PUBLIC SCHOOLS OF EDISON TOWNSHIP
DIVISION OF CURRICULUM AND INSTRUCTION

HEALTH – GRADES 6-8

Length of Course: 1/4 Term: each year

Elective / Required: Required

Schools: Middle Schools

Student Eligibility: Grades 6-8

Credit Value: N/A

Date Approved: 3/23/2010

TABLE OF CONTENTS

Grade 8

Appendices

Modifications will be made to accommodate IEP mandates for classified students.

STATEMENT OF PURPOSE

The purpose of health education is to make students aware that health is a state of physical, social, and mental well-being. It is necessary, therefore, that students receive accurate health information, become familiar with various related issues, and develop the ability to make responsible decisions. Embracing this concept, the health program at the middle school level presents subject matter in a sequential and integrated manner and is organized around six major themes: human growth and development, understanding self, interpersonal relationships, responsible personal behavior, environment, and the family.

The manner in which fact, opinion, values, level of maturity, and emotions bear upon the decision-making process will be discussed at every level. It is important that students come to understand that they are responsible for their decisions. The extent to which the objectives of the health program are achieved will be determined, in the final analysis, by the health practices of our students.

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Introduction

The most precious resource teachers have is time. Regardless of how much time a course is scheduled for, it is never enough to accomplish all that one would like. Therefore, it is imperative that teachers utilize the time they have wisely in order to maximize the potential for all students to achieve the desired learning.

High quality educational programs are characterized by clearly stated goals for student learning, teachers who are well-informed and skilled in enabling students to reach those goals, program designs that allow for continuous growth over the span of years of instruction, and ways of measuring whether students are achieving program goals.

The Edison Township School District Curriculum Template

The Edison Township School District has embraced the backward-design model as the foundation for all curriculum development for the educational program. When reviewing curriculum documents and the Edison Township curriculum template, aspects of the backward-design model will be found in the stated enduring *understandings/essential questions, unit assessments,* and *instructional activities.* Familiarization with backward-design is critical to working effectively with Edison's curriculum guides.

Guiding Principles: What is Backward Design? What is Understanding by Design?

"Backward design" is an increasingly common approach to planning curriculum and instruction. As its name implies, "backward design" is based on defining clear goals, providing acceptable evidence of having achieved those goals, and then working 'backward' to identify what actions need to be taken that will ensure that the gap between the current status and the desired status is closed.

Building on the concept of backward design, Grant Wiggins and Jay McTighe (2005) have developed a structured approach to planning programs, curriculum, and instructional units. Their model asks educators to state goals; identify deep understandings, pose essential questions, and specify clear evidence that goals, understandings, and core learning have been achieved.

Program based on backward design use desired results to drive decisions. With this design, there are questions to consider, such as: What should students understand, know, and be able to do? What does it look like to meet those goals? What kind of program will result in the outcomes stated? How will we know students have achieved that result? What other kinds of evidence will tell us that we have a quality program? These questions apply regardless of whether they are goals in program planning or classroom instruction.

The backward design process involves three interrelated stages for developing an entire curriculum or a single unit of instruction. The relationship from planning to curriculum design, development, and implementation hinges upon the integration of the following three stages.

Stage I: Identifying Desired Results: Enduring understandings, essential questions, knowledge and skills need to be woven into curriculum publications, documents, standards, and scope and sequence materials. Enduring understandings identify the "big ideas" that students will grapple with during the course of the unit. Essential questions provide a unifying focus for the unit and students should be able to answer more deeply and fully these questions as they proceed through the unit. Knowledge and skills are the *"stuff"* upon which the understandings are built.

Stage II: Determining Acceptable Evidence: Varied types of evidence are specified to ensure that students demonstrate attainment of desired results. While discrete knowledge assessments (e.g.: multiple choice, fill-in-the-blank, short answer, etc…) will be utilized during an instructional unit, the overall unit assessment is performance-based and asks students to demonstrate that they have mastered the desired understandings. These culminating (summative) assessments are authentic tasks that students would likely encounter in the real-world after they leave school. They allow students to demonstrate all that they have learned and can do. To demonstrate their understandings students can explain, interpret, apply, provide critical and insightful points of view, show empathy and/or evidence self-knowledge. Models of student performance and clearly defined criteria (i.e.: rubrics) are provided to all students in advance of starting work on the unit task.

Stage III: Designing Learning Activities: Instructional tasks, activities, and experiences are aligned with stages one and two so that the desired results are obtained based on the identified evidence or assessment tasks. Instructional activities and strategies are considered only once stages one and two have been clearly explicated. Therefore, congruence among all three stages can be ensured and teachers can make wise instructional choices.

At the curricular level, these three stages are best realized as a fusion of research, best practices, shared and sustained inquiry, consensus building, and initiative that involves all stakeholders. In this design, administrators are instructional leaders who enable the alignment between the curriculum and other key initiatives in their district or schools. These leaders demonstrate a clear purpose and direction for the curriculum within their school or district by providing support for implementation, opportunities for revision through sustained and consistent professional development, initiating action research activities, and collecting and evaluating materials to ensure alignment with the desired results. Intrinsic to the success of curriculum is to show how it aligns with the overarching goals of the district, how the document relates to district, state, or national standards, what a high quality educational program looks like, and what excellent teaching and learning looks like. Within education, success of the educational program is realized through this blend of commitment and organizational direction.

New Jersey Core Curriculum Content Standards
for
Comprehensive Health and Physical Education

INTRODUCTION

Comprehensive Health and Physical Education in the 21st Century

Health literacy is an integral component of 21st century education. Healthy students are learners who are "knowledgeable and productive, [and] also emotionally and physically healthy, motivated, civically engaged, prepared for work and economic self-sufficiency, and ready for the world beyond their own borders" (ASCD, 2004). As part of the state's initiative to prepare students to function optimally as global citizens and workers, the contemporary view of health and physical education focuses on taking personal responsibility for one's health through an active, healthy lifestyle that fosters a *lifelong* commitment to wellness. The mission and vision for comprehensive health and physical education reflects this perspective:

Mission: *Knowledge of health and physical education concepts and skills empowers students to assume lifelong responsibility to develop physical, social, and emotional wellness.*

Vision: A quality comprehensive health and physical education program fosters a population that:

- Maintains physical, social, and emotional health by practicing healthy behaviors and goal setting.
- Engages in a physically active lifestyle.
- Is knowledgeable about health and wellness and how to access health resources.
- Recognizes the influence of media, technology, and culture in making informed health-related decisions as a consumer of health products and services.
- Practices effective cross-cultural communication, problem solving, negotiation, and conflict resolution skills.
- Is accepting and respectful of individual and cultural differences.
- Advocates for personal, family, community, and global wellness and is knowledgeable about national and international public health and safety issues.

Intent and Spirit of the Comprehensive Health and Physical Education Standards

All students participate in a comprehensive, sequential, health and physical education program that emphasizes the natural interdisciplinary connection between wellness and health and physical education. The standards provide a blueprint for curriculum development, instruction, and assessment that reflects the latest research-based platform for effective health and physical education programs. The primary focus of the standards is on the development of knowledge and skills that influence healthy behaviors within the context of self, family, school, and the local and global community. The 2009 revised standards incorporate the current thinking and best practices found in health and physical education documents published by national content-specific organizations as well as public health and other education organizations and agencies.

Revised Standards

The Comprehensive Health and Physical Education Standards provide the foundation for creating local curricula and meaningful assessments. Revisions to the standards include cumulative progress indicators that reflect:

- o Recently enacted legislation outlined in the section below
- o An emphasis on health literacy, a 21st century theme
- o Global perspectives about health and wellness through comparative analysis of health-related issues, attitudes, and behaviors in other countries
- o Inclusion of additional skills related to traffic safety, fire safety, and accident and poison prevention
- o Increased awareness of and sensitivity to the challenges related to individuals with disabilities

The 2009 standards continue to incorporate **New Jersey Legislative Statutes** *related to the health and well-being of students in New Jersey public schools, including those enacted from 2004-2008:*

- *Gang Violence Prevention Bill: N.J.S.A. 18A:35-4.26 (2006) requires instruction in gang violence prevention.*
- *Organ Donation Bill: N.J.S.A. 18A:7F-4.3 (2008) requires instruction in grades 9 through 12 about organ donation and the benefits of organ and tissue donation.*
- *Suicide Prevention Bill: N.J.S.A. 18A:6-111 (2004) requires instruction in suicide prevention and related mental health issues.*

Resources

Association for Supervision and Curriculum Development. (2004). *The whole child.* Online: http://www.ascd.org/programs/THE_WHOLE_CHILD.aspx

Centers for Disease Control and Prevention. (2009). *Health education curriculum analysis tool.* Atlanta, GA: Author.

Centers for Disease Control and Prevention. (2006). *Physical education curriculum analysis tool.* Atlanta, GA: Author.

Joint Committee on National Health Education Standards. (2007). *National health education standards: Achieving health excellence.* Atlanta, GA: American Cancer Society.

Lohrmann, D. K. (2005). *Creating a healthy school.* Alexandria, VA: Association for Supervision and Curriculum Development.

National Association for Sport and Physical Education. (2004). *Moving into the future: National standards for physical education.* Reston, VA: American Alliance for Health, Physical Education, Recreation, and Dance.

National Association of State Boards of Education. (2008). *Center for safe and healthy schools.* Online: http://www.nasbe.org/index.php/shs

New Jersey State Department of Education. (2004). *Core curriculum content standards in comprehensive health and physical education*. Online: http://www.nj.gov/education/aps/cccs/chpe/standards.htm

Partnership for 21st Century Skills. (2005). *Framework for 21st century learning.* Online: http://www.21stcenturyskills.org

Hyperlinks:

Health Literacy includes:

- Obtaining, interpreting, and understanding basic health information and services and using such information and services in ways that are health enhancing.

- Understanding preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance, and stress reduction.

- Using available information to make appropriate health-related decisions.

- Establishing and monitoring personal and family health goals.

(Partnership for 21st Century Skills, 2005)

Content Area	Comprehensive Health and Physical Education		
Standard	2.1 Wellness: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.		
Strand	A. Personal Growth and Development		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing self-help skills and personal hygiene skills promotes healthy habits.	2.1.P.A.1	Develop an awareness of healthy habits (e.g., use clean tissues, wash hands, handle food hygienically, brush teeth, and dress appropriately for the weather).
		2.1.P.A.2	Demonstrate emerging self-help skills (e.g., develop independence when pouring, serving, and using utensils and when dressing and brushing teeth).
2	Health-enhancing behaviors contribute to wellness.	2.1.2.A.1	Explain what being "well" means and identify self-care practices that support wellness.
		2.1.2.A.2	Use correct terminology to identify body parts, and explain how body parts work together to support wellness.
4	The dimensions of wellness are interrelated and impact overall personal well-being.	2.1.4.A.1	Explain the physical, social, emotional, and mental dimensions of personal wellness and how they interact.
		2.1.4.A.2	Determine the relationship of personal health practices and behaviors on an individual's body systems.
6	Staying healthy is a lifelong process that includes all dimensions of wellness.	2.1.6.A.1	Explain how health data can be used to assess and improve each dimension of personal wellness.
		2.1.6.A.2	Relate how personal lifestyle habits, environment, and heredity influence growth and development in each life stage.
		2.1.6.A.3	Determine factors that influence the purchase of healthcare products and use of personal hygiene practices.
8	Developing and maintaining wellness requires ongoing evaluation of factors impacting health and modifying lifestyle behaviors accordingly.	2.1.8.A.1	Assess and apply health data to enhance each dimension of personal wellness.
		2.1.8.A.2	Compare and contrast the impact of genetics, family history, personal health practices, and environment on personal growth and development in each life stage.
		2.1.8.A.3	Relate advances in technology to maintaining and improving personal health.
		2.1.8.A.4	Determine the impact of marketing techniques on the use of personal hygiene products, practices, and services.
12	Developing and maintaining wellness requires ongoing evaluation of factors impacting health and modifying lifestyle behaviors accordingly.	2.1.12.A.1	Analyze the role of personal responsibility in maintaining and enhancing personal, family, community, and global wellness.
		2.1.12.A.2	Debate the social and ethical implications of the availability and use of technology and medical advances to support wellness.

Content Area	Comprehensive Health and Physical Education		
Standard	2.1 Wellness: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.		
Strand	B. Nutrition		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing the knowledge and skills necessary to make nutritious food choices promotes healthy habits.	2.1.P.B.1	Explore foods and food groups (e.g., compare and contrast foods representative of various cultures by taste, color, texture, smell, and shape).
		2.1.P.B.2	Develop awareness of nutritious food choices (e.g., participate in classroom cooking activities, hold conversations with knowledgeable adults about daily nutritious meal and snack offerings).
2	Choosing a balanced variety of nutritious foods contributes to wellness.	2.1.2.B.1	Explain why some foods are healthier to eat than others.
		2.1.2.B.2	Explain how foods in the food pyramid differ in nutritional content and value.
		2.1.2.B.3	Summarize information about food found on product labels.
4	Choosing a balanced variety of nutritious foods contributes to wellness.	2.1.4.B.1	Explain how healthy eating provides energy, helps to maintain healthy weight, lowers risk of disease, and keeps body systems functioning effectively.
		2.1.4.B.2	Differentiate between healthy and unhealthy eating practices.
		2.1.4.B.3	Create a healthy meal based on nutritional content, value, calories, and cost.
		2.1.4.B.4	Interpret food product labels based on nutritional content.
6	Eating patterns are influenced by a variety of factors.	2.1.6.B.1	Determine factors that influence food choices and eating patterns.
		2.1.6.B.2	Summarize the benefits and risks associated with nutritional choices, based on eating patterns.
		2.1.6.B.3	Create a daily balanced nutritional meal plan based on nutritional content, value, calories, and cost.
		2.1.6.B.4	Compare and contrast nutritional information on similar food products in order to make informed choices.
8	Eating patterns are influenced by a variety of factors.	2.1.8.B.1	Analyze how culture, health status, age, and eating environment influence personal eating patterns and recommend ways to provide nutritional balance.
		2.1.8.B.2	Identify and defend healthy ways for adolescents to lose, gain, or maintain weight.
		2.1.8.B.3	Design a weekly nutritional plan for families with different lifestyles, resources, special needs, and cultural backgrounds.
		2.1.8.B.4	Analyze the nutritional values of new products and supplements.

12	Applying basic nutritional and fitness concepts to lifestyle behaviors impacts wellness.	2.1.12.B.1	Determine the relationship of nutrition and physical activity to weight loss, weight gain, and weight maintenance.
		2.1.12.B.2	Compare and contrast the dietary trends and eating habits of adolescents and young adults in the United States and other countries.
		2.1.12.B.3	Analyze the unique contributions of each nutrient class (fats, carbohydrates, protein, water, vitamins, and minerals) to one's health.

Content Area	Comprehensive Health and Physical Education		
Standard	2.1 Wellness: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.		
Strand	C. Diseases and Health Conditions		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing self-help skills and personal hygiene skills promotes healthy habits.	2.1.P.C.1	Develop an awareness of healthy habits (e.g., use clean tissues, wash hands, handle food hygienically, brush teeth, and dress appropriately for the weather).
2	Knowledge about diseases and disease prevention promotes health-enhancing behaviors.	2.1.2.C.1	Summarize symptoms of common diseases and health conditions.
		2.1.2.C.2	Summarize strategies to prevent the spread of common diseases and health conditions.
		2.1.2.C.3	Determine how personal feelings can affect one's wellness.
4	The use of disease prevention strategies in home, school, and community promotes personal health.	2.1.4.C.1	Explain how most diseases and health conditions are preventable.
		2.1.4.C.2	Justify how the use of universal precautions, sanitation and waste disposal, proper food handling and storage, and environmental controls prevent diseases and health conditions.
		2.1.4.C.3	Explain how mental health impacts one's wellness.
6	The early detection and treatment of diseases and health conditions impact one's health.	2.1.6.C.1	Summarize means of detecting and treating diseases and health conditions that are prevalent in adolescents.
		2.1.6.C.2	Determine the impact of public health strategies in preventing diseases and health conditions.
		2.1.6.C.3	Compare and contrast common mental illnesses (such as depression, anxiety and panic disorders, and phobias) and ways to detect and treat them.
8	The prevention and control of diseases and health conditions are affected by many factors.	2.1.8.C.1	Evaluate emerging methods to diagnose and treat diseases and health conditions that are common in young adults in the United States and other countries, including hepatitis, sexually transmitted infections, HIV/AIDS, breast cancer, HPV, and testicular cancer.
		2.1.8.C.2	Analyze local, state, national, and international public health efforts to prevent and control diseases and health conditions.

		2.1.8.C.3	Analyze the impact of mental illness (e.g., depression, impulse disorders such as gambling or shopping, eating disorders, and bipolar disorders) on physical, social, and emotional well-being.
12	Personal health is impacted by family, community, national, and international efforts to prevent and control diseases and health conditions.	2.1.12.C.1	Predict diseases and health conditions that may occur during one's lifespan and speculate on potential prevention and treatment strategies.
		2.1.12.C.2	Develop strategies that will impact local, state, national, and international public health efforts to prevent and control diseases and health conditions.
		2.1.12.C.3	Determine the emotional, social, and financial impact of mental illness on the family, community, and state.
		2.1.12.C.4	Relate advances in medicine and technology to the diagnosis and treatment of mental illness.

Content Area	Comprehensive Health and Physical Education		
Standard	2.1 Wellness: ALL STUDENTS WILL ACQUIRE HEALTH PROMOTION CONCEPTS AND SKILLS TO SUPPORT A HEALTHY, ACTIVE LIFESTYLE.		
Strand	D. Safety		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing an awareness of potential hazards in the environment impacts personal health and safety.	2.1.P.D.1	Use safe practices indoors and out (e.g., wear bike helmets, walk in the classroom, understand how to participate in emergency drills, and understand why car seats and seat belts are used).
		2.1.P.D.2	Develop an awareness of warning symbols and their meaning (e.g., red light, stop sign, poison symbol, etc.).
		2.1.P.D.3	Identify community helpers who assist in maintaining a safe environment.
		2.1.P.D.4	Know how to dial 911 for help.
2	Using personal safety strategies reduces the number of injuries to self and others.	2.1.2.D.1	Identify ways to prevent injuries at home, school, and in the community (e.g., fire safety, poison safety, accident prevention).
		2.1.2.D.2	Differentiate among the characteristics of strangers, acquaintances, and trusted adults and describe safe and appropriate behaviors/touches.
		2.1.2.D.3	Identify procedures associated with pedestrian, bicycle, and traffic safety.
4	Identifying unsafe situations and choosing appropriate ways to reduce or eliminate risks contributes to the safety of self and others.	2.1.4.D.1	Determine the characteristics of safe and unsafe situations and develop strategies to reduce the risk of injuries at home, school, and in the community (e.g., fire safety, poison safety, accident prevention).
		2.1.4.D.2	Summarize the various forms of abuse and ways to get help.
		2.1.4.D.3	Examine the impact of unsafe behaviors when traveling in vehicles, as a pedestrian, and when using other modes of transportation.

	Applying first-aid procedures can minimize injury and save lives.	2.1.4.D.4	Demonstrate simple first-aid procedures for choking, bleeding, burns, and poisoning.
6	Identifying unsafe situations and choosing appropriate ways to reduce or eliminate risks contributes to the safety of self and others.	2.1.6.D.1	Summarize the common causes of intentional and unintentional injuries in adolescents and related prevention strategies.
		2.1.6.D.2	Explain what to do if abuse is suspected or occurs.
		2.1.6.D.3	Summarize the components of the traffic safety system and explain how people contribute to making the system effective.
	Applying first-aid procedures can minimize injury and save lives.	2.1.6.D.4	Assess when to use basic first-aid procedures.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
8	Evaluating the potential for injury prior to engaging in unhealthy/risky behaviors impacts choices.	2.1.8.D.1	Assess the degree of risk in a variety of situations and identify strategies to reduce intentional and unintentional injuries to self and others.
		2.1.8.D.2	Describe effective personal protection strategies used in public places and what to do when one's safety is compromised.
		2.1.8.D.3	Analyze the causes and the consequences of noncompliance with the traffic safety system.
	Applying first-aid procedures can minimize injury and save lives.	2.1.8.D.4	Demonstrate first-aid procedures, including victim and situation assessment, Basic Life Support, and the care of head trauma, bleeding and wounds, burns, fractures, shock, and poisoning.
12	Evaluating the potential for injury prior to engaging in unhealthy/risky behaviors impacts choices.	2.1.12.D.1	Determine the causes and outcomes of intentional and unintentional injuries in adolescents and young adults and propose prevention strategies.
		2.1.12.D.2	Explain ways to protect against abuse and all forms of assault and what to do if assaulted.
		2.1.12.D.3	Analyze the relationship between alcohol and drug use and the incidence of motor vehicle crashes.
		2.1.12.D.4	Develop a rationale to persuade peers to comply with traffic safety laws and avoid driving distractors.
		2.1.12.D.5	Summarize New Jersey motor vehicle laws and regulations and determine their impact on health and safety (e.g., organ/tissue donation, seatbelt use, and the use of hand-held devices).
	Applying first-aid procedures can minimize injury and save lives.	2.1.12.D.6	Demonstrate first-aid procedures, including Basic Life Support and automatic external defibrillation, caring for head trauma, bone and joint emergencies, caring for cold and heat injuries, and responding to medical emergencies.

Content Area	Comprehensive Health and Physical Education		
Standard	2.1 Wellness: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.		
Strand	E. Social and Emotional Health		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Many factors at home, school, and in the community impact social and emotional health.	2.1.2.E.1	Identify basic social and emotional needs of all people.
		2.1.2.E.2	Determine possible causes of conflict between people and appropriate ways to prevent and resolve them.
		2.1.2.E.3	Explain healthy ways of coping with common stressful situations experienced by children.
4	Many factors at home, school, and in the community impact social and emotional health.	2.1.4.E.1	Compare and contrast how individuals and families attempt to address basic human needs.
		2.1.4.E.2	Distinguish among violence, harassment, gang violence, discrimination, and bullying and demonstrate strategies to prevent and resolve these types of conflicts.
	Stress management skills impact an individual's ability to cope with different types of emotional situations.	2.1.4.E.3	Determine ways to cope with rejection, loss, and separation.
		2.1.4.E.4	Summarize the causes of stress and explain ways to deal with stressful situations.
6	Social and emotional development impacts all components of wellness.	2.1.6.E.1	Examine how personal assets and protective factors support healthy social and emotional development.
	Respect and acceptance for individuals regardless of gender, sexual orientation, disability, ethnicity, socioeconomic background, religion, and/or culture provide a foundation for the prevention and resolution of conflict.	2.1.6.E.2	Make recommendations to resolve incidences of school and community conflict, violence, harassment, gang violence, discrimination, and bullying.
	Stress management skills impact an individual's ability to cope with different types of emotional situations.	2.1.6.E.3	Compare and contrast ways that individuals, families, and communities cope with change, crisis, rejection, loss, and separation.
8	Social and emotional development impacts all components of wellness.	2.1.8.E.1	Analyze how personal assets, resiliency, and protective factors support healthy social and emotional health.
	Respect and acceptance for individuals regardless of gender, sexual orientation, disability, ethnicity, socioeconomic background, religion, and/or culture provide a foundation for the prevention and resolution of conflict.	2.1.8.E.2	Determine the effectiveness of existing home, school, and community efforts to address social and emotional health and prevent conflict.
	Stress management skills impact an individual's ability to cope with different types of emotional situations.	2.1.8.E.3	Explain how culture influences the ways families and groups cope with crisis and change.
		2.1.8.E.4	Compare and contrast stress management strategies that are used to address various types of stress-induced situations.

12	Respect and acceptance for individuals regardless of gender, sexual orientation, disability, ethnicity, socioeconomic background, religion, and/or culture provide a foundation for the prevention and resolution of conflict.	2.1.12.E.1	Predict the short- and long-term consequences of unresolved conflicts.
		2.1.12.E.2	Analyze how new technologies may positively or negatively impact the incidence of conflict or crisis.
	Stress management skills impact an individual's ability to cope with different types of emotional situations.	2.1.12.E.3	Examine how a family might cope with crisis or change and suggest ways to restore family balance and function.
		2.1.12.E.4	Develop a personal stress management plan to improve/maintain wellness.

Content Area	Comprehensive Health and Physical Education		
Standard	2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.		
Strand	A. Interpersonal Communication		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Effective communication may be a determining factor in the outcome of health- and safety-related situations.	2.2.2.A.1	Express needs, wants, and feelings in health- and safety-related situations.
4	Effective communication may be a determining factor in the outcome of health- and safety-related situations.	2.2.4.A.1	Demonstrate effective interpersonal communication in health- and safety-related situations.
	Effective communication is the basis for strengthening interpersonal interactions and relationships and resolving conflicts.	2.2.4.A.2	Demonstrate effective interpersonal communication when responding to disagreements or conflicts with others.
6	Effective communication may be a determining factor in the outcome of health- and safety-related situations.	2.2.6.A.1	Demonstrate verbal and nonverbal interpersonal communication in various settings that impact the health of oneself and others.
	Effective communication is the basis for strengthening interpersonal interactions and relationships and resolving conflicts.	2.2.6.A.2	Demonstrate use of refusal, negotiation, and assertiveness skills in different situations.
8	Effective interpersonal communication encompasses respect and acceptance for individuals regardless of gender, sexual orientation, disability, ethnicity, socioeconomic background, religion, and/or culture.	2.2.8.A.1	Compare and contrast verbal and nonverbal interpersonal communication strategies in a variety of settings and cultures in different situations.
	Effective communication is the basis for strengthening interpersonal interactions and relationships and resolving conflicts.	2.2.8.A.2	Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts.

12	Effective interpersonal communication encompasses respect and acceptance for individuals regardless of gender, sexual orientation, disability, ethnicity, socioeconomic background, religion, and/or culture.	2.2.12.A.1	Employ skills for communicating with family, peers, and people from other backgrounds and cultures that may impact the health of oneself and others.
	Effective communication is the basis for strengthening interpersonal interactions and relationships and resolving conflicts.	2.2.12.A.2	Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts.
	Technology increases the capacity of individuals to communicate in multiple and diverse ways.	2.2.12.A.3	Analyze the impact of technology on interpersonal communication in supporting wellness and a healthy, active lifestyle.

Content Area	Comprehensive Health and Physical Education		
Standard	2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.		
Strand	B. Decision-Making and Goal Setting		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Effective decision-making skills foster healthier lifestyle choices.	2.2.2.B.1	Explain what a decision is and why it is advantageous to think before acting.
		2.2.2.B.2	Relate decision-making by self and others to one's health.
		2.2.2.B.3	Determine ways parents, peers, technology, culture, and the media influence health decisions.
		2.2.2.B.4	Select a personal health goal and explain why setting a goal is important.
4	Many health-related situations require the application of a thoughtful decision-making process.	2.2.4.B.1	Use the decision-making process when addressing health-related issues.
		2.2.4.B.2	Differentiate between situations when a health-related decision should be made independently or with the help of others.
		2.2.4.B.3	Determine how family, peers, technology, culture, and the media influence thoughts, feelings, health decisions, and behaviors.
		2.2.4.B.4	Develop a personal health goal and track progress.
6	Every health-related decision has short- and long-term consequences and affects the ability to reach health goals.	2.2.6.B.1	Use effective decision-making strategies.
		2.2.6.B.2	Predict how the outcome(s) of a health-related decision may differ if an alternative decision is made by self or others.
		2.2.6.B.3	Determine how conflicting interests may influence one's decisions.
		2.2.6.B.4	Apply personal health data and information to support achievement of one's short- and long-term health goals.
8	Every health-related decision has short- and long-term consequences and affects the ability to reach health goals.	2.2.8.B.1	Predict social situations that may require the use of decision-making skills.
		2.2.8.B.2	Justify when individual or collaborative decision-making is appropriate.
		2.2.8.B.3	Analyze factors that support or hinder the achievement of personal health goals during different life stages.

| 12 | Developing and implementing an effective personal wellness plan contributes to healthy decision-making over one's lifetime. | 2.2.12.B.1 | Predict the short- and long-term consequences of good and poor decision-making on oneself, friends, family, and others. |
| | | 2.2.12.B.2 | Evaluate the impact of individual and family needs on the development of a personal wellness plan and address identified barriers. |

Content Area	Comprehensive Health and Physical Education		
Standard	2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.		
Strand	C. Character Development		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Character traits are often evident in behaviors exhibited by individuals when interacting with others.	2.2.2.C.1	Explain the meaning of character and how it is reflected in the thoughts, feelings, and actions of oneself and others.
		2.2.2.C.2	Identify types of disabilities and demonstrate appropriate behavior when interacting with people with disabilities.
4	Personal core ethical values impact the health of oneself and others.	2.2.4.C.1	Determine how an individual's character develops over time and impacts personal health.
	Character building is influenced by many factors both positive and negative, such as acceptance, discrimination, bullying, abuse, sportsmanship, support, disrespect, and violence.	2.2.4.C.2	Explain why core ethical values (such as respect, empathy, civic mindedness, and good citizenship) are important in the local and world community.
		2.2.4.C.3	Determine how attitudes and assumptions toward individuals with disabilities may negatively or positively impact them.
6	Personal core ethical values impact the behavior of oneself and others.	2.2.6.C.1	Explain how character and core ethical values can be useful in addressing challenging situations.
	Character building is influenced by many factors both positive and negative, such as acceptance, discrimination, bullying, abuse, sportsmanship, support, disrespect, and violence.	2.2.6.C.2	Predict situations that may challenge an individual's core ethical values.
		2.2.6.C.3	Develop ways to proactively include peers with disabilities at home, at school, and in community activities.
8	Working together toward common goals with individuals of different abilities and from different backgrounds develops and reinforces core ethical values.	2.2.8.C.1	Analyze strategies to enhance character development in individual, group, and team activities.
		2.2.8.C.2	Analyze to what extent various cultures have responded effectively to individuals with disabilities.
	Rules, regulations, and policies regarding behavior provide a common framework that supports a safe, welcoming environment.	2.2.8.C.3	Hypothesize reasons for personal and group adherence, or lack of adherence, to codes of conduct at home, locally, and in the worldwide community.
12	Individual and/or group pressure to be successful in competitive activities can result in a positive or negative impact.	2.2.12.C.1	Analyze the impact of competition on personal character development.

	Core ethical values impact behaviors that influence the health and safety of people everywhere.	2.2.12.C.2	Judge how individual or group adherence, or lack of adherence, to core ethical values impacts the local, state, national, and worldwide community.
		2.2.12.C.3	Analyze current issues facing the disability community and make recommendations to address those issues.

Content Area	Comprehensive Health and Physical Education		
Standard	2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.		
Strand	D. Advocacy and Service		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Service projects provide an opportunity to have a positive impact on the lives of self and others.	2.2.2.D.1	Determine the benefits for oneself and others of participating in a class or school service activity.
4	Service projects provide an opportunity to have a positive impact on the lives of self and others.	2.2.4.D.1	Explain the impact of participation in different kinds of service projects on community wellness.
6	Participation in social and health- or service-organization initiatives have a positive social impact.	2.2.6.D.1	Appraise the goals of various community or service-organization initiatives to determine opportunities for volunteer service.
		2.2.6.D.2	Develop a position about a health issue in order to inform peers.
8	Effective advocacy for a health or social issue is based on communicating accurate and reliable research about the issue and developing and implementing strategies to motivate others to address the issue.	2.2.8.D.1	Plan and implement volunteer activities to benefit a local, state, national, or world health initiative.
		2.2.8.D.2	Defend a position on a health or social issue to activate community awareness and responsiveness.
12	Effective advocacy for a health or social issue is based on communicating accurate and reliable research about the issue and developing and implementing strategies to motivate others to address the issue.	2.2.12.D.1	Plan and implement an advocacy strategy to stimulate action on a state, national, or global health issue, including but not limited to, organ/tissue donation.

Content Area	Comprehensive Health and Physical Education		
Standard	2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.		
Strand	E. Health Services and Information		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing an awareness of potential hazards in the environment impacts personal health and safety.	2.2.P.E.1	Identify community helpers who assist in maintaining a safe environment.

2	Knowing how to locate health professionals in the home, at school, and in the community assists in addressing health emergencies and obtaining reliable information.	2.2.2.E.1	Determine where to access home, school, and community health professionals.
4	Communicating health needs to trusted adults and professionals assists in the prevention, early detection, and treatment of health problems.	2.2.4.E.1	Identify health services and resources provided in the school and community and determine how each assists in addressing health needs and emergencies.
		2.2.4.E.2	Explain when and how to seek help when experiencing a health problem.
6	Health literacy includes the ability to compare and evaluate health resources.	2.2.6.E.1	Determine the validity and reliability of different types of health resources.
	Communicating health needs to trusted adults and professionals assists in the prevention, early detection, and treatment of health problems.	2.2.6.E.2	Distinguish health issues that warrant support from trusted adults or health professionals.
8	Potential solutions to health issues are dependent on health literacy and available resources.	2.2.8.E.1	Evaluate various health products, services, and resources from different sources, including the Internet.
	Communicating health needs to trusted adults and professionals assists in the prevention, early detection, and treatment of health problems.	2.2.8.E.2	Compare and contrast situations that require support from trusted adults or health professionals.
12	Potential solutions to health issues are dependent on health literacy and available resources.	2.2.12.E.1	Analyze a variety of health products and services based on cost, availability, accessibility, benefits, and accreditation.
	Affordability and accessibility of healthcare impacts the prevention, early detection, and treatment of health problems.	2.2.12.E.2	Determine the effect of accessibility and affordability of healthcare on family, community, and global health.

Content Area	Comprehensive Health and Physical Education		
Standard	2.3 Drugs and Medicines: All students will acquire knowledge about alcohol, tobacco, other drugs, and medicines and apply these concepts to support a healthy, active lifestyle.		
Strand	A. Medicines		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Medicines come in a variety of forms (prescription medicines, over-the-counter medicines, medicinal supplements), are used for numerous reasons, and should be taken as directed in order to be safe and effective.	2.3.2.A.1	Explain what medicines are and when some types of medicines are used.
		2.3.2.A.2	Explain why medicines should be administered as directed.

4	Medicines come in a variety of forms (prescription medicines, over-the-counter medicines, medicinal supplements), are used for numerous reasons, and should be taken as directed in order to be safe and effective.	2.3.4.A.1	Distinguish between over-the-counter and prescription medicines.
		2.3.4.A.2	Determine possible side effects of common types of medicines.
6	Medicines come in a variety of forms (prescription medicines, over-the-counter medicines, medicinal supplements), are used for numerous reasons, and should be taken as directed in order to be safe and effective.	2.3.6.A.1	Compare and contrast short- and long-term effects and the potential for abuse of commonly used over-the-counter and prescription medicines and herbal and medicinal supplements.
		2.3.6.A.2	Compare information found on over-the-counter and prescription medicines.
8	Medicines come in a variety of forms (prescription medicines, over-the-counter medicines, medicinal supplements), are used for numerous reasons, and should be taken as directed in order to be safe and effective.	2.3.8.A.1	Explain why the therapeutic effects and potential risks of commonly used over-the-counter medicines, prescription drugs, and herbal and medicinal supplements vary in different individuals.
		2.3.8.A.2	Compare and contrast adolescent and adult abuse of prescription and over-the-counter medicines and the consequences of such abuse.
12	Medicines come in a variety of forms (prescription medicines, over-the-counter medicines, medicinal supplements), are used for numerous reasons, and should be taken as directed in order to be safe and effective.	2.3.12.A.1	Determine the potential risks and benefits of the use of new or experimental medicines and herbal and medicinal supplements.
		2.3.12.A.2	Summarize the criteria for evaluating the effectiveness of a medicine.
		2.3.12.A.3	Relate personal abuse of prescription and over-the-counter medicines to wellness.

Content Area	Comprehensive Health and Physical Education		
Standard	2.3 Drugs and Medicines: All students will acquire knowledge about alcohol, tobacco, other drugs, and medicines and apply these concepts to support a healthy, active lifestyle.		
Strand	B. Alcohol, Tobacco, and Other Drugs		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Use of drugs in unsafe ways is dangerous and harmful.	2.3.2.B.1	Identify ways that drugs can be abused.
		2.3.2.B.2	Explain effects of tobacco use on personal hygiene, health, and safety.
		2.3.2.B.3	Explain why tobacco smoke is harmful to nonsmokers.
		2.3.2.B.4	Identify products that contain alcohol.
		2.3.2.B.5	List substances that should never be inhaled and explain why.
4	Use of drugs in unsafe ways is dangerous and harmful.	2.3.4.B.1	Explain why it is illegal to use or possess certain drugs/substances and the possible consequences.
		2.3.4.B.2	Compare the short- and long-term physical effects of all types of tobacco use.

		2.3.4.B.3	Identify specific environments where second-hand/passive smoke may impact the wellness of nonsmokers.
+		2.3.4.B.4	Summarize the short- and long-term physical and behavioral effects of alcohol use and abuse.
		2.3.4.B.5	Identify the short- and long- term physical effects of inhaling certain substances.
6	There is a strong relationship between individuals who abuse drugs and increased intentional and unintentional health-risk behaviors.	2.3.6.B.1	Explain the system of drug classification and why it is useful in preventing substance abuse.
		2.3.6.B.2	Relate tobacco use and the incidence of disease.
		2.3.6.B.3	Compare the effect of laws, policies, and procedures on smokers and nonsmokers.
		2.3.6.B.4	Determine the impact of the use and abuse of alcohol on the incidence of illness, injuries, and disease, the increase of risky health behaviors, and the likelihood of harm to one's health.
		2.3.6.B.5	Determine situations where the use of alcohol and other drugs influence decision-making and can place one at risk.
		2.3.6.B.6	Summarize the signs and symptoms of inhalant abuse.
		2.3.6.B.7	Analyze the relationship between injected drug use and diseases such as HIV/AIDS and hepatitis.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
8	There is a strong relationship between individuals who abuse drugs and increased intentional and unintentional health-risk behaviors.	2.3.8.B.1	Compare and contrast the physical and behavioral effects of commonly abused substances by adolescents.
		2.3.8.B.2	Predict the legal and financial consequences of the use, sale, and possession of illegal substances.
		2.3.8.B.3	Analyze the effects of all types of tobacco use on the aging process.
		2.3.8.B.4	Compare and contrast smoking laws in New Jersey with other states and countries.
		2.3.8.B.5	Explain the impact of alcohol and other drugs on those areas of the brain that control vision, sleep, coordination, and reaction time and the related impairment of behavior, judgment, and memory.
		2.3.8.B.6	Relate the use of alcohol and other drugs to decision-making and risk for sexual assault, pregnancy, and STIs.
		2.3.8.B.7	Explain the impact of inhalant use and abuse on social, emotional, mental, and physical wellness.
		2.3.8.B.8	Analyze health risks associated with injected drug use.

12	There are immediate and long-term consequences of risky behavior associated with substance abuse.	2.3.12.B. 1	Compare and contrast the incidence and impact of commonly abused substances (such as tobacco, alcohol, marijuana, inhalants, anabolic steroids, and other drugs) on individuals and communities in the United States and other countries.
		2.3.12.B. 2	Debate the various legal and financial consequences of the use, sale, and possession of illegal substances.
		2.3.12.B. 3	Correlate increased alcohol use with challenges that may occur at various life stages.
		2.3.12.B. 4	Correlate the use of alcohol and other drugs with incidences of date rape, sexual assault, STIs, and unintended pregnancy.
		2.3.12.B. 5	Relate injected drug use to the incidence of diseases such as HIV/AIDS and hepatitis.

Content Area	Comprehensive Health and Physical Education		
Standard	2.3 Drugs and Medicines: All students will acquire knowledge about alcohol, tobacco, other drugs, and medicines and apply these concepts to support a healthy, active lifestyle.		
Strand	C. Dependency/Addiction and Treatment		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Substance abuse is caused by a variety of factors.	2.3.2.C.1	Recognize that some people may have difficulty controlling their use of alcohol, tobacco, and other drugs.
	There are many ways to obtain help for treatment of alcohol, tobacco, and other substance abuse problems.	2.3.2.C.2	Explain that people who abuse alcohol, tobacco, and other drugs can get help.
4	Substance abuse is caused by a variety of factors.	2.3.4.C.1	Identify signs that a person might have an alcohol, tobacco, and/or drug use problem.
		2.3.4.C.2	Differentiate between drug use, abuse, and misuse.
		2.3.4.C.3	Determine how advertising, peer pressure, and home environment influence children and teenagers to experiment with alcohol, tobacco, and other drugs.
6	Substance abuse is caused by a variety of factors.	2.3.6.C.1	Summarize the signs and symptoms of a substance abuse problem and the stages that lead to dependency/addiction.
		2.3.6.C.2	Explain how wellness is affected during the stages of drug dependency/addiction.

		2.3.6.C.3	Determine the extent to which various factors contribute to the use and abuse of alcohol, tobacco, and other drugs by adolescents, such as peer pressure, low self-esteem, genetics, and poor role models.
	There are many ways to obtain help for treatment of alcohol, tobacco, and other substance abuse problems.	2.3.6.C.4	Determine effective strategies to stop using alcohol, tobacco and other drugs, and that support the ability to remain drug-free.
8	Substance abuse is caused by a variety of factors.	2.3.8.C.1	Compare and contrast theories about dependency/addiction (such as genetic predisposition, gender-related predisposition, and multiple risks) and provide recommendations that support a drug free life.
	The ability to interrupt a drug dependency/addiction typically requires outside intervention, a strong personal commitment, treatment, and the support of family, friends, and others.	2.3.8.C.2	Summarize intervention strategies that assist family and friends to cope with the impact of substance abuse.
12	The ability to interrupt a drug dependency/addiction typically requires outside intervention, a strong personal commitment, treatment, and the support of family, friends, and others.	2.3.12.C.1	Correlate duration of drug abuse to the incidence of drug-related injury, illness, and death.
		2.3.12.C.2	Analyze the effectiveness of various strategies that support an individual's ability to stop abusing drugs and remain drug-free.
	Substance abuse impacts individuals from all cultural and socioeconomic backgrounds.	2.3.12.C.3	Predict the societal impact of substance abuse on the individual, family, and community.

Content Area	Comprehensive Health and Physical Education		
Standard	2.4 Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.		
Strand	A. Relationships		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	The family unit encompasses the diversity of family forms in contemporary society.	2.4.2.A.1	Compare and contrast different kinds of families locally and globally.
		2.4.2.A.2	Distinguish the roles and responsibilities of different family members.
		2.4.2.A.3	Determine the factors that contribute to healthy relationships.
4	The family unit encompasses the diversity of family forms in contemporary society.	2.4.4.A.1	Explain how families typically share common values, provide love and emotional support, and set boundaries and limits.
		2.4.4.A.2	Explain why healthy relationships are fostered in some families and not in others.
6	Healthy relationships require a mutual commitment.	2.4.6.A.1	Compare and contrast how families may change over time.
		2.4.6.A.2	Analyze the characteristics of healthy friendships and other relationships.
		2.4.6.A.3	Examine the types of relationships adolescents may experience.
		2.4.6.A.4	Demonstrate successful resolution of a problem(s) among friends and in other relationships.

		2.4.6.A.5	Compare and contrast the role of dating and dating behaviors in adolescence.
8	The values acquired from family, culture, personal experiences, and friends impact all types of relationships.	2.4.8.A.1	Predict how changes within a family can impact family members.
		2.4.8.A.2	Explain how the family unit impacts character development.
		2.4.8.A.3	Explain when the services of professionals are needed to intervene in relationships.
		2.4.8.A.4	Differentiate between affection, love, commitment, and sexual attraction.
		2.4.8.A.5	Determine when a relationship is unhealthy and explain effective strategies to end the relationship.
		2.4.8.A.6	Develop acceptable criteria for safe dating situations, such as dating in groups, setting limits, or only dating someone of the same age.
12	Individuals in healthy relationships share thoughts and feelings, have fun together, develop mutual respect, share responsibilities and goals, and provide emotional security for one another.	2.4.12.A.1	Compare and contrast how family structures, values, rituals, and traditions meet basic human needs worldwide.
		2.4.12.A.2	Compare and contrast the current and historical role of life commitments, such as marriage.
		2.4.12.A.3	Analyze how personal independence, past experience, and social responsibility influence the choice of friends in high school and young adulthood.
		2.4.12.A.4	Predict how relationships may evolve over time, focusing on changes in friendships, family, dating relationships, and lifetime commitments such as marriage.
		2.4.12.A.5	Determine effective prevention and intervention strategies to address domestic or dating violence (e.g., rules of consent).
	Technology impacts the capacity of individuals to develop and maintain interpersonal relationships.	2.4.12.A.6	Analyze how various technologies impact the development and maintenance of local and global interpersonal relationships.

Content Area	Comprehensive Health and Physical Education		
Standard	2.4 Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.		
Strand	B. Sexuality		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Gender-specific similarities and differences exist between males and females.	2.4.2.B.1	Compare and contrast the physical differences and similarities of the genders.
4	Puberty is the period of sexual development, determined primarily by heredity, in which the body becomes physically able to produce children.	2.4.4.B.1	Differentiate the physical, social, and emotional changes occurring at puberty and explain why puberty begins and ends at different ages.
6	Most significant physical, emotional, and mental growth changes occur during adolescence, but not necessarily at the same rates.	2.4.6.B.1	Compare growth patterns of males and females during adolescence.

	Responsible actions regarding sexual behavior impact the health of oneself and others.	2.4.6.B.2	Summarize strategies to remain abstinent and resist pressures to become sexually active.
		2.4.6.B.3	Determine behaviors that place one at risk for HIV/AIDS, STIs, HPV, or unintended pregnancy.
		2.4.6.B.4	Predict the possible physical, social, and emotional impacts of adolescent decisions regarding sexual behavior.
8	Personal lifestyle habits and genetics influence sexual development as well as overall growth patterns.	2.4.8.B.1	Analyze the influence of hormones, nutrition, the environment, and heredity on the physical, social, and emotional changes that occur during puberty.
	Responsible actions regarding sexual behavior impact the health of oneself and others.	2.4.8.B.2	Determine the benefits of sexual abstinence and develop strategies to resist pressures to become sexually active.
		2.4.8.B.3	Compare and contrast methods of contraception used by adolescents and factors that may influence their use.
		2.4.8.B.4	Relate certain behaviors to placing one at greater risk for HIV/AIDS, STIs, and unintended pregnancy.
	Discussion of topics regarding sexuality requires a safe, supportive environment where sensitivity and respect is shown toward all.	2.4.8.B.5	Discuss topics regarding gender identity, sexual orientation, and cultural stereotyping.
	Early detection strategies assist in the prevention and treatment of illness or disease.	2.4.8.B.6	Explain the importance of practicing routine healthcare procedures such as breast self-examination, testicular examinations, and HPV vaccine.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	The decision to become sexually active affects one's physical, social, and emotional health.	2.4.12.B.1	Predict the possible long-term effects of adolescent sex on future education, on career plans, and on the various dimensions of wellness.
	Responsible actions regarding sexual behavior impact the health of oneself and others.	2.4.12.B.2	Evaluate information that supports abstinence from sexual activity using reliable research data.
		2.4.12.B.3	Analyze factors that influence the choice, use, and effectiveness of contraception, including risk-reduction and risk-elimination strategies.
	Discussion of topics regarding sexuality requires a safe, supportive environment where sensitivity and respect is shown toward all.	2.4.12.B.4	Compare and contrast attitudes and beliefs about gender identity, sexual orientation, and gender equity across cultures.
	Early detection strategies and regular physical exams assist in the prevention and treatment of illness or disease.	2.4.12.B.5	Relate preventative healthcare strategies of male/female reproductive systems to the prevention and treatment of disease (e.g., breast/testicular exams, Pap smear, HPV vaccine).

Content Area	Comprehensive Health and Physical Education		
Standard	2.4 Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.		
Strand	C. Pregnancy and Parenting		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	The health of the birth mother impacts the development of the fetus.	2.4.2.C.1	Explain the factors that contribute to a mother having a healthy baby.
4	Knowing the physiological process of how pregnancy occurs as well as development of the fetus leading to childbirth contribute to a greater understanding of how and why a healthy environment should be provided for the pregnant mother.	2.4.4.C.1	Explain the process of fertilization and how cells divide to create an embryo/fetus that grows and develops during pregnancy.
	The health of the birth mother impacts the development of the fetus.	2.4.4.C.2	Relate the health of the birth mother to the development of a healthy fetus.
6	Knowing the physiological process of how pregnancy occurs as well as development of the fetus leading to child birth contribute to a greater understanding of how and why a healthy environment should be provided for the pregnant mother.	2.4.6.C.1	Summarize the sequence of fertilization, embryonic growth, and fetal development during pregnancy.
		2.4.6.C.2	Identify the signs and symptoms of pregnancy.
		2.4.6.C.3	Identify prenatal practices that support a healthy pregnancy.
	Adolescent parents may have difficulty adjusting to emotional and financial responsibilities of parenthood.	2.4.6.C.4	Predict challenges that may be faced by adolescent parents and their families.
8	Pregnancy, childbirth, and parenthood are significant events that cause numerous changes in one's life and the lives of others.	2.4.8.C.1	Summarize the signs and symptoms of pregnancy and the methods available to confirm pregnancy.
		2.4.8.C.2	Distinguish physical, social, and emotional changes that occur during each stage of pregnancy, including the stages of labor and childbirth and the adjustment period following birth.
		2.4.8.C.3	Determine effective strategies and resources to assist with parenting.
		2.4.8.C.4	Predict short- and long-term impacts of teen pregnancy.
		2.4.8.C.5	Correlate prenatal care with the prevention of complications that may occur during pregnancy and childbirth.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	Pregnancy, childbirth, and parenthood are significant events that cause numerous changes in one's life and the lives of others.	2.4.12.C.1	Compare embryonic growth and fetal development in single and multiple pregnancies, including the incidence of complications and infant mortality.

		2.4.12.C.2	Analyze the relationship of an individual's lifestyle choices during pregnancy and the incidence of fetal alcohol syndrome, sudden infant death syndrome, low birth weight, premature birth, and other disabilities.
		2.4.12.C.3	Evaluate the methods and resources available to confirm pregnancy.
		2.4.12.C.4	Determine the impact of physical, social, emotional, cultural, religious, ethical, and legal issues on elective pregnancy termination.
		2.4.12.C.5	Evaluate parenting strategies used at various stages of child development based on valid sources of information.
		2.4.12.C.6	Compare the legal rights and responsibilities of adolescents with those of adults regarding pregnancy, abortion, and parenting.
		2.4.12.C.7	Analyze factors that affect the decision to become a parent.

Content Area	Comprehensive Health and Physical Education		
Standard	2.5 Motor Skill Development: All students will utilize safe, efficient, and effective movement to develop and maintain a healthy, active lifestyle.		
Strand	A. Movement Skills and Concepts		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
P	Developing competence and confidence in gross and fine motor skills provides a foundation for participation in physical activities.	2.5.P.A.1	Develop and refine gross motor skills (e.g., hopping, galloping, jumping, running, and marching).
		2.5.P.A.2	Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner).
		2.5.P.A.3	Use objects and props to develop spatial and coordination skills (e.g., throws and catches balls and Frisbees, twirls a hula-hoop about the hips, walks a balance beam, laces different sized beads, and buttons and unbuttons).
2	Understanding of fundamental concepts related to effective execution of actions provides the foundation for participation in games, sports, dance, and recreational activities.	2.5.2.A.1	Explain and perform movement skills with developmentally appropriate control in isolated settings (i.e., skill practice) and applied settings (i.e., games, sports, dance, and recreational activities).
		2.5.2.A.2	Demonstrate changes in time, force, and flow while moving in personal and general space at different levels, directions, ranges, and pathways.
		2.5.2.A.3	Respond in movement to changes in tempo, beat, rhythm, or musical style.
		2.5.2.A.4	Correct movement errors in response to feedback.

4	Understanding of fundamental concepts related to effective execution of actions provides the foundation for participation in games, sports, dance, and recreational activities.	2.5.4.A.1	Explain and perform essential elements of movement skills in both isolated settings (i.e., skill practice) and applied settings (i.e., games, sports, dance, and recreational activities).
		2.5.4.A.2	Use body management skills and demonstrate control when moving in relation to others, objects, and boundaries in personal and general space.
		2.5.4.A.3	Explain and demonstrate movement sequences, individually and with others, in response to various tempos, rhythms, and musical styles.
	Ongoing feedback impacts improvement and effectiveness of movement actions.	2.5.4.A.4	Correct movement errors in response to feedback and explain how the change improves performance.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
6	Understanding of fundamental concepts related to effective execution of actions provides the foundation for participation in games, sports, dance, and recreational activities.	2.5.6.A.1	Explain and perform movement skills that combine mechanically correct movement in smooth flowing sequences in isolated settings (i.e., skill practice) and applied settings (i.e., games, sports, dance, and recreational activities).
		2.5.6.A.2	Explain concepts of force and motion and demonstrate control while modifying force, flow, time, space, and relationships in interactive dynamic environments.
		2.5.6.A.3	Create and demonstrate planned movement sequences, individually and with others, based on tempo, beat, rhythm, and music (creative, cultural, social, and fitness dance).
	Performing movement skills effectively is often based on an individual's ability to analyze one's own performance as well as receive constructive feedback from others.	2.5.6.A.4	Use self-evaluation and external feedback to detect and correct errors in one's movement performance.
8	Movement skill performance is primarily impacted by the quality of instruction, practice, assessment, feedback, and effort.	2.5.8.A.1	Explain and demonstrate the transition of movement skills from isolated settings (i.e., skill practice) into applied settings (i.e., games, sports, dance, and recreational activities).
		2.5.8.A.2	Apply the concepts of force and motion (weight transfer, power, speed, agility, range of motion) to impact performance.
		2.5.8.A.3	Create, explain, and demonstrate, as a small group, a planned movement sequence that includes changes in rhythm, tempo, and musical style (creative, cultural, social, and fitness dance).
		2.5.8.A.4	Detect, analyze, and correct errors and apply to refine movement skills.
12	Movement skill performance is primarily impacted by the quality of instruction, practice, assessment, feedback, and effort.	2.5.12.A.1	Explain and demonstrate ways to transfer movement skills from one game, sport, dance, or recreational activity to another (e.g., striking skills from/to tennis, badminton, ping pong, racquetball).

		2.5.12.A.2	Analyze application of force and motion (weight transfer, power, speed, agility, range of motion) and modify movement to impact performance.
		2.5.12.A.3	Design and lead a rhythmic activity that includes variations in time, space, force, flow, and relationships (creative, cultural, social, and fitness dance).
		2.5.12.A.4	Critique a movement skill/performance and discuss how each part can be made more interesting, creative, efficient, and effective.

Content Area	Comprehensive Health and Physical Education		
Standard	2.5 Motor Skill Development: All students will utilize safe, efficient, and effective movement to develop and maintain a healthy, active lifestyle.		
Strand	B. Strategy		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
2	Teamwork consists of effective communication and other interactions between team members.	2.5.2.B.1	Differentiate when to use competitive and cooperative strategies in games, sports, and other movement activities.
		2.5.2.B.2	Explain the difference between offense and defense.
		2.5.2.B.3	Determine how attitude impacts physical performance.
		2.5.2.B.4	Demonstrate strategies that enable team members to achieve goals.
4	Offensive, defensive, and cooperative strategies are applied in most games, sports, and other activity situations.	2.5.4.B.1	Explain and demonstrate the use of basic offensive and defensive strategies (e.g., player positioning, faking, dodging, creating open areas, and defending space).
		2.5.4.B.2	Acknowledge the contributions of team members and choose appropriate ways to motivate and celebrate accomplishments.
6	There is a relationship between applying effective tactical strategies and achieving individual and team goals when competing in games, sports, and other activity situations.	2.5.6.B.1	Demonstrate the use of offensive, defensive, and cooperative strategies in individual, dual, and team activities.
		2.5.6.B.2	Compare and contrast strategies used to impact individual and team effectiveness and make modifications for improvement.
8	Individual and team execution in games, sports, and other activity situations is based on the interaction of tactical use of strategies, positive mental attitudes, competent skill levels, and teamwork.	2.5.8.B.1	Compare and contrast the use of offensive, defensive, and cooperative strategies in a variety of settings.
		2.5.8.B.2	Assess the effectiveness of specific mental strategies applied to improve performance.
		2.5.6.B.3	Analyze individual and team effectiveness in achieving a goal and make recommendations for improvement.

12	Individual and team execution in games, sports, and other activity situations is based on the interaction of tactical use of strategies, positive mental attitudes, competent skill levels, and teamwork.	2.5.12.B.1	Demonstrate and assess tactical understanding by using appropriate and effective offensive, defensive, and cooperative strategies.
		2.5.12.B.2	Apply a variety of mental strategies to improve performance.
		2.5.12.B.3	Analyze factors that influence intrinsic and extrinsic motivation and employ techniques to enhance individual and team effectiveness.

Content Area	Comprehensive Health and Physical Education		
Standard	**2.5 Motor Skill Development: All students will utilize safe, efficient, and effective movement to develop and maintain a healthy, active lifestyle.**		
Strand	**C. Sportsmanship, Rules, and Safety**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Practicing appropriate and safe behaviors while participating in and viewing games, sports, and other competitive events contributes to enjoyment of the event.	2.5.2.C.1	Explain what it means to demonstrate good sportsmanship.
		2.5.2.C.2	Demonstrate basic activity and safety rules and explain how they contribute to moving in a safe environment.
4	Practicing appropriate and safe behaviors while participating in and viewing games, sports, and other competitive events contributes to enjoyment of the event.	2.5.4.C.1	Summarize the characteristics of good sportsmanship and demonstrate appropriate behavior as both a player and an observer.
		2.5.4.C.2	Apply specific rules and procedures during physical activity and explain how they contribute to a safe active environment.
6	Practicing appropriate and safe behaviors while participating in and viewing games, sports, and other competitive events contributes to enjoyment of the event.	2.5.6.C.1	Compare the roles and responsibilities of players and observers and recommend strategies to enhance sportsmanship-like behavior.
		2.5.6.C.2	Apply rules and procedures for specific games, sports, and other competitive activities and describe how they enhance participation and safety.
	There is a strong cultural, ethnic, and historical background associated with competitive sports and dance.	2.5.6.C.3	Relate the origin and rules associated with certain games, sports, and dances to different cultures.
8	Self-initiated behaviors that promote personal and group success include safety practices, adherence to rules, etiquette, cooperation, teamwork, ethical behavior, and positive social interaction.	2.5.8.C.1	Assess player behavior for evidence of sportsmanship in individual, small-group, and team activities.
		2.5.8.C.2	Summarize types of equipment, products, procedures, and rules that contribute to the safety of specific individual, small-group, and team activities.
	Movement activities provide a timeless opportunity to connect with people around the world.	2.5.8.C.3	Analyze the impact of different world cultures on present-day games, sports, and dance.
12	Self-initiated behaviors that promote personal and group success include safety practices, adherence to rules, etiquette, cooperation, teamwork, ethical behavior, and positive social interaction.	2.5.12.C.1	Analyze the role, responsibilities, and preparation of players, officials, trainers, and other participants and recommend strategies to improve their performance and behavior.
		2.5.12.C.2	Develop rule changes to existing games, sports, and activities that enhance safety and enjoyment.

	Cultural practices regarding physical activity, sports, and games reflect a microcosm of society.	2.5.12.C.3	Determine the current impact of globalization and technology on the development of, participation in, and viewing of games, sports, dance, and other movement activities, and predict future impact.
Content Area	**Comprehensive Health and Physical Education**		
Standard	**2.6 Fitness: All students will apply health-related and skill-related fitness concepts and skills to develop and maintain a healthy, active lifestyle.**		
Strand	**A. Fitness and Physical Activity**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	Developing competence and confidence in gross and fine motor skills provides a foundation for participation in physical activities.	2.6. P.A.1	Develop and refine gross motor skills (e.g., hopping, galloping, jumping, running, and marching).
		2.6. P.A.2	Develop and refine fine motor skills (e.g., completes gradually more complex puzzles, uses smaller-sized manipulatives during play, and uses a variety of writing instruments in a conventional manner).
2	Appropriate types and amounts of physical activity enhance personal health.	2.6.2.A.1	Explain the role of regular physical activity in relation to personal health.
		2.6.2.A.2	Explain what it means to be physically fit and engage in moderate to vigorous age-appropriate activities that promote fitness.
		2.6.2.A.3	Develop a fitness goal and monitor progress towards achievement of the goal.
4	Each component of fitness contributes to personal health as well as motor skill performance.	2.6.4.A.1	Determine the physical, social, emotional, and intellectual benefits of regular physical activity.
		2.6.4.A.2	Participate in moderate to vigorous age-appropriate activities that address each component of health-related and skill-related fitness.
		2.6.4.A.3	Develop a health-related fitness goal and track progress using health/fitness indicators.
		2.6.4.A.4	Determine the extent to which different factors influence personal fitness, such as heredity, training, diet, and technology.
6	Knowing and applying a variety of effective fitness principles over time enhances personal fitness level, performance, and health status.	2.6.6.A.1	Analyze the social. emotional, and health benefits of selected physical experiences.
		2.6.6.A.2	Determine to what extent various activities improve skill-related fitness versus health-related fitness.
		2.6.6.A.3	Develop and implement a fitness plan based on the assessment of one's personal fitness level, and monitor health/fitness indicators before, during, and after the program.
		2.6.6.A.4	Predict how factors such as health status, interests, environmental conditions, and available time may impact personal fitness.
		2.6.6.A.5	Relate physical activity, healthy eating, and body composition to personal fitness and health.

		2.6.6.A.6	Explain and apply the training principles of frequency, intensity, time, and type (FITT) to improve personal fitness.
		2.6.6.A.7	Evaluate the short- and long-term effects of anabolic steroids and other performance-enhancing substances on personal health.

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
8	Knowing and applying a variety of effective training principles over time enhances personal fitness level, performance- and health status.	2.6.8.A.1	Summarize the short- and long-term physical, social, and emotional benefits of regular physical activity.
		2.6.8.A.2	Use health data to develop and implement a personal fitness plan and evaluate its effectiveness.
		2.6.8.A.3	Analyze how medical and technological advances impact personal fitness.
		2.6.8.A.4	Determine ways to achieve a healthy body composition through healthy eating, physical activity, and other lifestyle behaviors.
		2.6.8.A.5	Use the primary principles of training (FITT) for the purposes of modifying personal levels of fitness.
		2.6.8.A.6	Determine the physical, behavioral, legal, and ethical consequences of the use of anabolic steroids and other performance-enhancing substances.
12	Taking personal responsibility to develop and maintain physical activity levels provides opportunities for increased health, fitness, enjoyment, challenges, self-expression, and social interaction.	2.6.12.A.1	Compare the short- and long-term impact on wellness associated with physical inactivity.
		2.6.12.A.2	Design, implement, and evaluate a fitness plan that reflects knowledge and application of fitness-training principals.
		2.6.12.A.3	Determine the role of genetics, gender, age, nutrition, activity level, and exercise type on body composition.
		2.6.12.A.4	Compare and contrast the impact of health-related fitness components as a measure of fitness and health.
		2.6.12.A.5	Debate the use of performance-enhancing substances (i.e., anabolic steroids and other legal and illegal substances) to improve performance.

<u>Glossary</u>
Comprehensive Health and Physical Education
Core Curriculum Content Standards

Different kinds of families refer to the many family structures represented in classrooms and in society today, including, but not limited to: traditional two-parent (i.e., mother and father) families, blended families, single-parent families, multi-racial families, multi-generational families, and same-sex-parent families.

Essential elements of movement means the knowledge and demonstration of mechanically correct technique when executing a movement skill.

FITT stands for the basic philosophy of what is necessary to gain a training effect from an exercise program. The FITT acronym represents:
1. Frequency – How often a person exercises
2. Intensity – How hard a person exercises
3. Time – How long a person exercises
4. Type – What type of activity a person does when exercising

Health-related fitness incorporates the five major components of fitness related to improved health:
1. *Cardio-respiratory endurance* is the ability of the blood vessels, heart, and lungs to take in, transport, and utilize oxygen. This is a critically important component of fitness because it impacts other components of fitness and decreases the risk of cardiovascular diseases.
2. *Muscular strength* is the maximum amount of force a muscle or muscle group can exert.
3. *Muscular endurance* is the length of time a muscle or muscle group can exert force prior to fatigue.
4. *Flexibility* refers to the range of motion in the joints.
5. *Body composition* shows the amount of fat versus lean mass (bone, muscle, connective tissue, and fluids). While some fat is essential for insulation and providing energy, too much fat can cause serious health problems.

Human papillomavirus (HPV) is a common virus that infects the skin and mucous membranes. There are about 100 types of HPV, and approximately 30 of those are spread through genital contact (typically sexual intercourse). Around 12 types – called "low-risk" types of HPV – can cause genital warts. In addition, there are approximately 15 "high-risk" types of HPV that can cause cervical cancer. Infection with the common types of "genital" HPV can be prevented with the HPV vaccine. However, vaccination is only fully effective if administered before a girl or young woman has been exposed to those types of HPV through sexual contact. In addition, the vaccine does not protect against all types of HPV that can cause cervical cancer.

Intentional injuries are injuries arising from purposeful action (e.g., violence and suicide).

Unintentional injuries are injuries arising from unintentional events (e.g., motor vehicle crashes and fires).

Movement skills encompass locomotor, nonlocomotor, and manipulative movement:
1. *Locomotor movement* occurs when an individual moves from one place to another or projects the body upward (e.g., walking, jumping, skipping, galloping, hopping, jumping, sliding, running).
2. *Nonlocomotor movement* occurs when an individual moves in self-space without appreciable movement from place to place (e.g., twisting, bending, stretching, and curling).
3. *Manipulative movement* occurs when an individual controls a variety of objects with different body parts (e.g., throwing, catching, kicking, striking, and dribbling).

Personal assets refer to individual strengths and weaknesses regarding personal growth.

Protective factors refer to the skills, strengths, and resources that help individuals deal more effectively with stressful situations.

Resiliency is the ability to overcome the negative effects of risk exposure.

Service projects are initiatives that represent relevant social and civic needs.

Sexually transmitted infection (STI), also known as sexually transmitted disease (STD), is an illness that has a significant probability of transmission between humans or animals by means of sexual contact, including vaginal intercourse, oral sex, and anal sex.

Skill-related fitness refers to components of physical fitness that contribute to the ability to successfully participate in sports:

1. *Agility* is the ability to rapidly and accurately change the direction of the whole body while moving in space.

2. *Balance* is the ability to maintain equilibrium while stationary or moving.

3. *Coordination* is the ability to use the senses and body parts in order to perform motor tasks smoothly and accurately.

4. *Power* is the amount of force a muscle can exert over time.

5. *Reaction time* is the ability to respond quickly to stimuli.

6. *Speed* is the amount of time it takes the body to perform specific tasks while moving.

Traffic safety system refers to the concept of traffic (moving people safely and efficiently), the specific components of the traffic safety system (e.g., laws, safety, signs, travel modes, routes, and responsibilities), and the people who are part of the traffic safety system (e.g., walkers, bicyclists, police, and automobile, bus, and train operators).

GRADE 6
HEALTH

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity
(6th Grade)

Targeted State Standards: Standard 2.1: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle. **Standard 2.2:** Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that various systems of the body work in a coordinated manner to ensure the total health of the individual. Students will be able to understand that the immune system protects the body from many disease organisms. Students will be able to understand that the characteristics of living organisms are passed along genetically.

Essential Questions: How do the body systems work together? How does the immune system protect the body from diseases? How do genetics/heredity influence who you are

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.6.B.1 Students will be able to compare and contrast body systems, their parts and functions, and explain that body systems must work together to ensure wellness. 2.1.6.B.3 Students will be able to discuss how heredity and physiological changes contribute to an individual uniqueness. 2.1.6.D.4 Students will be able to discuss the use of public health strategies to prevent diseases and health conditions.	**HUMAN GROWTH AND DEVELOPMENT** Objectives - Students will demonstrate an understanding of: A. The anatomy and physiology of female and male reproductive systems. B. The physical and emotional changes which occur in boys and girls during puberty. C. The personal and social responsibilities that accompany growing up.	Label different parts of the body systems. Understand where their traits came from. Understand the functions of the body systems. Complete study sheets of the body systems. Create bulletin boards of the body systems. Recognize, define, and apply relevant vocabulary. Understand how the different body systems work together.	Diagrams Venn Diagrams Labeling Videos/DVDs Research Projects/Papers Bulletin Boards Family Tree Collect and compare/contrast family pictures Research diseases and their causes/preventions	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects Reports

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	Assessment Check Points
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	

2.2.2.B.2 Relate decision-making by self and others to one's health.
 	
2.2.4.B.1 Use the decision making process when addressing health-related issues.
 	
2.2.6.B.4 Apply personal health data and information to support achievement of one's short and long-term goals.
	D. The various systems of the body that work in a coordinated manner to insure the total health of the individual.
	E. The immune system which protects the body from many disease organisms.
	F. The characteristics of living organisms that are passed along genetically.
	
	Review of Body Systems
	
	A. Skeletal system
	
	   1. Function
	
	      a. support
	      b. protection
	      c. muscle
	      d. blood cell production
	      e. mineral storehouse
	
	   2. Major bones
	
	      a. skull
	      b. clavicle or collarbone
	      c. sternum or breastbone
	      d. ribs
	      e. vertebrae or spinal column
		Compare and contrast the male and female reproductive systems.
		
		Develop a Family Tree.
		
		Recognize the changes that take place during puberty.
			Group Work
			
			Teacher Lecture
			
			Oral Presentations
			
			Stress Abstinence	

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	f. pelvis or hipbones g. arm bones h. leg bones 3. Joints a. hinge b. ball and socket c. gliding d. immobile 4. Connective tissue a. cartilage b. tendons c. ligaments B. Muscular system 5. Functions a. movement b. protection c. body symmetry d. heat production 6. Types of muscles a. voluntary b. involuntary c. cardiac			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	C. Circulatory System
	
	  1. Function: carry blood throughout the body
	
	  2. Parts of the circulatory system
	
	    a. Blood: carries oxygen and nutrients
	    b. Heart: pumps blood
	    c. arteries
	    d. veins
	    e. capillaries
	
	D. Respiratory system
	
	  1. Function: exchange oxygen and carbon dioxide
	
	  2. Parts of the respiratory system
	
	    a. nose and nasal passage
	    b. trachea
	    c. bronchial tree
	    d. alveoli or air sacs
	    e. lungs
	    f. mucous membrane
	    g. cilia
	    h. diaphragm			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	3. Breathing a. inhalation b. exhalation 4. Breathing is affected by: a. exercise b. excitement c. illness d. chemicals e. environment, e.g., altitude, pollution, smoking E. Digestive system 1. Function – digestion of food 2. Parts of the digestive system a. mouth b. esophagus c. stomach d. small intestine e. large intestine f. rectum and anus g. liver h. pancreas i. gall bladder			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Digestive juices
	
	  a. salivary
	  b. Gastric
	  c. pancreatic
	  d. bile
	
	F. Excretory system
	
	  1. Function: waste removal
	
	  2. Types of excretion and involved body parts
	
	    a. urination: liquid waste from cells
	
	      i. kidneys
	      ii. urethra
	      iii. bladder
	      iv. urethra
	
	    b. perspiration: liquid waste from skin
	
	      i. sweat glands
	      ii. pores
	
	    c. defecation: solid waste from digestive system
	
	      i. small intestine
	      ii. large intestine			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iii. rectum iv. anus d. exhalation: carbon dioxide from lungs G. Nervous system 1. Function: carries messages to and from the brain 2. Parts of the nervous system a. brain b. spinal cord c. nerves d. neurons: nerve cells H. Endocrine system 1. Function: help in control of body activities 2. Types of endocrine glands a. pituitary b. thyroid c. adrenal d. pancreas			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	I. Reproductive system: Health teachers and nurses will cover this system as part of the unit on growing up.
	
	J. Immune System
	
	   1. Function
	   2. Parts
	
	      a. skin
	      b. white blood cells
	      c. antibodies
	
	   3. Immunity
	
	C. Genetics/Heredity
	
	   1. How heredity works
	   2. Dominant and recessive heredity
	   3. Human traits which are inherited
	
	      a. coloration of skin
	      b. sex
	      c. blood type
	      d. body structure
	      e. possible diseases or disorders
	
	         i. Hemophilia
	        ii. Sickle cell Anemia			

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Cumulative Progress Indicators	Core Content		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iii. Juvenile Diabetes iv. Tay-Sachs v. Muscular dystrophy			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs. Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides. Utilize peer tutors. Differentiate products/presentations to accommodate multiple intelligences. Assign roles or specific tasks for group projects.

Human Growth and Development/Systems of the Body/Immune System/Genetics & Heredity (Cont.)

Resources:	
Instructional Materials **Pamphlets for Girls** **Grade 6** "Growing Up and Liking It: Kate's Diary". Milltown, NJ, Personal Products, Inc., 1992 **Grade 6 - Girls** **Filmstrips Videocassettes:** The New Improved Me: Understanding Body Changes - Sunburst Kids to Kids: Talking About Puberty - Tambrands, Inc. **Grade 6 - Boys** The New Improved Me: Understanding Body Changes - Sunburst Kids to Kids: Talking About Puberty - Tambrands, Inc. The Living Body: Hormones Body Talk	

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs
(6th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle.
Standard 2.3: All students will learn and apply information about alcohol, tobacco, other drugs, and medicines to make decisions that support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that medicines, tobacco, alcohol, and drugs may have serious effects on the individual. Students will be able to understand that health products and home remedies can be helpful in some cases and dangerous in others.

Essential Questions: How does the use/abuse of tobacco, alcohol, and drugs affect you and those around you?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.6.A.4 Students will discuss how health knowledge, health choices, self-control, resistance, and self-management skills influence wellness.	The effects of alcohol, tobacco, and medicines on you and those around you.	Role play pressure scenarios.	Diagrams	Quizzes
	The difference between safe usage and abusing drugs.	Identify various drugs.	Venn Diagrams	Tests
2.3.6.A.2 Students will discuss medicines used to treat common diseases and health conditions.	Different pressures that can arise and how to deal with them.	Understand the difference between legal and illegal drugs.	Labeling	Pre-assessment
		Recognize the harmful effects that drugs have on your body.	Videos/DVDs	Q & A
2.3.6.C.1 Students will describe the signs and symptoms of a substance abuse problem and the stages that lead to dependency/addiction.	Review types of drugs:	Discuss the surgeon general warning.	Research Projects/Papers	Worksheets
	A. Medicines		Role play	Homework
	1. Types	Recognize, define, and apply relevant vocabulary.	Bulletin boards	Class discussions
	B. Prescription drugs	Discuss drug legislation.	Research drugs and their causes/preventions	Projects
	1. generic drugs 2. brand name drugs 3. proper usage	Understand the dangers of second-hand smoke.	Group Work Teacher Lecture Guest Speakers	Research

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	C. Over the counter drugs 1. cough remedies 2. head ache remedies 3. cold/flu remedies 4. laxatives 5. diarrhea aids 6. indigestion aids 7. diet aids 8. sleeping aids D. Home remedies 1. kinds 2. positive effects 3. negative effects E. Quackery 1. reasons 2. types F. Tobacco 1. why people smoke a. parental example b. social reasons, e.g., peer pressure c. relaxation/ enjoyment d. dependents		Oral presentations	

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Types of tobacco products
	
	 a. Cigarettes
	 b. cigars
	 c. pipes
	 d. smokeless tobacco
	
	    i. snuff
	    ii. chewing (spit) tobacco
	
	 3. Effects
	
	 a. heart
	 b. lungs
	 c. respiratory passages
	
	 G. Alcohol
	
	 1. why people drink
	
	 a. parental example
	 b. ceremonies, e.g., religious, toasts
	 c. social reasons
	 d. relaxation, enjoyment
	 e. escape
	 f. dependence			

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Types of Alcoholic Beverages
	
	  a. beer
	  b. wine
	  c. liquor
	
	3. effects
	
	  a. liver
	  b. nervous system
	  c. other
	  d. alcoholism
	
	H. Marijuana- Indian Hemp Plant
	
	1. why people smoke marijuana
	
	  a. curiosity
	  b. peer
	  c. relaxation, enjoyment
	  d. escape
	
	2. slang names
	
	  a. weed, grass, pot
	  b. others
	
	3. ways ingested
	
	  a. smoked
	  b. eaten			

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	4. active ingredient in marijuana is delta-9-THC (tetrahydro-cannabinnol)
	5. effects
	
	   a. respiratory passages
	   b. brain damages
	   c. heart
	
	I. Inhalants
	
	   1. why people abuse inhalants
	
	      a. curiosity
	      b. peer pressure
	      c. escape
	
	   2. types of inhalants
	
	      a. solvents
	      b. aerosols
	      c. refrigerants
	      d. medicines and pain killers
	
	   3. ways to inhale
	
	      a. bags (plastic, paper)
	      b. balloons
	      c. soaking rags
	      d. empty soda cans			

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	e. directly from bottle, can, tube 4. effects a. brain damage b. liver damage c. kidney damage d. respiratory damage J. drugs 1. types a. stimulants b. depressants c. hallucinogens d. anabolic steroids 2. effects a. habituation b. tolerance c. addiction			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Modify curriculum to suit individual needs. Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides.

Human Growth and Development: Medicine, Tobacco, Alcohol, and Drugs (Cont.)

Resources:	Instructional Adjustments:
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Utilize peer tutors.
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Differentiate products/presentations to accommodate multiple intelligences.
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	Assign roles or specific tasks for group projects.
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Video tapes:
    Fast, Forward, Future- National Audio
    Alcohol: What Do You Think- Sunburst
    Alcohol, The Accepted Drug- Marsh Media
    Come See About Medicines- Foundations in health Series
    Come See How We Fight Infections- Foundations in health Series
    Wash Those Hands- Marsh media
    Marijuana What Do You Know- Sunburst
    The Truth About Inhalants- Sunburst
    The Trouble With Tobacco – United Learning, Inc
    Smokeless Tobacco; The Whole Truth- Sunburst
    Smoking and Children –Educational Activities
    Changing Chemicals –NJ Dept of Education
    Educate: Inhalants Natural Highs- Sunburst	

Human Growth and Development: Family Life Education Part 1, Growing Up
(6th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle.
Standard 2.4: All students will learn the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that physical and emotional changes occur in boys and girls during puberty. Students will be able to understand that there are personal and social responsibilities that accompany growing up.

Essential Question: How does understanding the changes that take place during puberty help you later in life? How do you take care of your changing bodies?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.6.A.1 Explain how health data can be used to assess and improve each dimension of personal wellness. 2.1.6.A.2 Relate how personal lifestyle habits, environment, and heredity influence growth and development in each life stage. 2.1.6.A.3 Determine factors that influence the purchase of healthcare products and use of personal hygiene practices.	Primary and secondary sex characteristics of males and females. Process of puberty. Respect for individual differences. How to take care of their changing body.	Label the male/female reproductive diagrams. Verbalize body changes and proper hygiene. Understand what puberty/adolescence is. Understand male and female characteristics	Diagrams Venn Diagrams Labeling Videos/DVDs Research Projects/Papers Role Play A. What might be the advantages of maturing early? The disadvantages? B. What does the term "generation gap" mean to you? Do you think one exists? Why?	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Human Growth and Development: Family Life Education Part 1, Growing Up (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.4.6.B.1 Compare growth patterns of males and females during adolescence
 	
2.4.6.B.2 Summarize strategies to remain abstinent and resist pressures to become sexually active.
 	
2.4.6.B.3 Determine behaviors that place one at risk for HIV/AIDS, STIs, HPV, or unintended pregnancy.
 	
2.4.6.B.4 Predict the possible physical, social, and emotional impacts of adolescent decisions regarding sexual behavior.
	I. Development of sexuality
	
	A. Physical sexuality
	
	   1. male sexual characteristics
	
	      a. body/facial hair
	      b. voice change
	      c. sperm production
	      d. erection
	      e. ejaculation
	      f. muscle development
	      g. heightened emotions
	
	   2. female characteristics
	
	      a. body hair
	      b. breasts develop
	      c. waist lengthens
	      d. hips widen
	      e. ovulation
	      f. menstruation
	      g. heightened emotions
	
	   3. changing bodies
	
	      a. rate of maturity
	      b. body types
			Oral presentations
			
			Teacher lecture
			
			Group work
			
			Stress Abstinence	

Human Growth and Development: Family Life Education Part 1, Growing Up (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	B. Emotional sexuality 1. consideration 2. kindness 3. tenderness 4. respect 5. physical contact C. Social sexuality 1. sex roles 2. sex stereotyping 3. approved social behavior D. Responsible sexuality 1. your sexual value system 2. consistency with your values/ethics 3. acting out of self-respect/respect for others 4. behaving in a positive and constructive manner II. Sexuality as a healthy aspect of personality A. Traditional expectations for females/males B. Changing expectations for females/males			

Human Growth and Development: Family Life Education Part 1, Growing Up (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	C. Sexual feelings vs. guilty feelings Stress Abstinence			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings Modify curriculum to suit individual needs. Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides. Utilize peer tutors. Differentiate products/presentations to accommodate multiple intelligences. Assign roles or specific tasks for group projects.

Human Growth and Development: Understanding Self
(6th Grade)

Targeted Standards: Standard 2.2: All students will use health-enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that they must develop personal standards. Students will be able to understand that they must develop skills in solving individual problems

Essential Questions: What is the value of individuality? How do you solve your problems?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.6.B.1 Use effective decision-making strategies.
 	
2.2.6.B.2 Predict how the outcome(s) of a health-related decision may differ if an alternative decision is made by self or others.
 	
2.2.6.B.3 Determine how conflicting interests may influence one's decisions.
 	
2.2.6.B.4 Apply personal health data and information to support achievement of one's short- and long-term health goals.
	How to break down and solve a problem.
	
	How their family/religion shapes their individuality.
	
	The value of individuality.
	
	A. Developing Personal Standards
	
	   1. Affected by family, religious training
	   2. Respect for self and others
	
	Suicide Prevention
		Set goals for themselves.
		
		Consider alternative methods for solving a problem.
		
		Recognize how their differences influence their individuality.
		
		Understand outside influences may impact individuality and problem solving.
			Diagrams
			
			Venn Diagrams
			
			Labeling
			
			Videos/DVDs
			
			Research Projects/Papers
			
			Role Play
			
			Oral Presentations
			
			Teacher Lecture
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Human Growth and Development: Understanding Self (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	Skills *What students will be able to do.*	Activities/Strategies Technology Implementation/ Interdisciplinary Connections	Assessment Check Points
2.2.6.C.1 Explain how character and core ethical values can be useful in addressing challenging situations. 2.2.6.C.2 Predict situations that may challenge an individual's core ethical values. 2.2.6.C.3 Develop ways to proactively include peers with disabilities at home, at school, and in community activities.				

Human Growth and Development: Understanding Self (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs.
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Consult IEPs and 504 plans to differentiate instruction based on individual needs.
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Provide study guides.
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Utilize peer tutors.
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	Differentiate products/presentations to accommodate multiple intelligences.
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	Assign roles or specific tasks for group projects.
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Interpersonal Relationships
(6th Grade)

Targeted Standards: Standard 2.2: All students will use health-enhancing personal, interpersonal, and life skills to support a healthy active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that they must develop personal standards. Students will be able to understand that they must develop skills in solving individual problems.

Essential Questions: What is the value of individuality? How do you solve your problems?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.2.6.A.1 Demonstrate verbal and nonverbal interpersonal communication in various settings that impact the health of oneself and others. 2.2.6.A.2 Demonstrate use of refusal, negotiation, and assertiveness skills in different situations. 2.2.6.B.1 Use effective decision-making strategies. 2.2.6.B.2 Predict how the outcome(s) of a health-related decision may differ if an alternative decision is made by self or others.	How to break-down and solve a problem. How their family/religion shapes their individuality. The value of individuality. A. Adjustments to Changes 1. Additional family member (new baby, grandparent) 2. Moving to a new neighborhood 3. Divorce 4. Economic change 5. Death of a family member 6. Family member born with disability or becomes disabled through an accident	Set goals for themselves. Consider alternative methods for solving a problem. Recognize how their differences influence their individuality.	Diagrams Venn Diagrams Labeling Videos/DVDs Research Role Play	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Interpersonal Relationships (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	B. Assuming Responsibility for self and others
	
	   1. Respect for self and others
	   2. Courtesy
	   3. Cooperation
	   4. Sharing
	   5. Helping Others
	
	Gang Violence Prevention
	
	Domestic Violence
	
	Child Abuse
	
	Sexual Assault Awareness			

Interpersonal Relationships (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs. Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides. Utilize peer tutors. Differentiate products/presentations to accommodate multiple intelligences. Assign roles or specific tasks for group projects.

Responsible Personal Behavior
(6th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle.
Standard 2.2: All students will use health-enhancing personal, interpersonal, and life skills to support a healthy active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that the quality of a person's physical fitness will greatly affect their health. Students will be able to understand that personal hygiene and grooming is one's own responsibility. Students will be able to understand that a variety of factors influence the selection of health information, products, and services. Students will be bale to understand that safe living practices are an important part of everyday life.

Essential Questions: How do you maintain your own personal hygiene? How does regular physical activity impact one's overall health? How do you maintain a safe environment?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.6.A.1 Explain how health data can be used to assess and improve each dimension of personal wellness.	What products to use and how to use them.	Groom themselves properly.	Diagrams	Quizzes
	What activities will benefit their health.	List activities that will benefit their health.	Venn Diagrams	Tests
2.1.6.A.2 Relate how personal lifestyle habits, environment, and heredity influence growth and development in each life stage.	How to keep safe while at home, school, in a car, in the presence of strangers, and dealing with harassment.	Identify ways to keep themselves safe with what they encounter in their daily routine.	Labeling	Pre-assessment
			Videos/DVDs	Q & A
			Research Projects/Papers	Worksheets
	A. Personal Health	Recognize how to stay healthy socially and emotionally not just physically.	Role Play	Homework
2.1.6.A.3 Determine factors that influence the purchase of healthcare products and use of personal hygiene practices.	1. Social aspects of cleanliness		Safety Posters	Class discussions
			Hygiene PSA	Projects
	a. Acceptance or rejection by peers		Design personal fitness plan	
			Oral Presentations	

Responsible Personal Behavior (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.6.E.1 Determine factors that influence the purchase of healthcare products and use of personal hygiene practices. 2.1.6.E.2 Make recommendations to resolve incidences of school and community conflict, violence, harassment, gang violence, discrimination, and bullying 2.1.6.E.3 Compare and contrast ways that individuals, families, and communities cope with change, crisis, rejection, loss, and separation. 2.2.6.B.1 Use effective decision-making strategies. 2.2.6.B.2 Predict how the outcome(s) of a health-related decision may differ if an alternative decision is made by self or others. 2.2.6.B.3 Determine how conflicting interests may influence one's decisions.	b. Being left out of social functions c. Mental anxiety of rejection 2. Practice aids to good grooming a. Over-the-counter products, e.g., soaps, deodorants, shampoo, toothpaste, skin cleansers, make-up b. Critical thinking about advertisements c Appropriate clothing for the weather/ occasion Harassment Intimidation Bullying (both in school and out of school)		Teacher Lecture	

Responsible Personal Behavior (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.2.6.B.4 Apply personal health data and information to support achievement of one's short- and long-term health goals.				

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides Utilize peer tutors Differentiate products/presentations to accommodate multiple intelligences. Assign roles or specific tasks for group projects.

Health and the Environment
(6th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle.
Standard 2.2: All students will use health-enhancing personal, interpersonal, and life skills to support a healthy active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are many types and causes of air, water, solid waste, and noise pollution. Students will be able to understand that environmental pollution can have far reaching affects on one's health. Students will be able to understand that many federal, state, and local agencies are working to help make people aware of environmental issues.

Essential Questions: What are the various types of pollution? How does pollution affect one's overall health? What are the agencies available to help deal with pollution?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.1.6.C.2 Determine the impact of public health strategies in preventing diseases and health conditions.
 	
 2.1.6.A.1 Explain how health data can be used to assess and improve each dimension of personal wellness.
 	
 2.1.6.A.3 Determine factors that influence the purchase of healthcare products and use of personal hygiene practices.
	The different types of pollution.
	
	 The harmful effects of pollution on the body.
	
	 How to prevent pollution and "go green."
	
	 Types of Pollution
	
	 A. Air
	
	    1. causes
	
	      a. smoke
	      b. exhaust
	
	    2. effects on the body
	
	      a. watery eyes
		Identify various types of pollution.
		
		 List harmful effects of pollution on the body.
		
		 Discuss ways to prevent pollution and reverse the effects.
		
		 Understand causes of pollution.
		
		 Identify problem areas where pollution can occur.
			Diagrams
			
			 Venn Diagrams
			
			 Labeling
			
			 Videos/DVDs
			
			 Research
			
			 Role Play
			
			 Environmental Safety Posters
			
			 "Go Green" PSA
			
			 Collect newspaper and magazine articles on pollution.
			
			 Posters for each type of pollution
				Quizzes
				
				 Tests
				
				 Pre-assessment
				
				 Q & A
				
				 Worksheets
				
				 Homework
				
				 Class discussions
				
				 Projects

Health and the Environment (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	b. headaches
	c. tiredness
	d. dizziness
	e. lung damage
	
	   i. emphysema
	   ii. asthma
	   iii. bronchitis
	
	3. prevention
	
	  a. energy conservation
	  b. public transportation
	  c. car pools
	
	B. Water
	
	1. causes
	
	  a. chemical spills
	  b. fertilizers
	  c. sewage
	
	2. effects of body
	
	  a. mercury poisoning
	  b. cancer
	  c. typhoid
			Have students create bumper sticker designs and slogans to inform public about pollution, its dangers, and what can be done to combat it.
			
			Have students use library resources to find out which parts of the world are facing a water shortage problem and what steps, if any, are being taken to deal with the situation.
			
			Invite speakers from local environmental agencies to speak to the class about air and water pollution.
			
			Talk about the fact that is all the people in the U.S. recycle their Sunday newspapers they could save over 500,000 trees every week. Then create posters focusing on the declining number of trees throughout the world.
			
			Ask students to complete these open-ended questions: "I could improve my conservation of resources by …," Some of the ways I waste resources are …" Discuss their completions.	

Health and the Environment (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	3. prevention a. use of biodegradable products b. conservation c. sewage treatment plants C. Solid Waste 1. causes a. litter (paper, newspaper, aluminum cans) b. hazardous wastes (plastics, paints, chemicals) c. nuclear (by-products of atomic power plants) 2. effects of body a. toxic fumes b. corrosive capabilities c. cancer		Have students make a class list of everything in their home that requires energy. Identify ways that energy is commonly wasted and ways it could be conserved in the home. Design posters for the classroom or school display on conservation. Ask for volunteers to visit hardware stores to check and see how many energy-saving and water-saving products they carry. Compare prices and report to class. Oral Presentations Teacher Lecture Guest Speakers	

Health and the Environment (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. prevention
	
	  a. precycling (consumer awareness)
	  b. recycling
	  c. EPA regulations
	  d. Nuclear Regulatory Commission
	
	D. Noise
	
	  1. causes
	
	    a. loud radios, televisions, stereos
	    b. appliances - blenders, garbage disposals
	    c. jets, subway & freight trains, motorcycles
	    d. power mowers, jackhammers
	    e. factories
	    f. sirens
	
	  2. Effects on body
	
	    a. narrowing blood vessels
	    b. increased heart rate
	    c. increased blood pressure
	    d. muscle tension			

Health and the Environment (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	e. nervousness, irritable f. tiredness g. temporary hearing loss - ringing in ear h. permanent hearing loss - ruptured eardrum 3. Prevention a. turn down volume b. speak softly c. earplugs d. safe distance from amplifiers e. sound-proofing materials E. Agencies Concerned With Environmental Health 1. Environmental Protection Agency 2. Greenpeace 3. Audubon Society 4. Sierra Club 5. Wilderness Society Accident prevention Fire Prevention Lyme Disease			

Health and the Environment (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs.
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Consult IEPs and 504 plans to differentiate instruction based on individual needs.
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Provide study guides.
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Utilize peer tutors.
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	Differentiate products/presentations to accommodate multiple intelligences.
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	Assign roles or specific tasks for group projects.
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

GRADE 7
HEALTH

Human Growth and Development: Male & Female Reproductive System
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle. **Standard 2.2:** All students will use health-enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle. **Standard 2.4:** All students will learn the physical, emotional, and social aspects of human relationships and sexuality, and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand the rate of physical growth in the onset of puberty varies widely between the sexes, as well as, among individuals. Students will be able to understand that the endocrine and reproductive systems play a major role in growth and development.

Essential Questions: What are body changes during puberty? What is puberty/adolescence? What are the major components to the male/female reproductive systems? How do you take care of your changing bodies?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.A.1 Assess and apply health data to enhance each dimension of personal wellness. 2.2.8.E.1. Evaluate various health products, services, and resources from different sources, including the Internet. 2.4.8.A.5. Determine when a relationship is unhealthy and explain effective strategies to end the relationship.	The effects of heredity and environment. Primary sex characteristics of males and females. Process of puberty. Respect for individual differences.	Label the male/female reproductive diagrams. Verbalize body changes and proper hygiene. Understand what puberty/adolescence is. Understand the function of the endocrine system.	Diagrams Venn Diagrams Labeling Videos/DVDs Research Projects Review Growing up program Open discussions Utilize anatomy/physiology charts to show systems graphically.	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Human Growth and Development: Male & Female Reproductive System (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	A. Differences in Growth Patterns of Males and Females
	
	  1. The affects of heredity and environment
	
	    a. Heredity
	
	      i. body type
	      ii. range of intellect
	      iii. pigmentation
	
	    a. Environment
	
	      1. diet
	      2. exercise
	      3. life style
	
	  2. Primary sex characteristics of males and females
	
	    a. males
	
	      i. testes
	      ii. penis
	
	    b. females
	
	      i. ovaries
	      ii. vagina
			Utilize anatomical model to show systems three - dimensionally.
			
			Have students complete study sheets on the endocrine and reproductive systems and collect them in a notebook for future reference.
			
			Lecture
			
			Small Groups
			
			Oral Presentations	

Human Growth and Development: Male & Female Reproductive System (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Sex characteristics/ process of puberty
	
	a. male
	
	   i. voice changes
	   ii. body and facial hair appear
	   iii. enlargement of muscle mass
	   iv. growth and development of reproductive organs
	   v. sperm production
	   vi. nocturnal emission
	
	b. female
	
	   i. breast develop
	   ii. voice richens
	   iii. body hair appears
	   iv. hips widen
	   v. growth and development of reproductive organs			

Human Growth and Development: Male & Female Reproductive System (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	vi. menstruation/ ovulation
	
	4. Respect for individual differences
	
	  a. Some adolescent girls are taller and more physically mature than some boys of the same age
	  b. growth occurs in spurts
	
	B. Endocrine and Reproductive System
	
	1. Endocrine: pineal, pituitary, thyroid, parathyroid, thymus, adrenal, pancreas
	
	  a. Location
	  b. Function
	
	2. Reproductive
	
	  a. Male: penis, testes, scrotum, urethra, seminal vesicle, prostate gland, vas deferens
	
	    i. location
	    ii. function			

Human Growth and Development: Male & Female Reproductive System (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	b. Female: ovaries, Fallopian tubes, uterus, cervix, vagina 1. location 2. function Breast Self Examination			

Human Growth and Development: Male & Female Reproductive System (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs. Consult IEPs and 504 plans to differentiate instruction based on individual needs. Provide study guides. Utilize peer tutors. Differentiate products/presentations to accommodate multiple intelligences. Assign roles or specific tasks for group projects.

Human Growth and Development: Diseases
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle. **Standard 2.2:** All students will use health-enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are many types and causes of diseases. Students will be able to understand that many diseases can be prevented or controlled.

Essential Questions: What are communicable/non-communicable diseases? What are the symptoms, treatments, causes, diagnosis and prevention of specific diseases? What are ways to protect your body from diseases?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.1.8.C.1 Evaluate emerging methods to diagnose and treat diseases and health conditions that are common in young adults in the United States and other countries, including hepatitis, sexually transmitted infections, HIV/AIDS, breast cancer, HPV, and testicular cancer.
 	
2.2.8.B.3 Analyze factors that support or hinder the achievement of personal health goals during different life stages.
	The difference between communicable and non-communicable diseases.
	
	Ways that the body protects itself.
	
	Symptoms, treatments, causes, diagnosis and prevention of specific diseases.
	
	What it takes to keep your body healthy.
	
	I. Understanding the Nature of Contagious Disease
	
	   A. Causative Organisms (Pathogens)
	
	      1. virus (cold, flu, A.I.D.S.)
		Define communicable disease, non-communicable disease, and disease.
		
		Identify disease-causing agents.
		
		Identify treatment options for specific diseases.
		
		Verbalize how to protect your body from diseases.
		
		List the ways diseases enter the body.
		
		Understand the difference between acute and chronic.
			Venn Diagrams
			
			Labeling
			
			Videos/DVDs
			
			Research Projects
			
			List the types of diseases Americans once faced with the diseases that are most common today.
			
			Make posters on how to improve life expectancy rates in the United States.
			
			Bulletin board of various diseases.
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.2.8.E.1 Evaluate various health products, services, and resources from different sources, including the Internet.	2. bacteria (strep throat, tetanus, gonorrhea, syphilis) 3. protozoa (malaria, African sleeping sickness) 4. fungi (ringworm, athlete's foot) 5. rickettsiae (Rocky Mountain spotted fever) B. Methods of Transmission 1. direct contact (actual touching) 2. droplets (coughing and sneezing) 3. vectors (animals) 4. vehicles (inanimate objects - clothing, glassware, etc.) C. Entrance into Body 1. nose and mouth 2. eyes and ears 3. breaks in skin 4. genito-urinary tract D. Stages in the Development of a Contagious Disease 1. exposure 2. incubation	List the body defenses against disease. Identify types of communicable diseases. Recognize diseases that are hereditary. Understand nutritional diseases.	Handouts of information on various diseases Transparencies of diseases Small Groups Teacher Lecture Oral Presentations	

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. outbreak of symptoms convalescence
	
	E. Types of Infection
	
	   1. acute
	   2. chronic
	
	F. Types of Immunity
	
	   1. natural
	   2. acquired
	
	      a. vaccination
	      b. previous exposure
	
	G. Body Defenses Against Disease
	
	   1. skin
	   2. saliva
	   3. digestive juices
	   4. lymph nodes
	   5. white blood cells
	   6. antibodies
	
	II. Communicable Diseases
	
	A. Respiratory
	
	   1. Sinusitis
	
	      a. causes
	
	         i. allergy			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	ii. deviated nasal septum
	iii. frequent colds
	iv. emotion
	
	b. symptoms
	
	   i. headache
	   ii. possible swelling, redness
	   iii. nasal congestion
	   iv. possible low-grade fever
	   v. postnasal drip
	   vi. possible sore-throat
	
	c. treatment/ prevention
	
	   i. rest
	   ii. increase intake of fluid
	   iii. warm compresses
	   iv. medical intervention if symptoms persist
	   v. avoid/remove causative factors			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	1. Laryngitis
	
	a. causes
	
	   i. excessive use of voice
	   ii. smoking irritation
	   iii. outside infection
	
	b. symptoms
	
	   i. hoarseness
	   ii. smoking irritation
	   iii. outside infection
	
	c. treatment/ prevention
	
	   i. rest voice
	   ii. medical intervention if symptoms persist
	   iii. avoid/remove causative factors			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Common Cold/Flu
	
	 a. causes
	
	     i. virus
	     ii. lowered resistance due to chilling, fatigue, poor nutrition
	
	 b. symptoms
	
	     i. sneezing/ coughing
	     ii. chills and fever
	     iii. headache
	     iv. sore throat
	     v. muscle pain
	
	 c. treatment
	
	     i. rest
	     ii. increased intake of fluid
	     iii. cold compresses if fever exists
	     iv. medical intervention if symptoms persist			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	d. prevention
	
	   i. cleanliness
	   ii. proper eating habits
	   iii. sufficient sleep
	
	4. Bronchitis
	
	a. causes
	
	   i. infection
	   ii. allergy
	   iii. irritating chemical, smoke, dust
	
	b. symptoms
	
	   i. cough
	   ii. shortness of breath
	
	c. treatment/ prevention
	
	   i. humid environment
	   ii. medical intervention if symptoms persist
	   iii. avoid/ remove causative factors			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	Skills *What students will be able to do.*	Activities/Strategies Technology Implementation/ Interdisciplinary Connections	Assessment Check Points

	5. Pneumonia
	
	  a. causes
	
	    i. infectious organisms
	
	    ii. irritating gas/dust
	    iii. prolonged inactivity
	
	  b. symptoms
	
	    i. chest pain
	    ii. cough
	    iii. shortness of breath
	    iv. fever
	
	  c. treatment
	
	    i. rest
	    ii. increased intake of fluid
	    iii. sponge baths to lower fever
	    iv. medical intervention if symptoms persist (antibiotics/ oxygen)			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	d. prevention
	
	  i. eliminate irritating substances
	  ii. treat primary disease
	  iii. maintain healthy body to increase resistance
	
	6. Asthma
	
	a. causes
	
	  i. infection
	  ii. allergy
	  iii. stress
	
	b. symptoms
	
	  i. cough
	  ii. wheezing/ difficulty breathing
	  iii. tight feeling chest
	
	c. treatment/ prevention
	
	  i. medication factors			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	ii. medical intervention if symptoms persist
	iii. avoid/ remove causative
	
	7. Emphysema
	
	   a. causes
	
	      i. can result from chronic bronchitis
	      ii. smoking
	      iii. air pollution
	
	   b. symptoms
	
	      i. cough
	      ii. shortness of breath
	      iii. wheezing
	      iv. fatigue
	
	   c. treatment
	
	      i. removal of smoke/pollution
	      ii. oxygen
	      iii. medication
	      iv. medical intervention			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	B. Gastro-intestinal 1. Ulcer a. causes i. infection from bacteria ii. poor eating habits iii. excessive use of aspirin b. symptoms i. burning pain ii. nausea iii. vomiting c. treatment i. controlled diet ii. antibiotics iii. antacids iv. medical intervention d. prevention i. avoid extremes in food temperature ii. avoid very spicy foods			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Gastritis/Colitis
	
	a. causes
	
	    i. infection from virus/bacteria
	    ii. poor eating habits
	
	b. symptoms
	
	    i. cramping abdominal pain
	    ii. vomiting/ diarrhea
	
	c. treatment
	
	    i. removal of cause
	    ii. controlled diet
	    iii. medical intervention
	    iv. medication
	
	d. prevention
	
	    i. control stress
	    ii. avoid any known causative factor			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Hepatitis
	
	a. causes
	
	   i. poor sanitation: type A
	   ii. contaminated blood or needles: type B
	
	b. symptoms
	
	   i. loss of appetite
	   ii. headache
	   iii. chills and fever
	   iv. nausea/ vomiting
	   v. possible jaundice
	
	c. treatment
	
	   i. nourishing diet
	   ii. rest
	
	d. prevention - type A
	
	   i. proper cleanliness techniques
	   ii. proper sanitation			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	e. prevention - type B
	
	    i. properly sterilized medical equipment
	    ii. blood banks must be sure blood transfusions are not contaminated
	
	C. Hereditary
	
	    1. Diabetes
	
	    a. obesity is a contributing factor
	    b. symptoms
	
	        i. high blood sugar
	        ii. hunger
	        iii. weakness
	        iv. thirst
	        v. increased urination
	        vi. sugar in urine
	        vii. weight loss
	
	    c. treatment
	
	        i. controlled diet			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. controlled exercise iii. blood testing daily to monitor sugar level iv. medical intervention v. medication d. prevention i. frequent physical exams ii. weight control iii. diet control 2. Sickle cell anemia a. both parents must carry the gene b. symptoms i. fatigue ii. paleness iii. loss of appetite iv. possible fainting v. leg ulcers vi. fever vii. pain in abdomen/ extremities			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	Skills *What students will be able to do.*	Activities/Strategies Technology Implementation/ Interdisciplinary Connections	Assessment Check Points

	c. treatment
	
	   i. blood transfusions
	   ii. rest
	   iii. oxygen
	   iv. medication prescribed by doctor
	   v. provide fluids
	
	d. prevention - genetic counseling
	
	3. Tay-Sachs
	
	a. both parents must carry the gene
	b. symptoms
	
	   i. enlargement of head
	   ii. brain damage
	   iii. deafness
	   iv. lack of energy
	   v. premature death (3-4 years)
	
	c. treatment: none
	d. prevention: genetic counseling			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	4. Hemophilia
	
	a. transmitted from mother to son
	b. symptoms
	
	   i. persistent bleeding of slight injuries
	   ii. bleeding into joints, leading to deformity
	
	c. treatment
	
	   i. transfusions of blood and clotting factor
	   ii. rest
	   iii. minor surgical procedures, such as pulling teeth, are performed in the hospital
	   iv. avoidance of injury
	   v. cold compresses
	
	d. prevention - genetic counseling			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	5. Muscular dystrophy/ Duchene Disease
	
	a. causes
	
	   i. defective gene causes a protein abnormality that results in muscular wasting
	   ii. sex-linked, passing from mother who carries the gene to her sons
	
	b. symptoms
	
	   i. difficulty walking and climbing stairs
	   ii. waddling or walking on the toes
	   iii. weakness of muscles in the face, making it difficulty to close the eyes or to whistle
	   iv. difficulty raising the arms and lifting objects			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	c. treatment - aimed at making the person more comfortable
	
	   i. physical therapy
	   ii. exercise programs
	   iii. medication
	   iv. surgery to free or lengthen contracted tendons
	   v. use of orthopedic devices such as special shoes, canes, braces, splints
	
	d. prevention
	
	D. Nutritional
	
	   1. Iron Deficiency Anemia
	
	      a. causes
	
	         i. poor eating habits with lack of iron
	         ii. growth spurts
	
	      b. symptoms
	
	         i. fatigue			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. paleness iii. fainting iv. loss of appetite c. treatment i. increased iron intake ii. rest d. prevention - adequate diet 2. Malnutrition a. causes i. poor body utilization of nutrients ii. poor dietary habits b. symptoms - vary according to type of deficiency c. treatment i. balanced diet ii. avoidance of substances that deplete nutrients (coffee, tea, alcohol)			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iii. vitamin/mineral supplements
	
	 3. Anorexia Nervosa
	
	 a. causes - psychological disorder brought on by:
	
	    i. poor self-concept
	    ii. poor coping abilities
	    iii. high expectations of oneself
	    iv. need to be popular
	    v. obsession with thinness
	
	 b. signs
	
	    i. low caloric intake
	    ii. great interest in food
	    iii. obsession with exercise
	    iv. emotional problems
	    v. distorted body image			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	vi. denial of eating problems
	
	c. physical symptoms
	
	  i. extreme weight loss
	  ii. constipation
	  iii. hormonal changes
	  iv. heart damage
	  v. nerve damage
	  vi. impaired immune function
	  vii. cessation menstrual cycle
	  viii. death
	
	d. treatment - all cases require:
	
	  i. medical help
	  ii. professional counseling
	
	4. Bulimia Nervosa
	
	a. causes - psychological disorder brought on by:
	
	  i. desire to be thin			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. desire to be more attractive iii. to be physically perfect b. signs/symptoms i. binging/purging ii. diarrhea iii. unexplained weight loss iv. secretive behavior c. physical consequences i. dehydration ii. kidney damage iii. irregular heart beat iv. stomach and esophagus damage (hemorrhaging) v. tooth enamel erosion vi. liver damage vii. death d. treatment i. medical help ii. professional counseling			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	5. Excessive Salt
	
	   a. water retention
	   b. high blood pressure
	   c. statistical relationship to heart disease
	
	6. Excessive Sugar
	
	   a. dental problems
	   b. weight gain
	   c. hyperglycemia, hypoglycemia
	   d. predisposition to diabetes
	
	7. Alcohol
	
	   a. cirrhosis of the liver
	   b. malnutrition
	   c. heart disease
	   d. brain damage
	
	E. Degenerative
	
	1. Heart Disease
	
	   a. coronary artery disease
	
	     i. causes
	
	      aa. improper diet			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	bb. lack of exercise cc. high blood pressure dd. smoking ee. heredity ii. symptoms aa. shortness of breath bb. fatigue cc. chest pain dd. heart attack iii. treatment aa. dietary control of fats and calories bb. controlled exercise cc. prescribed iv. prevention aa. eat properly, avoid fats bb. maintain proper body weight cc. avoid smoking dd. exercise			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	b. Heart Attack i. causes aa. blood clot bb. constricting of coronary blood vessels ii. symptoms aa. severe chest pain bb. pain in left arm cc. shortness of breath dd. pale ee. profuse sweating iii. treatment aa. rest bb. prescribed medication cc. oxygen iv. prevention aa. avoid smoking bb. balanced diet			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	cc. maintain proper weight
	dd. proper exercise
	ee. regular physical check-ups
	
	F. Arthritis
	
	   1. types
	
	      a. infectious
	      b. direct trauma
	      c. metabolic (gout)
	      d. rheumatoid
	      e. osteoarthritis (degenerative)
	
	   2. causes
	
	      a. microorganisms (infectious)
	      b. injury
	      c. inability to utilize some proteins
	      d. heredity
	      e. physical/mental stress
	
	   3. symptoms in joints
	
	      a. pain
	      b. swelling			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	c. redness
	d. loss of movement
	e. deformity
	
	4. treatment
	
	    a. aspirin
	    b. prescribed mediation
	    c. moist heat compresses
	    d. mild exercise to keep mobility
	    e. rest
	    f. proper diet
	
	C. Lyme Disease
	
	1. cause - tick borne bacteria carried by deer tick (on mice, deer, birds and other rodents)
	2. incubation - 7-10 days after bite
	3. symptoms
	
	    a. stage I
	
	        i. rash at site of bite			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. circle of reddened skin around pale area (bulls-eye appearance) iii. flu-like illness iv. stiff neck b. stage II i. arthritic complications: hot, swollen, painful joints - painful muscles and tendons ii. neurological complications: facial paralysis, skin sensitivities, insomnia, hearing loss iii. cardiac complications: irregular hear beat (fast or slow), chest pain, dizziness, shortness of breath			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	4. treatment a. diagnosed by blood test and symptoms b. antibiotics: usually tetracycline or penicillin c. rest for severe fatigue d. aspirin, acetaminophen for flu symptoms and joint pain e. pregnant victims: hospitalization with IV therapy 5. prevention a. stay on paved surfaces when walking b. wear long sleeved pants and shirts in wooded areas c. tuck shirt in pants, tuck pants in socks, wear closed shoes d. hat for head e. wear light colored clothing for easy tick spotting f. body check for ticks g. use repellents with DEET/permethrin			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	h. flea and tick collars for pets - check pets frequently i. keep weeds and grass around home mowed D. Rabies (Hydrophobia) 1. cause - virus carried by wild animals (raccoons, skunks, fox, bats, squirrels) 2. incubation: 1-3 months 3. symptoms of rabid animal a. appears to be crazed or overly aggressive b. unusually tame for wild animal c. a nocturnal animal out in daylight d. heavy salivating (foaming at mouth) e. loss of coordination f. strange meow or bark 4. symptoms of human victim initially: a. radiating fever b. fever			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	c. headache/sore throat/ear infection d. nervousness/ anxiety e. nausea f. rapid heart rate g. increased sensitivity to loud noise h. excessive salivating 5. advanced: a. loss of coordination b. muscle spasms c. inability to swallow food or water causing frothy saliva d. high fever e. 50% victims experience hydrophobia (fear of water) f. progressive generalized paralysis g. death - always fatal if not treated			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	6. treatment
	
	   a. wash wound for 10 minutes with soap and water
	   b. medical help (series of rabies vaccines)
	
	7. prevention/minimizing risks
	
	   a. inoculation of pets
	   b. secure pets from exposure to wild animals
	   c. garbage and pet foods kept indoors
	   d. notify police or animal shelter if animal is suspicious
	
	E. Senility
	
	1. causes
	
	   a. hardening/ narrowing of blood vessels in brain
	   b. linked to emotional insecurities (depression/poor adjustment to life)			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. symptoms
	
	   a. confusion
	   b. forgetfulness
	   c. resistance to change
	   d. irritability
	   e. impairment in thinking/reasoning
	   f. handicaps include blindness, deafness, crippling
	
	3. treatment
	
	   a. each symptom is treated
	   b. familiar surroundings
	   c. help with personal hygiene
	   d. help with nutrition
	
	4. prevention
	
	   a. health life style
	   b. mental activity
	
	     i. plan future goals
	    ii. join clubs, organizations			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	F. Alzheimer's Disease (degenerative brain disorder)
	
	  1. causes
	
	    a. unknown
	    b. investigating viruses, toxins, genes
	
	  2. symptoms
	
	    a. early sign - loss of memory
	    b. difficulty speaking
	    c. loss of all cognitive functions
	    d. irreversible and incurable
	
	  3. treatment
	
	    a. provision of support services for families of victims
	    b. "environmental cues" in early stages for patient
	
	G. Cancer
	
	  1. causes
	
	    a. hereditary tendency
	    b. diet
	    c. air/water pollution			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	d. loss of all cognitive
	e. irritations of medications
	f. smoking
	
	2. symptoms
	
	   a. unusual bleeding or discharge
	   b. lump of thickening on body
	   c. sore that does not heal
	   d. change in body function (depending on affected organ)
	   e. persistent hoarseness/cough
	   f. difficulty in swallowing
	   g. change in wart or mole
	   h. pain in affected area
	   i. weight loss
	
	3. treatment
	
	   a. surgery
	   b. chemotherapy
	   c. radiation			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	4. prevention
	
	   a. medical care for primary condition, e.g., colitis
	   b. avoid chemical food additives
	   c. avoid excessive use of suspected carcinogens, e.g., smoking artificial sweeteners
	   d. include fiber in diet
	   e. avoid excessive sun exposure
	   f. regular physical check-ups
	   g. stress control
	
	H. Acquired Immune Deficiency Syndrome (AIDS)
	
	1. causes - HIV (human immunodeficiency virus) Types I and II
	2. method of transmission
	
	   a. sexually transmitted
	   b. contaminated blood/blood products
	   c. congenitally acquired
	   d. contaminated syringes			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. stages and symptoms
	
	a. carrier
	
	  i. no symptoms
	  ii. incubation may be 6 months to 10 years or more
	
	b. ARC (AIDS - Related Complex) - weakening of immune system
	
	  i. low grade fevers
	  ii. weakness
	  iii. swollen lymph glands
	  iv. night sweats
	  v thrush
	
	c. AIDS (complete breakdown of immune system)
	
	  i. wasting away
	  ii. possible pneumonia (PCP)
	  iii. possible cancer (Kaposi's sarcoma)			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	4. treatments, e.g., experimental
	5. prevention
	
	  a. abstain from sexual contact
	  b. abstain from exchange of blood, e.g., sharing syringes, "blood brothers"
	  c. avoid sexual contacts with members of high-risk groups, e.g., homosexuals, IV drug addicts, prostitutes, bisexuals
	
	6. risk reduction - use of prophylactics, monogamous
	
	7. new research, therapies, related issues
	
	III. Sexually transmitted
	
	  A. Gonorrhea
	
	    1. cause - bacteria (gonococcus)			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. incubation period - usually 2-7 days after contact
	3. symptoms
	
	   a. male
	
	      i. painful urination
	      ii. burning pain
	      iii. discharge from pain
	      iv. possible sterility if untreated
	
	   b. female
	
	      i. possible discharge from vagina
	      ii. her symptoms may not be obvious
	      iii. untreated, may involve abdominal pain
	      iv. possible reproductive damage/sterility
	
	4. treatment
	
	   a. penicillin
	   b. other drugs being studied			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	5. prevention
	
	   a. avoid sexual relations
	   b. use of prophylactics
	
	6. can cause blindness in infants
	
	B. syphilis
	
	  1. cause - bacteria (treponema pallidum)
	  2. incubation: 10 days to 3 months after contact
	  3. symptoms:
	
	   a. Stage I (primary)
	
	     i. chancre/open sore
	     ii. fluid containing millions of bacteria discharged
	     iii. lasts 2 weeks to 6 months
	
	   b. Stage II (secondary)
	
	     i. rash
	     ii. fever
	     iii. muscle pain			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iv raised bumps oozing infected fluid v. symptoms disappear in 2-6 weeks vi. hair may fall out in patches c. Late stage i. may occur from 5-20 years after Stage II symptoms ii. permanent damage to body organs iii. blindness (once damage has occurred, cannot be reversed) iv. insanity v. paralysis vi. death 4. treatment a. penicillin 5. prevention a. avoid sexual relations b. use of prophylactics			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	6. pregnancy - fetus may be deformed or dead
	
	 C. Genital Herpes
	
	 1. cause - virus (herpes simplex II)
	 2. incubation: 2 - 8 days
	 3. symptoms:
	
	    a. rash
	    b. fever
	    c. tiredness
	    d. muscle aches
	    e. swollen lymph glands
	    f. painful blisters on genital
	
	 4. treatment
	
	    a. no cure
	    b. prescribed treatment for control only
	
	 5. prevention
	
	    a. avoid sexual relations
	    b. use of prophylactics
	
	 6. complications include spreading disease to other parts of the body			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	D. NGU (non-gonococcal urethritis; non-specific urethritis; urethritis) 1. cause: bacteria (Chlamydia trachomitis) in 50% of the cases, other unknown organisms 2. incubation period: 1-3 weeks after exposure 3. symptoms a. male i. similar to, but not as severe as, gonorrhea ii. painful urination iii. whitish urethral discharge iv. 10% of infected males experience no symptoms complications include: possible sterility, infection of prostate gland, Reiter's syndrome (a form of arthritis) v. disease affects men, can be transmitted to women during intercourse			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	b. female (infected by male with NGU)
	
	  i. infections of cervix, uterus, liver, urethra infection in Fallopian tubes or ovaries called PID (pelvic inflammatory disease) leading to sterility of tubal pregnancies
	
	4. treatment
	
	  a. antibiotics (tetracycline)
	
	5. prevention
	
	  a. avoid sexual relations
	  b. use of prophylactics
	
	6. may cause eye infections and/or pneumonia in babies born to infected mothers
	
	E. Vaginitis (female)
	
	1. cause - bacterial, yeast fungi, trichomonas, low estrogen levels			

Human Growth and Development: Diseases (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. symptoms
	
	  a. abnormal vaginal discharge
	  b. pain, burning, itching
	
	3. treatment
	
	  a. vary, depending on cause (antibiotics, creams)
	
	4. prevention
	
	  a. keep vaginal area clean
	  b. avoid chemicals that may upset the PH of vagina
	  c. wear cotton underwear, avoid pantyhose, tight clothing			

Human Growth and Development: Diseases (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Consult IEPs and 504 plans to differentiate instruction based on individual needs.
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Provide study guides
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Utilize peer tutors
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	Differentiate products/presentations to accommodate multiple intelligences.
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	Assign roles or specific tasks for group projects.
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	
Sexually Transmitted Diseases: An Update - Sunburst STD: What You Should Know - Pleasantville Media Herpes - Sunburst Body Defense - Britannica Infectious Disease - Britannica Anorexia and Bulimia - Marsh Media Cardiovascular Diseases, Cholesterol, Hypertension - InForMed Young Hearts - AIMS Media Aids Alert for Youth - Creative media Study of Human Disease - Health Edco Lyme Disease - Lyme Disease Foundation	

Human Growth and Development: Diseases (Cont.)

Resources:	
Rabies - NJ Dept of Health Health Responsibilities - Marsh Media Diagnosing Heart Disease - Films for Humanities and Science Cancer - Films for Humanities and Science Our Immune System - The Science Show The Body's Fight Against Diseases Time Out: HIV/AIDS - Paramount A Paralyzing Fear: The Polio Story- PBS Influenza: 1918 - PBS Being Healthy - Harcourt Brace Health for Life - Scott Foresman	

Human Growth and Development: Substance Abuse
(7th Grade)

Targeted Standards: Standard 2.3: All students will learn and apply information about alcohol, tobacco, other drugs, and medicines to make decisions that support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that adolescents have many reasons why they begin to use substances. Students will be able to understand that there are many symptoms of abuse. Students will be able to understand that it is important to be able to know the different types of drugs and their effects (pharmacology). Students will be able to understand that the "Gateway Drugs" (tobacco, alcohol, marijuana) have dangers and risks associated with their use.

Essential Questions: How does substance abuse impact the three areas of health? What are refusal skills?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/presentation

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.3.8.B.1 Compare and contrast the physical and behavioral effects of commonly abused substances by adolescents.
 	
2.3.8.B.7 Explain the impact of inhalant use and abuse on social, emotional, mental, and physical wellness.
	Reasons why adolescents begin to use substances.
	
	Effects of using chemical substances.
	
	Impact of use on all areas of health.
	
	How to apply refusal skills.
	
	Current research as it applies to the gateway drugs.
	
	I. Substance Abuse
	
	   A. Reasons why adolescents begin to use substances
	
	      1. Curiosity
	      2. Cope with stress/escape
		Drug classification (through definitions).
		
		Recognize the effects of abuse.
		
		Recognize peer pressure.
		
		Understand reasons why adolescents begin using substances.
		
		List the types of drugs.
		
		Identify symptoms of abuse.
		
		Understand dangers of intoxication.
			Cause and effect
			
			Create a skit
			
			Write/illustrate story
			
			Cooperative activities
			
			Support AV materials
			
			Oral presentations
			
			Teacher lecture
			
			Research
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Self-image/impress peers
	4. Parental influence regarding alcohol, tobacco
	5. Advertisements - adventure, masculine, sexy, glamorous
	
	B. Drugs
	
	  1. types
	
	    a. stimulants
	    b. depressants
	    c. hallucinogens
	    d. anabolic steroids
	
	  2. effects
	
	    a. habituation
	    b. tolerance
	    c. addiction
	
	C. Pharmacology
	
	  1. Volatile substances (glue, fuels)
	
	    a. commercial and household uses
	
	      i. fuel
	      ii. manufacturing objects and substances
			Create bulletin board of drug advertisements with explanation of how they encourage use of tobacco, alcohol, and over-the-counter drugs.
			
			Guest speaker: American Cancer Society, Alcoholics Anonymous.
			
			Distribute and discuss pamphlets and articles from Edison Police.
			
			Create bulletin boards showing how advertising implies adventure, sex, etc.
			
			Discuss behavior patterns that might lead to involvement with the law.
			
			Guest speaker from Police Department to discuss implications of breaking the law.	

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iii. building and repair of objects
	
	b. methods of proper and safe use
	
	   i. read package instructions
	   ii. use in ventilated area of outdoors
	
	c. misuse/abuse by inhalation of concentrated vapors
	
	   i. types of inhalants
	
	     aa. solvents
	     bb. aerosols
	     cc. refrigerants
	     dd. medicine and pain killers
	
	   ii. ways to inhale
	
	     aa. directly from bottle
	     bb. bags (plastic or paper)
	     cc. balloons			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	dd. empty soda cans
	ee. soaking rag
	
	d. symptoms of abuse
	
	  i. intoxicated appearance
	  ii. runny nose
	  iii. loss of muscle coordination
	  iv. distorted perception and judgment
	  v. erratic behavior
	  vi. confusion
	  vii. as drug wears off
	
	    aa. nausea
	    bb. depression
	    cc. loss of interest in life's activities
	
	e. reasons for abuse
	
	  i. peer pressure
	  ii. curiosity
	  iii. escape			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	f. indicators of abuse
	
	   i. chemical color
	  ii. irritated skin around nose/mouth
	 iii. intoxicated appearance
	
	g. dangers of abuse
	
	   i. convulsions
	  ii. brain damage
	 iii. liver damage
	 iv. kidney damage
	  v. bone marrow damage - Aplastic Anemia
	 vi. respiratory system damage
	
	h. legal penalties for possession and distribution
	
	2. Tobacco
	
	a. costs of smoking
	
	   i. cigarettes, cigars, etc.			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iii. smokeless tobacco, snuff or chewing (spit)
	
	 b. chemical poisons related to smoking
	
	   i. tar
	   ii. nicotine
	   iii. carbon monoxide
	
	 c. effects of tobacco on the cardiovascular system
	
	   i. heart beats faster
	   ii. blood vessels constrict
	   iii. possible cause of
	
	     aa. high blood pressure
	     cc. escape
	     dd. peer pressure			

Human Growth and Development: Substance Abuse (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iv. carbon monoxide deprives blood of oxygen
	
	d. effects of tobacco on the respiratory system
	
	  i. destruction of cilia
	  ii. inflamed mucous membrane
	  iii. destruction of alveoli
	  iv. possible cause of
	
	    aa. reduced lung capacity
	    bb. smoker's cough
	    cc. bronchitis
	    dd. emphysema
	    ee. cancer
	    ff. oral cancer (smokeless tobacco)
	
	e. New research on effects of tobacco
	f. Cigarette advertising
	
	3. Alcohol
	
	a. types of alcohol
	
	  i. methyl alcohol (made from wood)			

Human Growth and Development: Substance Abuse (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. ethyl alcohol (made from fruits, vegetables, grain) aa. beer bb. wine cc. distilled beverages b. when alcohol is consumed i. alcohol acts as a depressant on the brain ii. no digestion needed iii. alcohol absorption into blood stream is direct iv. oxidation in the liver is at a rate of 1/2 ounce per hour v. blood alcohol concentration (BAC) elevates when more alcohol is consumed than the liver can oxidize			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	vi. the higher the BAC:
	
	   aa. the more the brain is sedated
	   bb. the greater the signs of intoxication
	
	vii. signs of intoxication
	
	   aa. loss of judgment
	   bb. loss of muscle coordination
	   cc. vomiting
	   dd. unconsciousness
	
	viii. dangers of intoxication
	
	   aa. personal embarrassment
	   bb. possible injury to self and others
	   cc. hangover
	   dd. unconsciousness
	   ee. death
	
	ix. possible reasons for alcohol abuse
	
	   aa. learned behavior (emulation of parents)
	   bb. hereditary tendency toward alcoholism			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	cc. escape dd. peer pressure x. conditions related to alcohol abuse aa. liver damage bb. brain damage cc. lowered resistance to disease dd. malnutrition ee Fetal Alcohol Syndrome (FAS) xi. effects of alcoholism aa. on the individual bb. on the family cc. on the community			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	xii. help for the alcoholic and family members aa. Alcoholics Anonymous bb. Al-Anon cc. Alateen dd. National Council of Alcoholism xiii. alcohol advertising 4. Marijuana - Indian hemp plant a. why people smoke marijuana i. curiosity ii. social reasons iii. relaxation/ enjoyment iv. escape b. active ingredient in marijuana is delta-9-THC (tetrahydrocannabinol) i. fat soluble			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iii. THC stays in body for 30 days
	
	c. marijuana is 5-20 times more potent today than 10 years ago
	d. average age of marijuana smoker is lower today than 10 years ago
	e. signs of use
	
	   i. heavy, sweet, burning odor
	  ii. signs similar to those of intoxication
	 iii. dilated pupils
	 iv. bloodshot, glassy eyes
	  v. increased heart rate
	 vi. difficulty with memory
	vii. loss of interest in life's activities (amotivational syndrome)			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	f. possible dangers to body
	
	   i. carcinogenic
	  ii. changes in reproductive function, e.g., sperm, chromosome damage
	 iii. brain damage
	 iv. lowered immunity
	  v. respiratory damage
	
	g. legal penalties for possession/distribution
	
	D. Medical use of drugs
	
	1. Drug therapy, e.g., cancer, mental illness
	2. Conquest of disease, e.g., smallpox, polio
	3. Control of certain illnesses, e.g., hypertension			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	E. Reasons for use of mood/behavior-modifying substances 1. Social, e.g., peer pressure, adventurousness 2. Pain-relief, e.g., opiates, nausea control in chemotherapy 3. Escape, e.g., way to void reality F. Legal implications of substance abuse 1. Vandalism 2. Theft 3. Probation 4. Arrest 5. Suspension/expulsion from school			

Human Growth and Development: Substance Abuse (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Human Growth and Development: Nutrition
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are many factors, symptoms, and resources available for people with eating disorders. Students will be able to understand that the nutritional principles of balance, variety, and adequacy are important in demonstrating proper nutrition. Students will be able to understand that people need to be responsible for and be able to recognize the consequences of personal food selection.

Essential Questions: How does proper nutrition affect the three areas of health? What helps to make us healthy individuals?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.B.1. Analyze how culture, health status, age, and eating environment influence personal eating patterns and recommend ways to provide nutritional balance.

2.1.8.B.2. Identify and defend healthy ways for adolescents to lose, gain, or maintain weight. | Components of a balanced diet.

Consequences of an inadequate diet.

Common nutritional disorders and diseases.

How emotions affect eating habits.

Snacks/fast foods.

Myths/misconceptions.

The food/nutrient groups.

A. Components of a balanced diet

    1. Food Pyramid | Analyze food labels.

Recognize food myths.

Understand the consequences of poor diet choices/practices.

Understand the Food Guide Pyramid.

Understand how emotions can effect eating.

Identify common nutritional disorders/diseases | Food log

Create bulletin board of basic food groups and nutrients

Videos/DVDs – Support material

Research "fad diets"

Pair-Share

Cooperative activities

Meal plans

Create a PSA on the importance of healthy snacking

Small Groups

Oral Presentations | Create a healthy diet plan

Quizzes

Tests

Pre-assessment

Q & A

Worksheets

Homework

Class discussions

Projects |

Human Growth and Development: Nutrition (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Nutrients: vitamins, minerals, fats, proteins, carbohydrates
	
	   a. sources
	   b. function
	
	3. Caloric intake vs. caloric output
	
	B. Consequences of inadequate diet
	
	   1. Lowered resistance to disease
	   2. Lowered energy level
	   3. Poor growth
	   4. Slower healing
	
	C. Common nutritional disorders/diseases
	
	   1. Tooth decay
	   2. Anemia
	   3. Skin disorders, e.g., pellagra
	   4. Night blindness
	   5. Heart disease
	   6. Anorexia nervosa
	   7. Bulimia
	   8. Obesity
			Teacher Lecture	

Human Growth and Development: Nutrition (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	D. Emotions (feelings) and eating 1. Appetite 2. Digestion 3. Food as a response to bad feelings E. Snacks and fast foods F. Myths/misconceptions 1. Certain foods are for certain meals 2. Butter is more fattening than margarine 3. Yogurt us more healthful than milk			

Human Growth and Development: Nutrition (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Understanding Self: Personality Development
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.
Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that personality is a result of the individuals' environment and heredity. Students will be able to understand that peer pressure has an effect on the attitudes and the behaviors of individuals.

Essential Questions: How does heredity, environment, and peers influence our personal development?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.1.8.E.3. Explain how culture influences the ways families and groups cope with crisis and change.
 	
2.2.8.C.1. Analyze strategies to enhance character development in individual, group, and team activities.
	Terminology
	• Personality
	• Environment
	• Peers
	
	Which factors influence personality?
	
	A. Personality Development
	
	   1. Heredity
	
	      a. Physical characteristics
	      b. Intelligence
	      c. Interpretation of and reaction to the environment
		Recognize and discuss the difference between positive and negative peer pressure.
		
		Understand the importance of the environment and heredity's role in personal development.
		
		Understand that children learn from watching others.
		
		Identify how peer pressure is an important influence during teen years.
		
		Identify things that make you angry.
			Role play
			
			Videos/DVDs – Support material
			
			Class discussion
			
			Journal Writing
			
			Research
			
			Class debate on whether heredity or environment has more of an influence on personality.
			
			Bulletin board on healthy ways to deal with anger.
			
			Create a list of common themes of popular songs.
			
			Teacher Lecture
			
			Small Groups
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Understanding Self: Personality Development (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Environment
	
	  a. Parents are the earliest teachers and providers of basic needs.
	  b. Children learn by watching others.
	  c. As children try different forms of behavior, rewards and punishments determine traits which will be reinforced.
	
	3. Peers
	
	  a. During teen years peer pressure is an important influence.
	  b. Peer pressure can be a positive or a negative influence.			

Understanding Self: Personality Development (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Understanding Self: Factors Influencing Decision-Making
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.
Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that the process of decision-making is most effective when an individual utilizes all the steps thoroughly.

Essential Questions: What factors influence the decisions that you make?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.E.3. Explain how culture influences the ways families and groups cope with crisis and change. 2.1.8.E.4. Compare and contrast stress management strategies that are used to address various types of stress-induced situations. 2.2.8.B.2 Justify when individual or collaborative decision-making is appropriate. 2.2.8.B.3. Analyze factors that support or hinder the achievement of personal health goals during different life stages.	Justify when individual or collaborative decision-making is appropriate. Gang Awareness	Apply the decision-making process to real-life situations. Analyze and evaluate outcomes. Identify various factors that influence decision making. Understand the limitations to decision making.	Role play Class Discussion Support AV material Writing a story Posters Bulletin boards Small Groups Teacher Lecture	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Understanding Self: Factors Influencing Decision-Making (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Understanding Self: Factors Influencing Attitudes about Sexuality
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle. **Standard 2.2:** All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle. **Standard 2.4:** All students will learn the physical, emotional, and social aspects of human relationships and sexuality, and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will understand that there are many factors which influence our attitudes about sexuality.

Essential Questions: What are the factors that influence our attitudes about sexuality?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.1.8.A.4.Determine the impact of marketing techniques on the use of personal hygiene products, practices, and services.
 	
2.4.8.B.2.Determine the benefits of sexual abstinence and develop strategies to resist pressures to become sexually active.
	The three factors that influence attitudes: physical, psychological, and social.
	
	A. Factors Influencing Attitudes About Sexuality
	
	   1. Physical
	
	      a. Gender
	      b. Level of Maturity
	      c. Appearance
	      d. Dress
	
	   2. Psychological
	
	      a. Self-image
	      b. Personality
	
	   3. Social
	
	      a. Family attitudes
	      b. Friends
		Discuss how one's appearance sends a message about sexuality.
		
		Identify how the media affects our attitudes
		
		Understand how appearance has an influence on one's attitude about sexuality
		
		Recognize how family, religion, culture and friends influence one's feelings towards sexuality
			Class Discussion
			
			Support AV material
			
			Periodicals
			
			Search for specific TV shows/commercials which influence our sexual attitude
			
			Small Groups
			
			Oral Presentations
			
			Teacher lecture
			
			Research Projects/Papers
			
			Stress Abstinence
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Understanding Self: Factors Influencing Attitudes about Sexuality (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	c. Religion d. Culture e. Media B. Knowledge – Stress Abstinence			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Understanding Self: Understanding Emotions
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.
Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are many types of emotions. Students will be able to understand that positive and negative emotions play a role in one's behavior and self esteem. Students will be able to understand that stress is caused by many factors, which illicit many effects.

Essential Questions: How does heredity, environment, and peers influence our personal development?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.A.1. Compare and contrast verbal and nonverbal interpersonal communication strategies in a variety of settings and cultures in different situations.
 	
2.2.8.E.2. Compare and contrast situations that require support from trusted adults or health professionals.
	Types of emotions.
	
	Effects (positive/negative).
	
	Stress/stressors.
	
	Coping with stress.
	
	I. Understanding Emotions
	
	   A. Types, e.g., happiness, fear, love, hate, anger, loneliness
	
	   B. Effects of positive/negative emotions on behavior and self-esteem
	
	      1. Short-term
	      2. Long-term
		Understand the types of emotions.
		
		Understand the effects of emotion.
		
		Understand the causes and effects of stress.
		
		Identify ways to cope with stress positively.
		
		Identify ways to cope with stress negatively.
			Videos/DVDs – Support material
			
			Research Papers
			
			Cooperative activities
			
			Individual projects
			
			Bulletin board on healthy ways to deal with stress
			
			Role play stressful situations
			
			Experiments on expressing emotions
			
			Small Groups
			
			Teacher Lecture
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Understanding Self: Understanding Emotions (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	C. Stress
	
	1. Causes
	
	  a. academic, e.g., grades, assignments
	  b. family, e.g., parents, siblings
	  c. social, e.g., friends, opposite sex
	
	2. Effects of stress
	
	  a. negative
	
	    i. irritability
	    ii. illness
	
	  b. positive
	
	    i. greater effort
	    ii. improved performance
	
	3. Coping with Stress
	
	  a. negatively
	
	    i. drugs
	    ii. aggressive behavior			

Understanding Self: Understanding Emotions (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iii. avoidance
	iv. suicide
	
	b. positively
	
	   i. overcoming cause
	   ii. physical activity
	   iii. hobbies
	   iv. relaxation techniques
	   v. seek professional
	      help, e.g., doctor,
	      therapist
	   vi. assertive behavior
	
	Suicide awareness			

Understanding Self: Understanding Emotions (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Interpersonal Relationships
(7th Grade)

Targeted Standards: Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.
Standard 2.4: All students will learn the physical, emotional, and social aspects of human relationships and sexuality, and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that peer pressure has an effect on the attitudes and behavior of the individual. Students will be able to understand that various behavior patterns can affect the individual and others**.** Students will be able to understand that feelings of prejudice can affect one's attitudes and behaviors towards others. Students will be able to understand that there are many roles and responsibilities within the family.

Essential Questions: What is my role in my family?   What are the different roles that I have outside of my family?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.B.1. Predict social situations that may require the use of decision-making skills.
 	
2.4.8.A.4. Differentiate between affection, love, commitment, and sexual attraction.
	There is more than one role that they portray.
	
	With maturation comes greater responsibilities.
	
	The various types of relationships.
	
	Discrimination/prejudice.
	
	I. Relationships Within the Family
	
	   A. Individual Roles
	
	      1. Birth order
		Identify the roles that they have in life.
		
		Discuss how their responsibilities have changed as they mature.
		
		Role-play various types of relationships.
		
		Define different types of discrimination/prejudice.
		
		Understand relationships within the family.
			Venn Diagrams
			
			Videos/DVDs
			
			Research
			
			Group Work
			
			Self-reflection
			
			Role-Play
			
			Bulletin boards on how to be a good friend
			
			Open discussions on the importance of friends and family
				Quiz/Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				HW/Projects
				
				Class discussions

Interpersonal Relationships (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	2. Parental expectations 3. Child's expectations of parents and kin B. Cooperative roles 1. Chores 2. Baby-sitting C. Responsibilities change with maturation 1. Independence in self-care 2. Chores 3. School D. Responsibilities change as family unit changes 1. Parent's job 2. Child's outside activities 3. Death, divorce, illness of family member 4. New family member, e.g., adoption, birth	Understand relationships outside of the family. Identify ways to deal with peer pressure Identify harmful behavior patterns Recognize causes of prejudice	List the advantages and disadvantages of being the oldest/middle/youngest sibling Small Groups Oral presentations Teacher Lecture	

Interpersonal Relationships (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	II. Relationships Outside the Family
	
	A. Relationships with persons other than peers
	
	  1. Teachers
	  2. Neighbors
	  3. Clergy
	
	B. Peer relationships and pressures
	
	  1. Dealing with peer pressures
	
	    a. adherence to one's own values
	    b. importance of communication with peers
	
	  2. Group and non-group relationships
	
	    a. types of groups
	    b. roles in group relationships			

Interpersonal Relationships (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	Skills *What students will be able to do.*	Activities/Strategies Technology Implementation/ Interdisciplinary Connections	Assessment Check Points

	3. Peer group and family
	
	   a. support of similar values
	   b. conflicts of dissimilar values
	
	C. Behavior patterns
	
	  1. Cheating, stealing, shoplifting, lying
	
	   a. personal feelings
	   b. circumstances
	   c. consequences
	
	  2. respect for feelings and property of others
	  3. review sexual harassment in school
	
	D. Prejudice
	
	  1. Causes
	
	   a. family teachings
	   b. environmental, peer influences
	   c. personal negative experiences
	   d. low self-esteem			

Interpersonal Relationships (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Negative behaviors
	
	  a. stereotyping
	
	    i. ethnic jokes
	    ii. media stereotypes
	
	  b. discrimination
	
	    i. religious
	    ii. racial
	    iii. nationality
	    iv. gender
	    v. age
	    vi. sexual lifestyles
	    vii. others (i.e., people with disabilities)
	
	  c. bias crimes
	
	    i. harassment, threats
	    ii. property damage
	    iii. violence
	
	3. Consequences for victims
	
	  a. limited/denied opportunities			

Interpersonal Relationships (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	b. hurt feelings c. physical harm 4. Consequences for attacker a. physical harm 5. Ways to improve relationships/fight prejudice a. avoid assumptions about strangers b. empathize with others c. avoid stereotypical jokes d. avoid associating with prejudiced people Bullying, Harassment, Intimidation Domestic Violence and Child Abuse Sexual Assault			

Interpersonal Relationships (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs

Responsible Personal Behavior: First Aid
(7th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.
Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that having knowledge of basic first aid principles is important.

Essential Questions: How can one recognize, evaluate, and act accordingly with different first aid situations?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.2.8.B.1. Predict social situations that may require the use of decision-making skills. 2.2.8.B. 2 Justify when individual or collaborative decision-making is appropriate.	General first aid procedures. How to build a first aid kit. A. Adult Perspective vs. Adolescent Perspective 1. Personal habits and grooming 2. Clothing and hair style 3. Spending money 4. Chores and responsibilities at home 5. School responsibilities 6. Curfew 7. Choice of activities	Perform basic first aid procedures. Recognize an emergency situation. Understand how to make a 9-1-1 call. Build a first aid kit. Identify necessary grooming habits. Recognize potentially dangerous situations Understand that responsibility comes with ones behavior. Understand that privileges come from responsible behavior.	Hands-on basic first aid procedures Cooperative Activities Videos/DVDs – support material Internet Research Assess emergency situations Role play List ways to maintain good hygiene Create emergency plans List positives and negatives of sleeping enough Guest Speakers	Check materials in First Aid Kit Quiz/Tests Pre-assessment Q & A Worksheets HW/Projects Class discussions

Responsible Personal Behavior: First Aid (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	B. Assumption of Responsibility for One's Behavior 1. Impulsive behavior vs. thoughtful behavior 2. Reward vs. punishment - accepting consequences C. Privileges and Freedom Require Responsible Behavior 1. Types of behavior likely to earn rewards 2. Keeping privileges by not abusing them D. Learn to Recognize/Cope with Potentially Dangerous Situations 1. Hitchhiking 2. Admitting someone into your home 3. Walking alone at night 4. Being alone with strangers 5. Group loitering 6. Obscene/suspicious phone calls 7. Negative peer pressure		Small Groups Oral Presentations Teacher Lecture	

Responsible Personal Behavior: First Aid (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	8. Threat to the privacy of one's body
	9. Avoid riding with anyone who has been drinking
	
	E. Review First Aid Procedures
	
	  1. General Principles
	  2. Wounds
	  3. Shock
	  4. Poisons
	  5. Burns
	  6. Frostbite/Cold Exposure
	  7. Respiratory Emergencies
	  8. Bone and Joint Injuries
	
	Accident Prevention
	
	Fire prevention			

Responsible Personal Behavior: First Aid (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

GRADE 8
HEALTH

Human Growth and Development: Reproductive System
(8th Grade)

Targeted Standards: Standard2.4 Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that the parts of the male and female reproductive systems have specific functions. Students will be able to understand that hormones play a role in human growth and development. Students will be able to demonstrate an understanding that the reproductive system plays a vital role in one's physical growth and development. Students will be able to demonstrate an understanding that there is ongoing research in the area of sexually transmitted disease.

Essential Questions: How does the reproductive system play a vital role in one's physical growth and development? What are the different ways to prevent STDs?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay, poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.4.8.B.1 Analyze the influence of hormones, nutrition, the environment, and heredity on the physical, social, and emotional changes that occur during puberty.

2.4.8.B.2 Determine the benefits of sexual abstinence and develop strategies to resist pressures to become sexually active. | The anatomy and physiology of the male and female reproductive systems.

The functions of hormones in human growth and development.

Different types and methods of transmission of various STDs.

I. Review Reproductive System

   A. Anatomy

      1. Male

         a. penis | Label diagrams of the reproductive system.

Compare and contrast the differences in the maturation process.

Methods of transmission and prevention of STDs. | Transparencies with diagrams

Create a bulletin board

Videos/DVDs

Research

   1. Utilize anatomy charts, overhead projectors, transparencies to show reproductive systems in detail
   2. Videocassettes and Filmstrips:

Lecture | Quiz/Tests

Pre-assessment

Q & A

Worksheets

HW/Projects

Class discussions |

Human Growth and Development: Reproductive System (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.4.8.B.3 Compare and contrast methods of contraception used by adolescents and factors that may influence their use. 2.4.8.B.4 Relate certain behaviors to placing one at greater risk for HIV/AIDS, STIs, and unintended pregnancy. 2.4.8.B.5 Discuss topics regarding gender identity, sexual orientation, and cultural stereotyping. 2.4.8.B.6 Explain the importance of practicing routine healthcare procedures such as breast self-examination, testicular examinations, and HPV vaccine.	b. urethra c. vas deferens d. testes e. scrotum 2. Female a. ovary b. fallopian tubes c. uterus d. cervix e. vagina B. Physiology 1. Male a. erection i. observed at all ages ii. can occur for many reasons aa. sexual stimulation bb. irritation for tight clothing cc. full bladder b. ejaculation i. semen is expelled through urethra from seminal duct		Small Groups Oral Presentation	

Human Growth and Development: Reproductive System (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	ii. increase of heart beat, respiration iii. spasmodic movement of other body muscles 2. Female a. ovulation i. release of mature ovum into fallopian tube ii. takes place approximately every 28 days iii. ovum takes 3-4 days to move through fallopian tube to uterus once fertilized b. menstruation i. normal, natural flow of blood, tissue to outside of body from uterus through vagina ii. begins at about 10-16 years of age iii. usually lasts from 3-5 days			

Human Growth and Development: Reproductive System (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	iv. warm baths, light exercise may help reduce possibility of cramps
	v. cycle occurs about once each month
	vi. irregular periods may occur for several reasons
	
	    aa. during early years of menstruation
	    bb. emotional upsets
	    cc. illness physical conditioning, e.g., dieting, nutrition, physical activity
	
	B. Update STDs			

Human Growth and Development: Reproductive System (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Consult IEPs and 504 plans
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Differentiated instruction Provide Study Guides
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Utilize peer tutors
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Human Growth and Development: Substance Abuse
(8th Grade)

Targeted Standards: Standard 2.2: All students will use health enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle.
Standard 2.3: All students will learn and apply information about alcohol, tobacco, other drugs, and medicines to make decisions that support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that drugs are classified according to their pharmacological actions. Students will be able to understand that there are short and long term effects of drug use. Students will be able to understand that there are different methods for administering drugs. Students will be able to understand that there are consequences of habitual chemical use and abuse. Students will be able to understand that adhering to prescribed instructions on labels (OTCs and prescriptions) is important. Students will be able to understand that a life free from chemical use and abuse will have a positive impact on the individual.

Essential Questions: How can an individual appreciate the significance of a life free from chemical abuse?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.2.8.A.2 Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts. 2.2.8.B.1 Predict social situations that may require the use of decision-making skills. 2.2.8.B.2 Justify when individual or collaborative decision-making is appropriate.	The classifications of drugs. Illicit drugs vs. medicines. Myths and misconceptions. Long and short term side effects. OTC vs. Prescription. History of medicines. A. Stimulants 1. Pharmacology - increase activity of the central nervous systems	Classify drugs. Recognize various ways of administering drugs. Discuss the consequences of chemical abuse.	Create a bulletin board Videos and DVDs: support material Research drugs and medicines Pair Share Cooperative activities Lecture Small Groups Guest Speakers Oral Presentations	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Human Growth and Development: Substance Abuse (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.B.3 Analyze factors that support or hinder the achievement of personal health goals during different life stages.
 	
2.3.8.A.1 Explain why the therapeutic effects and potential risks of commonly used over-the-counter medicines, prescription drugs, and herbal and medicinal supplements vary in different individuals.
 	
2.3.8.A.2 Compare and contrast adolescent and adult abuse of prescription and over-the-counter medicines and the consequences of such abuse.
 	
2.3.8.B.1 Compare and contrast the physical and behavioral effects of commonly abused substances by adolescents.
 	
2.3.8.B.2 Predict the legal and financial consequences of the use, sale, and possession of illegal substances.
	2. Types
	
	  a. Caffeine - found in coffee, tea, cola, chocolate, many over-the-counter drugs
	  b. amphetamines - synthetically made
	  c. cocaine - comes from coca leaves, decreases sense of hunger, fatigue
	
	3. Medical uses of amphetamines
	
	  a. narcolepsy
	  b. obesity
	  c. hyperkenesis, (A.D.D. Attention Deficit Disorder)
	
	4. Negative effects of stimulants
	
	  a. caffeine
	
	    i. restlessness
	    ii. rapid heart beat
	
	  b. amphetamines
	
	    i. tolerance/ addiction			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	Skills *What students will be able to do.*	Activities/Strategies Technology Implementation/ Interdisciplinary Connections	Assessment Check Points

2.3.8.B.3 Analyze the effects of all types of tobacco use on the aging process.
 	
2.3.8.B.4 Compare and contrast smoking laws in New Jersey with other states and countries.
 	
2.3.8.B.5 Explain the impact of alcohol and other drugs on those areas of the brain that control vision, sleep, coordination, and reaction time and the related impairment of behavior, judgment, and memory.
 	
2.3.8.B.6 Relate the use of alcohol and other drugs to decision-making and risk for sexual assault, pregnancy, and STIs.
 	
2.3.8.B.7 Explain the impact of inhalant use and abuse on social, emotional, mental, and physical wellness.
 	
2.3.8.B.8 Analyze health risks associated with injected drug use.
	ii. may lead to insomnia
	    iii. elevated blood pressure
	    iv. rapid heart beat
	
	  c. cocaine
	
	    i. no medical use
	    ii. aftereffect of depression
	    iii. side-effect of severe headaches
	    iv. nasal passage damage
	    v. decreased appetite
	    vi. decreased sensitivity to pain and fatigue
	
	5. Possible consequences of stimulant usage
	
	  a. physical risks
	
	    i. dependence
	    ii. overdose
	    iii. abrupt withdrawal can lead to death
	    iv. damage to reproductive system and/or fetus			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.3.8.C.1 Compare and contrast theories about dependency/addiction (such as genetic predisposition, gender-related predisposition, and multiple risks) and provide recommendations that support a drug free life.
 	
2.3.8.C.2 Summarize intervention strategies that assist family and friends to cope with the impact of substance abuse.
	b. social risks
	
	   i. labeling as drug user
	   ii. loss of friends
	   iii. alienation from family
	   iv. limited job opportunities
	   v. job loss
	   vi. poor school performance
	
	c. legal risks
	
	   i. commission of illegal acts to obtain more drugs
	   ii. police record
	   iii. jail
	
	B. Depressants
	
	  1. Pharmacology - slow activity of central nervous system
	  2. Types
	
	   a. alcohol - most widely used
	   b. barbiturates - synthetically made
	   c. narcotics
	
	    i. opiates			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	ii. Demerol
	iii. methadone
	
	3. Medical uses
	
	    a. barbiturates - used to combat insomnia, epilepsy
	    b. opiates - morphine used a pain reliever
	    c. Demerol - pain killer
	    d. methadone - used to counteract addition
	
	4. Negative effects
	
	    a. tolerance, addition, overdose
	    b. can cause death when used with alcohol
	    c. highly addictive
	    d. excessive doses - coma and death
	
	5. Possible consequences of usage
	
	    a. physical
	
	        i. depressant/ stimulant cycle
	        ii. hepatitis, infection from dirty needles			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iii. damage to reproductive system and/or fetus iv. abrupt withdrawal can be fatal b. social i. labeling as drug user ii. loss of friends iii. alienation from family iv. loss of interest in all but drugs c. legal i. commission of illegal acts to obtain more drugs ii. police record iii. jail C. Hallucinogens 1. Pharmacology - this group of drugs produces delusions, illusions, hallucinations while altering mood, behavior			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Types
	
	  a. marijuana - most frequently used
	  b. hashish - concentrated resin from marijuana leaves
	  c. mescaline - from peyote cactus
	  d. psilocybin - from a mushroom
	  e. LSD - commonly called "acid" (Lysergic Acid Diethylamide)
	  f. PCP - commonly called "angel dust" (Phencyclidine)
	
	3. Medical use - except for marijuana, none
	4. Negative effects
	
	  a. nausea, vomiting
	  b. dizziness
	  c. weakness
	  d. distorted perception of reality, hallucinations
	  e. paranoid behavior
	  f. unexpected "flashbacks"' especially with LSD			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	5. Possible consequences of usage
	
	 a. physical
	
	    i. possible injury, death to user or others during hallucinatory behavior
	   ii. chromosomal damage
	  iii. flashbacks can continue for many years after last drug ingestion
	  iv. damage to reproductive system and/or fetus
	
	 b. social
	
	    i. labeling as a drug user
	   ii. embarrassment, guilt for behavior
	
	 c. legal
	
	    i. commission of illegal acts
	   ii. police record
	  iii. jail			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	D. Alcohol
	
	1. Pharmacology - central nervous system depressant
	2. Types
	
	   a. brewed beverages containing 3-6% alcohol
	   b. fermented beverages containing 9-22% alcohol
	   c. distilled beverages containing 40-50% alcohol
	
	3. Uses
	
	   a. ceremonial/religious
	   b. occasional medical use as sedative
	   c. social
	
	4. Negative effects
	
	   a. inhibits functioning of central nervous system
	
	     i. loss of coordination
	     ii. loss of motor reflexes
	     iii. affects speech and eye motion			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iv. affects respiration and circulation v. severe intoxication results in coma or death b. dilation of blood vessels, loss of body heat c. possible confusion, hallucinations d. hangover e. tolerance increase with use 5. Possible consequences of usage a. physical i. prolonged use: temporary/ permanent psychosis ii. alcoholism iii. withdrawal (delirium tremens) iv. digestive disorders v. liver damage vi. malnutrition vii. possible injury to self/others viii. damage to fetus - FAS ix. death			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	b. social i. loss of job ii. embarrassment because of behavior iii. labeling as alcoholic iv. monetary loss to family c. legal i. arrest for disorderly conduct ii. possible loss of driver's license iii. police record E. Marijuana 1. Pharmacology - alters perception of sounds, colors, space, time 2. Medical usage a. relieve pressure of glaucoma b. lessen side-effects of drugs used in treating cancer			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. Negative effects
	
	  a. loss psychomotor function
	  b. panic reactions
	  c. increases feelings of hunger
	  d. tetrahydocannabinol (THC) is fat soluble, remains in body for a long time
	  e. carcinogenic
	  f. decreased lung function
	  g. amotivational syndrome
	
	4. Physical
	
	  a. chemically acts as a hallucinogen
	  b. relaxed, mild euphoric feeling
	  c. induces a feeling of hunger
	  d. carcinogenic
	  e. decrease in lung function
	  f. loss of psychomotor function
	  g. male users - lower sperm count, reduced sperm mobility and increased sperm impairment			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	h. retention of THC (tetrahydrocannabinol) F. Sedatives/Depressants 1. Physical a. depress the central nervous system b. induce drowsiness c. excessive doses - intoxication, hallucinations, coma and death d. addicting e. withdrawal is more dangerous than from heroin G. Designer Drugs (variations of synthetic drugs which mimic their effects) 1. Pharmacology - varies depending on which drug the black market chemist attempts to imitate; narcotics, stimulants or hallucinogens 2. Medical usage a. none b. all illegal			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	c. all untested; potency unknown, action unknown d. many contaminated by impurities, toxins due to method of manufacture 3. Examples a. China White - synthetic heroin b. Crack - freebased cocaine c. Ecstasy - synthetic speed d. Crystal or Glass - synthetic speed e. Lovlies or Dust - synthetic PCP 4. Negative effects - vary, depending on drug taken, from disorientation to permanent organic damage, paralysis, death 5. Possible consequences of usage a. physical i. damage to reproductive system ii. brain damage-			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	iii. damage to respiratory system iv. possible injury to self or others v. damage to reproductive system and/or fetus b. social i. labeling as drug user ii. alienation from family and friends iii. loss of direction (amotivational syndrome) c. legal i. driving while impaired ii. risk of injury to self or others iii. police record H. Anabolic steroids 1. Pharmacological - androgenic anabolic steroids are synthetic derivatives of male hormones testosterone 2. Medical usage a. promote recovery after surgery			

Human Growth and Development: Substance Abuse (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	b. production blood cells in anemia
	c. treatment for Osteoporosis
	
	3. Negative effects - when used to enhance athletic performance
	
	   a. mood swings - "road rage"
	   b. flare-up of acne
	   c. baldness
	
	4. Possible consequences of usage - when used to enhance athletic performance
	
	   a. high blood pressure
	   b. cardiovascular disease
	   c. altered function of reproductive system - testicles atrophy
	   d. abnormal liver function
	   e. potential for abusive behavior
	   f. causes cancer
	
	I. Affects of Advertising on Drug Usage
	
	   1. Encourages drug usage for any symptom
	   2. Romantic approach to sale of alcohol/tobacco			

Human Growth and Development: Substance Abuse (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs Consult IEPs and 504 Plans Provide Study Guides Utilize Peer Tutors Differentiate Instruction

Understanding Self: Development of Self Concept
(8th Grade)

Targeted Standards: Standard 2.1 Wellness: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.
Standard 2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand why it is important to like yourself. Students will understand what a self-concept is. Students will understand the differences between genders as it applies to traits, roles in society, and values. Students will be able to understand that a positive self-concept is important for the proper psychological development of the individual. Students will be able to understand that emotions are feelings expressing basic needs or drives. Students will be able to understand that teenagers face many types of stressful situations that can be dealt with in various ways.

Essential Questions: How can the development of a positive self-concept help build healthy relationships?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.1.8.A.1 Assess and apply health data to enhance each dimension of personal wellness.
 	
2.2.8.C.1 Analyze strategies to enhance character development in individual, group, and team activities.
 	
2.2.8.C.2 Analyze to what extent various cultures have responded effectively to individuals with disabilities.
	What is self-concept?
	
	What "exploitation" means.
	
	Importance of values.
	
	Changing roles in society.
	
	A. Feeling good about oneself
	
	   1. Physical appearance
	   2. Social position
	   3. Emotional feelings and attitudes
		Self analyze.
		
		Compare today's gender roles with those of previous generations.
		
		Discuss stereotypes
		
		Identify stressful situations and how to deal with them.
			Create a bulletin board
			
			Videos and DVDs: support material
			
			Research gender differences (roles)
			
			Pair Share
			
			Cooperative activities
			
			Role Play
			
			Lecture
			
			Small Groups
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Understanding Self: Development of Self Concept (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.C.3 Hypothesize reasons for personal and group adherence, or lack of adherence, to codes of conduct at home, locally, and in the worldwide community.	B. Not exploiting others
	
	  1. Mocking
	  2. Gossiping
	  3. Accepting people
	  4. Refusing to take advantage
	
	C. Developing appreciation for maleness/femaleness
	
	  1. Stereotypical traits
	
	    a. male, e.g., aggressive, muscular, athletic, supremacy
	    b. female, e.g., passive, fragile, non-competitive
	
	  2. Changing roles in society
	  3. Qualities valued in today's man/women, e.g., character strength, ability to get along with others
	
	D. Understanding strengths and weaknesses
	
	  1. Recognition
	  2. Realistic goals
	  3. Correcting weaknesses
	  4. Self-acceptance
	  5. Impossibility of perfection
			Oral Presentations	

Understanding Self: Development of Self Concept (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.	Modify curriculum to suit individual needs
Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*	Consult IEPs and 504 Plans
Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development	Provide Study Guides
National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*	Utilize Peer Tutors
New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*	Differentiate Instruction
Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine	
Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Understanding Self: Development of Emotions
(8th Grade)

Targeted Standards: Standard 2.1: All students will learn and apply health promotion concepts and skills to help promote a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that biological and environmental forces effect emotions. Students will be able to understand that stress affects a person negatively and positively. Students will be able to understand that there are characteristics of emotional security. Students will be able to understand that there are different defense mechanisms. Students will be able to understand that there are many characteristics that exemplify emotional maturity

Essential Questions: How do emotions affect a person's well-being?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.E.1 Evaluate various health products, services, and resources from different sources, including the Internet. 2.1.8.E.2 Compare and contrast situations that require support from trusted adults or health professionals.	Definition of emotions. Biological and environmental influences on emotions. What are defense mechanisms? Stressors – recognition. How to deal with stressful situations. Characteristics of emotional maturity. A. Forces that affect emotions 1. Biological a. hormones	Know what a stressor is. Recognize emotions. Improve self-esteem. Control positive and negative emotions.	Create a bulletin board Videos and DVDs: support material Research Pair Share Cooperative activities Lecture Small Groups Oral Presentations	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Understanding Self: Development of Emotions (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	b. diabetes
	
	2. Environmental
	
	   a. work pressure
	   b. school pressure
	
	3. Relationships with others
	
	   a. dependence vs. independence
	   b. facing/dealing with conflicts
	
	4. Past learning experiences
	
	   a. ongoing emotional growth
	   b. reward vs. punishment
	
	B. Stressful situations
	
	1. School
	
	   a. grades
	   b. appropriate course scheduling
	   c. college/vocational school			

Understanding Self: Development of Emotions (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	2. Parental attitudes
	
	   a. dating
	   b. friends
	   c. rewards/ punishment
	
	3. Role at home
	
	   a. chores
	   b. allowance
	   c. kin relationships
	
	4. Communication
	
	   a. lack of communication
	   b. misunderstanding
	
	      i. tone of voice, inflection
	      ii. body language
	
	5. Peer relationships
	
	   a. standards of acceptance
	   b. rejection
	   c. confiding in others
	   d. dress
	   e. reputation
	   f. likes vs. dislikes			

Understanding Self: Development of Emotions (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	6. Relaxation from stress
	
	  a. exercises
	  b. meditation
	  c. yoga
	  d. stress - reduction centers
	  e. role of proper diet
	  f. reduction of caffeine, salt, refined sugars; increase B and C vitamins
	
	C. Expressing emotions
	
	  1. Negatively
	
	    a. displacement, e.g., blaming others
	    b. projection
	    c. aggression
	    d. withdrawal, e.g., runaway signs of isolation and depression (suicide)
	
	  2. Positively
	
	    a. discussion
	    b. channeling energy into appropriate outlets, e.g., sports, hobbies
	    c. assertiveness			

Understanding Self: Development of Emotions (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	D. Characteristics of emotional maturity 1. Self-discipline 2. Self-esteem 3. Independence 4. Accepting reality 5. Personal responsibility 6. Expressing emotions appropriately 7. Adaptability Suicide awareness			

Understanding Self: Development of Emotions (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
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www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Understanding Self: Adolescent Sexuality
(8th Grade)

Targeted Standards: Standard 2.4 Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are anatomical and physiological differences between the male and female reproductive systems. Students will be able to understand that there are physical, mental, and social developments that take place during adolescence. Students will be able to understand that being consistent with your values and ethics during adolescence is important.

Essential Questions: Why is it important to understand and feel comfortable with one's own sexuality during their adolescent years?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.4.8.B.1 Analyze the influence of hormones, nutrition, the environment, and heredity on the physical, social, and emotional changes that occur during puberty.
 	
2.4.8.B.2 Determine the benefits of sexual abstinence and develop strategies to resist pressures to become sexually active.
 	
2.4.8.B.3 Compare and contrast methods of contraception used by adolescents and factors that may influence their use.
	Anatomy and physiology of reproductive systems.
	
	Social and emotional development during adolescence.
	
	Values/ethics as it applies during adolescence.
	
	STDs
	
	A. Development of sexuality
	
	   1. Physical sexuality
	
	      a. male sexual characteristics
	
	         i. body/facial hair
	         ii. voice change
		Identify and discuss the functions of the reproductive system.
		
		Discuss their values/ethics.
		
		Discuss and identify the changes that occur during puberty.
		
		Identify different types of STDs
		
		Discuss the risks of STDs
			Create a bulletin board
			
			Videos and DVDs: support material
			
			Research
			
			Pair Share
			
			Cooperative activities
			
			Lecture
			
			Diagrams
			
			Small Groups
			
			Oral Presentations
			
			Stress Abstinence
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Understanding Self: Adolescent Sexuality (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.4.8.B.4 Relate certain behaviors to placing one at greater risk for HIV/AIDS, STIs, and unintended pregnancy.
 	
2.4.8.B.5 Discuss topics regarding gender identity, sexual orientation, and cultural stereotyping.
 	
2.4.8.B.6 Explain the importance of practicing routine healthcare procedures such as breast self-examination, testicular examinations, and HPV vaccine.
	iii. sperm production
	iv. erection
	v. ejaculation
	vi. muscle development
	vii. heightened emotions
	
	b. female characteristics
	
	  i. body hair
	  ii. breasts develop
	  iii. waist lengthens
	  iv. hips widen
	  v. ovulation
	  vi. menstruation
	  vii. heightened emotions
	
	c. changing bodies
	
	  i. rate of maturity
	  ii. body types
	
	2. Emotional sexuality
	
	a. consideration
	b. kindness
	c. tenderness
	d. respect			

Understanding Self: Adolescent Sexuality (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	e. physical contact
	
	3. Social sexuality
	
	    a. sex roles
	    b. sex stereotyping
	    c. approved social behavior
	
	4. Responsible sexuality
	
	    a. your sexual value system
	    b. consistency with your values/ethics
	    c. acting out of self-respect/respect for others
	    d. behaving in a positive and constructive manner
	
	B. Sexuality as a healthy aspect of personality
	
	1. Traditional expectations for females/males
	2. Changing expectations for females/males
	3. Sexual feelings vs. guilty feelings
	
	Stress Abstinence			

Understanding Self: Adolescent Sexuality (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	Instructional Adjustments: Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs Consult IEPs and 504 Plans Provide Study Guides Utilize Peer Tutors Differentiate Instruction

Interpersonal Relationships: Getting to Know Your Peers
(8th Grade)

Targeted Standards: Standard 2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that relationships evolve from group and couple situations. Students will be able to understand that effective communication helps resolve conflicts and problems. Students will be able to understand that there is a difference between a meaningful relationship and exploitation.

Essential Questions: How does communication affect relationships?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.A.1 Compare and contrast verbal and nonverbal interpersonal communication strategies in a variety of settings and cultures in different situations.
 	
2.2.8.A.2 Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts.
	How relationships are formed.
	
	Types of communication and how they are used effectively in a relationship.
	
	Meaningful relationship qualities vs. exploitation.
	
	I. Group Situations
	
	  A. Types of groups, e.g., clubs, religious institutions, teams
	  B. Purposes of groups
	  C. Advantages/ Disadvantages of group, opposite sex relationships
	  D. Types of group activities, e.g., parties, trips
		Use their values to build healthy relationships.
		
		Learn and demonstrate effective communication skills.
		
		Recognize and deal with negative outcomes of conflicts and problems in relationships.
		
		Recognize what is important to you in relationship with others
			Create a bulletin board
			
			Videos and DVDs: support material
			
			Research
			
			Pair Share
			
			Cooperative activities
			
			Create a poster/collage of what is important to you in relationship with others
			
			Lecture
			
			Small Groups
			
			Oral Presentations
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Interpersonal Relationships: Getting to Know Your Peers (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	II. Couple Situations A. Readiness to become a couple, e.g., maturity, financial B. Reasons for becoming a couple, e.g., attraction, convenience C. Friends vs. boy/girl friends D. Parental attitudes toward couples E. Advantages/ disadvantages of being a couple F. Public display of affection III. Issues to be Recognized (between the sexes) A. Conflicts in values 1. permissiveness vs. conservatism 2. importance of grooming, clothing 3. money values 4. family expectations 5. sexual activity B. Maintaining responsible relationships 1. courteous behavior 2. respect for each other			

Interpersonal Relationships: Getting to Know Your Peers (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	3. respect for family expectations
	4. consequences of behavior
	
	   a. showing off
	   b. public display of affection
	   c. drugs
	   d. sex
	
	C. Sexual exploitation/ promiscuity
	
	  1. lies
	
	   a. everyone does it
	   b. you would if you loved me
	
	  2. teasing
	
	   a. clothing
	   b. behavior
	
	  3. promiscuity
	
	   a. sexual transmitted diseases (STD)
	   b. pregnancy
	   c. reputation
	
	D. Teenage pregnancy
	
	  1. reasons
	
	   a. ignorance			

Interpersonal Relationships: Getting to Know Your Peers (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	b. substitution of sex for love/ acceptance
	c. yielding to pressure
	d. sexual curiosity
	
	2. medical risks
	
	a. to mother
	
	   i. physical immaturity
	   ii. damage to reproductive system
	   iii. miscarriage
	   iv. nutritional depletion
	
	b. to baby
	
	   i. underweight
	   ii. birth defects
	   iii. congenital STD
	
	3. social/psychological factors
	
	a. telling parents
	b. whether to marry
	c. supporting/raising child			

Interpersonal Relationships: Getting to Know Your Peers (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	d. what to do about pregnancy
	
	   i. have a baby/keep it
	   ii. have baby/place for adoption
	   iii. abortion*
	
	e. reputation/future acceptance
	f. stigma of illegitimacy
	g. unstable home life
	
	   i. immaturity of parents
	   ii. marital problems
	   iii. fighting
	   iv. divorce
	
	4. curtailment of educational opportunity
	
	   a. school may ostracize pregnant girl
	   b. child care may prohibit further education
	
	*No position will be taken on social, religious, or moral implications other than explanation.
	
	Gang awareness
	
	Sexual assault			

Interpersonal Relationships: Getting to Know Your Peers (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
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Responsible Personal Behavior: Abuse and Neglect
(8th Grade)

Targeted Standards: Standard 2.1: All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are different types of abuse and neglect. Students will be able to understand that there are resources available for abuse and neglect victims

Essential Questions: How does abusive/neglectful behavior affect others?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.E.1 Analyze how personal assets, resiliency, and protective factors support healthy social and emotional health.	Acceptable and unacceptable personal behavior.	Establish parameters of acceptable and unacceptable personal behavior.	Create a bulletin board	Quizzes
			Videos and DVDs: support material	Tests
2.1.8.E.2 Determine the effectiveness of existing home, school, and community efforts to address social and emotional health and prevent conflict.	Different types of abuse and neglect (terminology).	Determine of types of harassment.	Research	Pre-assessment
	Effects of abuse/neglect on victims.		Pair Share	Q & A
	Resources available for victims.	Understand internet safety – predators.	Cooperative activities	Worksheets
2.1.8.E.3 Explain how culture influences the ways families and groups cope with crisis and change.	I. Molestation	Discuss where to get help.	A. What is the difference between physical and psychological abuse?	Homework
	A. By strangers B. By people one knows, including family members		B. What constitutes neglect? C. The school is required by law to report suspected cases of abuse/neglect. Why?	Class discussions
2.1.8.E.4 Compare and contrast stress management strategies that are used to address various types of stress-induced situations.			D. Where can you go to get help or advice about abuse or neglect?	Projects
			Small Groups	

Responsible Personal Behavior: Abuse and Neglect (Cont.)

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	C. Sexual harassment at school 1. types a. physical i. deliberate touching ii. standing in someone's way to standing too close iii. pulling off another student's clothing b. verbal i. obscene jokes, stories ii. unwanted letters and calls iii. Suggestive remarks iv. sexual graffiti v. pressure for dates vi. insults, threats vii. whistles, catcall, rude noises		Lecture Oral Presentations	

Responsible Personal Behavior: Abuse and Neglect (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	c. non-verbal
	
	    i. staring at someone's body
	    ii. spying on someone dressing or showering
	    iii. sexual pictures or drawings
	    iv. gestures or looks (winking, licking lips, suggestive body movements)
	
	2. effects on victims
	
	    a. loss of self-respect
	    b. avoidance of school
	    c. loss of trust in teachers, students, school in general
	    d. feel unsafe
	    e. avoidance of certain classes, activities, people
	    f. lower grades due to poor concentration			

Responsible Personal Behavior: Abuse and Neglect (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	g. suffer other serious mental, physical and emotional problems 3. dealing with harassment a. immediate response i. refusal skills: response styles aa. passive bb. aggressive cc. assertive b. after it occurs i. talk to friends ii. keep records of what, when, where, witnesses iii. avoid being alone with harasser iv. seek out an adult you trust			

Responsible Personal Behavior: Abuse and Neglect (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	v. take advantage of school programs (peer mediation)
	vi. file a formal complaint (school or court)
	
	4. legal protection
	
	  a. Title IX of Education Amendments to Civil Rights Act
	  b. Title VII of Civil Rights Act
	  c. Equal Protection Clause of 14th Amendment to U.S. Constitution
	
	II. Assault/Rape
	
	  A. By strangers
	  B. By family
	  C. By friends (date rape)
	
	III. Incest
	IV. Exploitation, e.g., advertising, television, movies
	V. Pornography			

Responsible Personal Behavior: Abuse and Neglect (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	VI. Neglect
	VII. Where to go for help
	VIII. Dealing With Others
	
	  A. Methods of Confrontation
	
	    1. Talking
	    2. Hitchhiking
	    3. Allowing others in your home
	    4 Attack
	
	  B. Possible consequences
	
	    1. Property damage, theft
	    2. Molestation
	    3. Rape
	    4. Murder
	
	  C. When suspicious of someone
	
	    1. At home
	
	      a. notify parents
	      b. go to a neighbor
	      c. call police
	
	    2. Away from home
	
	      a. get away
	      b. go to a public place
	      c. notify parents			

Responsible Personal Behavior: Abuse and Neglect (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	d. call police Domestic Violence Child Abuse			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
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Supportive videos/DVDs	
www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	

Interpersonal Relationships: Dealing with Others
(8th Grade)

Targeted Standards: Standard 2.2 Integrated Skills: All students will develop and use personal and interpersonal skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that there are ways to communicate effectively. Students will be able to understand that communication can be verbal or nonverbal. Students will be able to understand that there are consequences of poor communication.

Essential Questions: How does abusive/neglectful behavior affect others?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

2.2.8.A.1 Compare and contrast verbal and nonverbal interpersonal communication strategies in a variety of settings and cultures in different situations.
 	
2.2.8.A.2 Demonstrate the use of refusal, negotiation, and assertiveness skills when responding to peer pressure, disagreements, or conflicts.
	Terminology
	
	Difference between verbal and nonverbal communication.
	
	How to be a good listener.
	
	A. Methods of Confrontation
	
	   1. Talking
	   2. Hitchhiking
	   3. Allowing others in your home
	   4. Attack
	
	B. Possible consequences
	
	   1. Property damage/theft
	   2. Molestation
	   3. Rape
	   4. Murder
		Learn how to listen.
		
		Be an effective communicator.
		
		Deal with confrontation positively.
		
		Know the consequences of poor communication.
			Create a bulletin board
			
			Videos and DVDs: support material
			
			Research
			
			Pair Share
			
			Cooperative activities
			
			Lectures
			
			Small Groups
			
			Oral Presentations
				Quizzes
				
				Tests
				
				Pre-assessment
				
				Q & A
				
				Worksheets
				
				Homework
				
				Class discussions
				
				Projects

Interpersonal Relationships: Dealing with Others (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**

	C. When suspicious of someone
	
	1. At home
	
	   a. notify parents
	   b. go to a neighbor
	   c. call police
	
	2. Away from home
	
	   a. get away
	   b. go to a public place
	   c. notify parents
	   d. call police
	
	Bullying
	
	Intimidation
	
	Harassment			

Interpersonal Relationships: Dealing with Others (Cont.)

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings
Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author. Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society* Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.* New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.* Decisions For Health – Holt, Rinehart, Winston Health For Life – Scott Foresman and Co. Being Healthy – Harcourt, Brace and Co. Glencoe Health – Glencoe, McGraw-Hill Co. Current Health - Magazine Supportive videos/DVDs www.discoveryeducation.com www.cdc.gov www.nlm.nih.gov/medlineplus www.kidshealth.org www.healthcentral.com www.health.org www.healthatoz.com	Modify curriculum to suit individual needs Consult IEPs and 504 Plans Provide Study Guides Utilize Peer Tutors Differentiate Instruction

Responsible Personal Behavior: Personal Health, Emergency, and First Aid
(8th Grade)

Targeted Standards: Standard 2.1 All students will acquire health promotion concepts and skills to support a healthy, active lifestyle.

Unit Objectives/Enduring Understandings: Students will be able to understand that knowledge of basic first aid procedure is important in saving lives. Students will be able to understand that making personal health decisions demonstrates responsibility. Students will be able to understand that there are appropriate ways to respond to emergency situations.

Essential Questions: Why is it important to handle emergency/safety situations in a calm and focused manner?

Unit Assessment: Teacher observation, Written/oral assessment, Question and answer, Anecdotal note-taking, Final essay/poster presentation

	Core Content Objectives		Instructional Actions	
Cumulative Progress Indicators	**Concepts** *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
2.1.8.D.1 Assess the degree of risk in a variety of situations and identify strategies to reduce intentional and unintentional injuries to self and others. 2.1.8.D.2 Describe effective personal protection strategies used in public places and what to do when one's safety is compromised. 2.1.8.D.3 Analyze the causes and the consequences of noncompliance with the traffic safety system. 2.1.8.D.4 Demonstrate first-aid procedures, including victim and situation assessment, Basic Life Support, and the care of head trauma, bleeding and wounds, burns, fractures, shock, and poisoning.	What to say when you call 9-1-1. Basic first aid procedures. Identification of emergency situations and the handling of them. The supplies in a first aid kit. Emergency plans. Review First Aid Procedures 1. General Principles 2. Wounds 3. Shock 4. Poisons 5. Burns 6. Frostbite/Cold Exposure 7. Respiratory Emergencies 8. Bone and Joint Injuries	Create a first aid kit. Identify the necessary steps in first aid scenarios. Call 9-1-1 effectively. Create a family emergency plan.	Create a bulletin board Videos and DVDs: support material Research Pair Share Cooperative activities Small Groups Guest Speakers Oral Presentations Practical Application	Quizzes Tests Pre-assessment Q & A Worksheets Homework Class discussions Projects

Responsible Personal Behavior: Personal Health, Emergency, and First Aid (Cont.)

Cumulative Progress Indicators	Core Content Objectives		Instructional Actions	
	Concepts *What students will know.*	**Skills** *What students will be able to do.*	**Activities/Strategies** Technology Implementation/ Interdisciplinary Connections	**Assessment Check Points**
	Fire Prevention Accident Prevention Lyme Disease			

Resources: Essential Materials, Supplementary Materials, Links to Best Practices	**Instructional Adjustments:** Modifications, student difficulties, possible misunderstandings

Resources: Essential Materials, Supplementary Materials, Links to Best Practices

Center for Disease Control and Prevention. (2009). *Health Education Curriculum Analysis Tool.* Atlanta, GA: Author.

Joint Committee on National Health Education Standards. (2007). *National Health Education Standards : Achieving Health Excellence. Atlanta, GA: American Cancer Society*

Lohrman, D.K. (2005). *Creating a Healthy School.* Alexandria, VA: Association for Supervision and Curriculum Development

National Association of States Boards of Education. (2008). *Center for Safe and Happy Schools.*

New Jersey State Department of Education. (2009). *Core Curriculum Content Standards in Comprehensive Health and Physical Education.*

Decisions For Health – Holt, Rinehart, Winston
Health For Life – Scott Foresman and Co.
Being Healthy – Harcourt, Brace and Co.
Glencoe Health – Glencoe, McGraw-Hill Co.
Current Health - Magazine

Supportive videos/DVDs

www.discoveryeducation.com
www.cdc.gov
www.nlm.nih.gov/medlineplus
www.kidshealth.org
www.healthcentral.com
www.health.org
www.healthatoz.com

Instructional Adjustments: Modifications, student difficulties, possible misunderstandings

Modify curriculum to suit individual needs

Consult IEPs and 504 Plans

Provide Study Guides

Utilize Peer Tutors

Differentiate Instruction

PUBLIC SCHOOLS OF EDISON TOWNSHIP
OFFICE OF THE SUPERINTENDENT
DIVISION OF CURRICULUM AND INSTRUCTION

COURSE REQUIREMENTS

HEALTH EDUCATION

GRADE 6   **LENGTH OF COURSE: QUARTER**

I. **COURSE CONTENT** - This course will consist of the following units of study:

A. Human Growth and Development: onset of puberty, anatomy and physiology of the female and male reproductive systems, personal hygiene, emotional changes during puberty, body systems, immune system, genetics/heredity, misuses of medicine, tobacco, alcohol and drugs, dental hygiene.
B. Understanding Self: developing personal standards, solving individual problems
C. Interpersonal Relationships: adjustments to change, assuming responsibilities for actions
D. Responsible for Personal Behavior: personal hygiene, factors in selecting health information, products and services, personal fitness, safe living practices, first aid
E. Health and the Environment: types of pollution, causes, physical effects, prevention, concerned agencies

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II. **COURSE REQUIREMENTS** - To complete this course successfully, students will be required to demonstrate a satisfactory (or higher) level of proficiency in understanding that:

A. Human Growth and Development

1. The anatomy and physiology of the female and male reproductive systems
2. Physical and emotional changes occur in boys and girls during puberty
3. Personal and social responsibilities accompany growing up
4. Various systems of the body work in a coordinated manner to insure the total health of the individual
5. The immune system protects the body from many diseases
6. The characteristics of living organisms are passed along genetically
7. Misused medicine, tobacco, alcohol and drugs may have a serious effect on the individual
8. The ability to identify the signs of chemical abuse/dependency and to develop a knowledge of prevention, intervention, and treatment services and resources to appreciate the significance of a drug-free life and fosters positive impact in attaining personal goals and aspirations through practicing interpersonal skills
9. Genetic, behavioral, and environmental factors affect human physiology and the lifelong quality of personal health

B. Understanding Self

1. They must develop personal standards
2. They must develop skills in solving individual problems

Health Education - Grade 6 (page 2)

    C.   Interpersonal Relationships

1. Adjustments must be made to a continually changing society
2. They must assume responsibility for their own actions

    D.   Responsible Personal Behavior

1. Personal hygiene and grooming are one's own responsibility.
2. A variety of factors influence the selection of health information, products and services.
3. The quality of a person's physical fitness greatly affects their health.
4. Safe living practices are an important part of everyone's life.
5. Risks and safety factors must be analyzed in order to make decisions that assess and respond to situations that threaten personal safety and the safety of others.
6. The knowledge and skills necessary to perform basic life support and first aid and can help the importance of personal responsibility for safe behavior in all arenas prevent and reduce the severity of accidents and injuries.
7. The importance of laws, rules and etiquette as related to safety.

    E.   Health and the Environment

1. There are agencies involved with environmental health issues and how technology can impact change.
2. Participating in activities that influence positive community and environmental health promotes conservation.
3. Personal, community and government agency practices contribute to a healthful environment.

III. **EVALUATION PROCESS** - Throughout the length of this course, students will be evaluated on the basis of:

    A.   A major test each marking period
    B.   Test and/or quizzes
    C.   Homework assignments
    D.   Class Participation
    E.   Other

IV. **GENERAL INFORMATION**

    A.   Course topics which have social, moral, ethical or religious implications will be presented in an explanatory manner and specific value positions will be not be advanced.
    B.   The complete curriculum guide and all course related materials will be available for review in each school.
    C.   Students may be excused from specific portions of the program to which parents/guardians have objections upon submission of a written request to the principal.

Revised: 9/13/94, 5/19/03, 6/10/09

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COURSE REQUIREMENTS

HEALTH EDUCATION

GRADE 7   **LENGTH OF COURSE: QUARTER**

I. **COURSE CONTENT** - This course will consist of the following units of study:

   A. <u>Human Growth and Development</u>: male and female growth patterns, review of immune system, endocrine and reproductive systems, diseases, substance abuse, nutrition
   B. <u>Understanding Self</u>: personality development, factors influencing decision-making, factors influencing attitudes about sexuality, understanding emotions
   C. <u>Interpersonal Relationships</u>: relationships within the family and other social contexts
   D. <u>Responsible for Personal Behavior</u>: adolescent vs. adult perspectives, assumption of responsibility for one's behavior, relationship between freedom and responsibility, recognizing potentially dangerous situations/individuals, first aid

II. **COURSE REQUIREMENTS** - To complete this course successfully, students will be required to demonstrate a satisfactory (or higher) level of proficiency in understanding that:

   A. Human Growth and Development

1. The rate of physical growth and the onset of puberty varies widely between the sexes as well as among individuals
2. The endocrine and reproductive systems play a major role in growth and development
3. There are many types and causes of diseases
4. Many diseases can be prevented or controlled
5. Many substances may be used to modify mood and behavior and the reasons for their use are quite varied
6. The signs of chemical abuse/dependency and a knowledge of prevention, intervention, and treatment services and resources to appreciate the significance of a drug-free life and the positive impact fosters in attaining personal goals and aspirations through practicing interpersonal skills.
7. The chances for contracting diseases of the cardiovascular and respiratory systems are increased with the use of tobacco.
8. Factors contribute to eating disorders, the symptoms, and appropriate resources for help and nutrition
9. Nutritional principles of balance, variety and adequacy must be applied so as to appreciate the need for proper nutrition.
10. Assume responsibility for and recognize the consequences of personal food selection.

Health Education - Grade 7 (page 2)

B.   Understanding Self

1. Personality is the result of the individual's heredity and environment
2. Peer pressure has an effect on the attitudes and behavior of individuals
3. Many factors influence the decision-making process
4. Many factors influence attitudes about sexuality
5. There is a relationship between emotions and behavior
6. Personality and social factors influence people in regard to substance use and abuse

C.   Interpersonal Relationships

1. Peer pressure has an effect on the attitudes and behavior of the individual
2. Various behavior patterns can affect the individual and others
3. Feelings of prejudice can affect one's attitudes and behavior towards others
4. There are many roles and responsibility within the family

D.   Responsible Personal Behavior

1. Adolescents and adults often have different ideas about personal habits and responsibilities
2. Every individual is responsible for his/her behavior.
3. Privileges are earned by demonstrating responsible behavior
4. You can learn to recognize and avoid potentially dangerous situations
5. Knowledge of first aid procedures is very important

III. **EVALUATION PROCESS** - Throughout the length of this course, students will be evaluated on the basis of:

A.   A major test each marking period
B.   Test and/or quizzes
C.   Homework assignments
D.   Class Participation
E.   Other

IV. **GENERAL INFORMATION**

A.   Course topics which have social, moral, ethical or religious implications will be presented in an explanatory manner and specific value positions will be not be advanced.
B.   The complete curriculum guide and all course related materials will be available for review in each school.
C.   Students may be excused from specific portions of the program to which parents/guardians have objections upon submission of a written request to the principal.

Revised: 9/13/94, 5/19/03, 6/10/09

PUBLIC SCHOOLS OF EDISON TOWNSHIP
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COURSE REQUIREMENTS

HEALTH EDUCATION

GRADE 8   **LENGTH OF COURSE: QUARTER**

I. **COURSE CONTENT** - This course will consist of the following units of study:

   A.   Human Growth and Development: reproductive system, substance abuse, disease
   B.   Understanding Self: developing values, development of ethics, self-concept, emotions, adolescent sexuality
   C.   Interpersonal Relationships: getting to know your peers, communication, abuse and neglect, dealing with others
   D.   Responsible for Personal Behavior: personal health, emergency, first-aid

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II. **COURSE REQUIREMENTS** - To complete this course successfully, students will be required to demonstrate a satisfactory (or higher) level of proficiency in understanding that:

   A.   Human Growth and Development

1. The reproductive system plays a vital role in one's physical growth and development.
2. Drugs are classified according to their pharmacological action by identifying the short and long term effects of alcohol and other drugs including tobacco, amphetamines, barbiturates, and anabolic steroids, on the body, behavior and relationships.
3. The influence of family, peers, community, and media on decisions regarding the use of various groups.
4. The significance of a drug-free life and the positive impact fosters attaining personal goals and aspirations through practicing interpersonal skills.
5. Risk factors and behaviors influenced by chemical use and refusal skills to reduce one's personal risk and risk to others.
6. The consequences of using drugs in an attempt to solve problems may lead to physical, social, and legal risks.
7. Many commercials and advertisements are designed to sell the public on habitual use of unnecessary medications.
8. There are many types and causes of disease.
9. Many diseases can be prevented and/or controlled.

   B.   Understanding Self

1. Recognizing one's values is an important aspect of understanding oneself
2. Ethical behavior is influenced by many factors including family, friends, religious training, and society.

Health Education - Grade 8 (page 2)

3. Positive self-concept is important for the proper psychological development of the individual.
4. Emotions are feelings expressing basic needs and drives.
5. Teenagers face many types of stressful situations that can be dealt with in various ways.
6. There are many characteristics that exemplify emotional maturity.
7. Relaxation from stress is vital for good mental, physical and social health.
8. It is important to understand and feel comfortable with one's sexuality during adolescent years.

    C.   Interpersonal Relationships

1. Relationships tend to evolve from group situations to couple situations.
2. Conflicts and problems may arise in relationships.
3. Communication is a necessary skill in relationships with others.
4. There are many ways people can be abused or neglected.

    D.   Responsible Personal Behavior

1. Health products and home remedies can be helpful in some cases but dangerous in others.
2. Knowledge of first-aid procedures is important for saving lives.

III. **EVALUATION PROCESS** - Throughout the length of this course, students will be evaluated on the basis of:

    A.   A major test each marking period
    B.   Test and/or quizzes
    C.   Homework assignments
    D.   Class Participation
    E.   Other

IV. **GENERAL INFORMATION**

    A.   Course topics which have social, moral, ethical or religious implications will be presented in an explanatory manner and specific value positions will be not be advanced.
    B.   The complete curriculum guide and all course related materials will be available for review in each school.
    C.   Students may be excused from specific portions of the program to which parents/guardians have objections upon submission of a written request to the principal.

Revised: 9/13/94, 5/19/03, 6/10/09

New Jersey Core Curriculum Content Standards
for
Technology
INTRODUCTION

Technology in the 21st Century

Technology is uniquely positioned to transform learning, to foster critical thinking, creativity, and innovation, and to prepare students to thrive in the global economy. As engaged digital learners, students are able to acquire and apply content knowledge and skills through active exploration, interaction, and collaboration with others across the globe, challenging them to *design the future* as envisioned in the statements that follow:

Mission: *Technology enables students to solve real world problems, enhance life, and extend human capability as they meet the challenges of a dynamic global society.*

Vision: The systematic integration of technology across the curriculum and in the teaching and learning process fosters a population that leverages 21st century resources to:

- Apply information-literacy skills to access, manage, and communicate information using a range of emerging technological tools.

- Think critically and creatively to solve problems, synthesize and create new knowledge, and make informed decisions that affect individuals, the world community, and the environment.

- Gain enhanced understanding of global interdependencies as well as multiple cultural perspectives, differing points of view, and diverse values.

- Employ a systemic approach to understand the design process, the designed world, and the interrelationship and impact of technologies.

- Model digital citizenship.

Intent and Spirit of the Technology Standards

All students acquire content area knowledge and skills in: (1) Visual and Performing Arts, (2) Comprehensive Health and Physical Education, (3) Language Arts Literacy, (4) Mathematics, (5) Science, (6) Social Studies, (7) World Languages, (8) Educational Technology, Technology Education, Engineering, and Design, and (9) 21st Century Life and Careers. As they do so, they are supported by the ongoing, transparent, and systematic integration of technology from preschool to grade 12 in preparation for postsecondary education and the workplace*.*

In **Preschool**, technology offers versatile learning tools that can support children's development in all domains. For example, electronic storybooks can "read" stories to children in multiple languages; adventure games foster problem-solving skills; story-making programs encourage literacy and creativity; math-related games can help children count and classify; and science activities promote inquiry and an understanding of the world through the eyes of a child. When preschoolers are encouraged to work together with electronic devices and computers, social skills are tapped as children negotiate turn-taking. However, technology should not replace the concrete, real-life experiences that are critical to a young child's learning; it must always be used in balance with other meaningful activities and routines. Technology should be embedded into children's learning centers and should enhance their learning and development during choice time as well as in small-group experiences.

In grades **K-2,** students are formally introduced to the basic features and functions of computers and demonstrate understanding that technology enables them to communicate beyond the classroom on a variety of topics. K-2 students are also exposed to elements of the design process, design systems, and a variety of technology resources, and understand the importance of safety when using technological tools.

In grades **3-4***,* students understand the purpose of, and are able to use, various computer applications. They continue to develop information-literacy skills and increasingly use technology to communicate with others in support of learning, while also recognizing the need for cyber safety and acceptable use policies. Students in grades 3-4 also investigate the impact of technology systems, understand the design process, and use it for problem solving.

In grades **5-8**, students expand their capacity to use operations and applications, apply information-literacy skills, and select the appropriate tools and resources to accomplish a variety of tasks, as they develop digital citizenship. As students participate in online learning communities, collaborating in the design of products that address local and global issues across the curriculum, they build understanding of the perspectives of learners from other countries. Students at this level can apply the design process in the development of products; understand impact constraints, trade-offs, and resource selection; and solve a design challenge and/or build a prototype using the design process. Students can explain why human-designed systems, products, and environments need to be monitored, maintained, and improved, and they recognize the interdependence of subsystems as parts of a system.

In grades **9-12,** students demonstrate advanced computer operation and application skills by publishing products related to real-world situations (e.g., digital portfolios, digital learning games and simulations), and they understand the impact of unethical use of digital tools. They collaborate adeptly in virtual environments and incorporate global perspectives into problem solving at home, at school, and in structured learning experiences, with the growing realization that people in the 21st century are interconnected economically, socially, and environmentally and have a shared future.

High School Specialization in technology enables students to design, create, and reverse-engineer technology products or systems, document the application of the design process, and understand its impact—including ethical considerations, costs, trade-offs, risks, benefits, and choice of resources. Students develop products that address local and global issues and challenges, which are disseminated for peer review.

Revised Standards

The 2009 standards provide the foundation for creating local curricula and authentic performance assessments and emulate the philosophy and goals contained in documents produced by national technology organizations, including the Partnership for the 21st Century Skills and the New Jersey Educational Technology Plan. The organization of the strands in standards 8.1 and 8.2, as well as the content and skills within each strand, has been reconceptualized to address emerging technologies and technological applications that are needed for life and work in the global age.

- Standard 8.1, Educational Technology, is aligned to the International Society for Technology in Education (ISTE) standards and the Partnership for the 21st Century Skills framework.

- Standard 8.2, formerly Technology Education, is renamed Technology Education, Engineering, and Design and is aligned with the goals of the International Technology Education Association (ITEA) and the Partnership for 21st Century Skills framework.

National, International, and State Advocacy

The Partnership for 21st Century Skills, ISTE, and the American Association of School Libraries (AASL) provide leadership and service to improve teaching and learning by advancing the effective use of technology in education. The ITEA promotes technological literacy by supporting the teaching of technology. The Consortium for School Networking (CoSN) is an organization for K-12 technology leaders who use technology strategically to improve learning.

At the state level, the New Jersey Technology Education Association (NJTEA) fosters the development of technological literacy through Technology Education Programs. The New Jersey Association for Educational Technology (NJAET)and the New Jersey Educational Computing Cooperative (NJECC), Inc., promote and support the integration of technology in education as it applies to student learning, professional development, and instructional planning.

Resources

American Association of School Librarians. (2007). *Standards for the 21st century learner*. Online: http://www.aasl.org

International Society for Technology in Education. (2002). *National educational technology standards for administrators*. Online: http://www.iste.org/Content/NavigationMenu/NETS/ForAdministrators/2009Standards/NETS_for_Administrators_2009.htm

International Society for Technology in Education. (2007). *National educational technology standards for students* (2nd Ed.). Online: http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm

International Society for Technology in Education. (2008). *National educational technology standards for teachers* (2nd Ed.). Online: http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm

International Technology Education Association. (2003). *Advancing excellence in technological literacy: Student assessment, professional development, and program standards*. Online: http://www.iteaconnect.org/TAA/PDFs/AETL.pdf

International Technology Education Association. (2007). *Standards for technological literacy.* Online: http://www.iteaconnect.org/TAA/PDFs/xstnd.pdf

Partnership for 21st Century Skills. (2005). *Framework for 21st century learning.* Online: http://www.21stcenturyskills.org

Content Area	Technology		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**A. Technology Operations and Concepts**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.	8.1.P.A.1	Use the mouse to negotiate a simple menu on the screen (e.g., to print a picture).
		8.1.P.A.2	Use electronic devices (e.g., computer) to type name and to create stories with pictures and letters/words.
		8.1.P.A.3	Identify the "power keys" (e.g., ENTER, spacebar) on a keyboard.
		8.1.P.A.4	Recognize that the number keys are in a row on the top of the keyboard.
		8.1.P.A.5	Use basic technology terms in conversations (e.g., digital camera, battery, screen, computer, Internet, mouse, keyboards, and printer).
		8.1.P.A.6	Turn smart toys on and off.
2	The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.	8.1.2.A.1	Identify the basic features of a computer and explain how to use them effectively.
		8.1.2.A.2	Use technology terms in daily practice.
		8.1.2.A.3	Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
		8.1.2.A.4	Create a document with text using a word processing program.
		8.1.2.A.5	Demonstrate the ability to navigate in virtual environments that are developmentally appropriate.
4	The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.	8.1.4.A.1	Demonstrate effective input of text and data using an input device.
		8.1.4.A.2	Create a document with text formatting and graphics using a word processing program.
		8.1.4.A.3	Create and present a multimedia presentation that includes graphics.
		8.1.4.A.4	Create a simple spreadsheet, enter data, and interpret the information.

		8.1.4.A.5	Determine the benefits of a wide range of digital tools by using them to solve problems.
8	The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.	8.1.8.A.1	Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
		8.1.8.A.2	Plan and create a simple database, define fields, input data, and produce a report using sort and query.
		8.1.8.A.3	Create a multimedia presentation including sound and images.
		8.1.8.A.4	Generate a spreadsheet to calculate, graph, and present information.
		8.1.8.A.5	Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.
12	The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.	8.1.12.A.1	Construct a spreadsheet, enter data, and use mathematical or logical functions to manipulate data, generate charts and graphs, and interpret the results.
		8.1.12.A.2	Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.
		8.1.12.A.3	Participate in online courses, learning communities, social networks, or virtual worlds and recognize them as resources for lifelong learning.
		8.1.12.A.4	Create a personalized digital portfolio that contains a résumé, exemplary projects, and activities, which together reflect personal and academic interests, achievements, and career aspirations.

Content Area	Technology		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**B. Creativity and Innovation**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.	8.1.P.B.1	Use a digital camera to take a picture.
2	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.	8.1.2.B.1	Illustrate and communicate original ideas and stories using digital tools and media-rich resources.

4	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.	8.1.4.B.1	Produce a media-rich digital story about a significant local event or issue based on first-person interviews.
8	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.	8.1.8.B.1	Synthesize and publish information about a local or global issue or event on a collaborative, web-based service (also known as a shared hosted service).
12	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.	8.1.12.B.1	Design and pilot a digital learning game to demonstrate knowledge and skills related to one or more content areas or a real world situation.

Content Area	Technology		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**C. Communication and Collaboration**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	Digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems.	8.1.P.C.1	Operate frequently used, high-quality, interactive games or activities in either screen or toy-based formats.
		8.1.P.C.2	Access materials on a disk, cassette tape, or DVD. Insert a disk, cassette tape, CD-Rom, DVD, or other storage device and press "play" and "stop."
2	Digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems.	8.1.2.C.1	Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools.
4	Digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems.	8.1.4.C.1	Engage in online discussions with learners in the United States or from other countries to understand their perspectives on a global problem or issue.
8	Digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems.	8.1.8.C.1	Participate in an online learning community with learners from other countries to understand their perspectives on a global problem or issue, and propose possible solutions.

12	Digital tools and environments support the learning process and foster collaboration in solving local or global issues and problems.	8.1.12.C.1	Develop an innovative solution to a complex, local or global problem or issue in collaboration with peers and experts, and present ideas for feedback in an online community.
Content Area	**Technology**		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**D. Digital Citizenship**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.	8.1.2.D.1	Model legal and ethical behaviors when using both print and non-print information by citing resources.
4	Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.	8.1.4.D.1	Explain the need for each individual, as a member of the global community, to practice cyber safety, cyber security, and cyber ethics when using existing and emerging technologies.
		8.1.4.D.2	Analyze the need for and use of copyrights.
		8.1.4.D.3	Explain the purpose of an acceptable use policy and the consequences of inappropriate use of technology.
8	Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.	8.1.8.D.1	Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.
		8.1.8.D.2	Summarize the application of fair use and Creative Commons guidelines.
		8.1.8.D.3	Demonstrate how information on a controversial issue may be biased.
12	Technological advancements create societal concerns regarding the practice of safe, legal, and ethical behaviors.	8.1.12.D.1	Evaluate policies on unauthorized electronic access (e.g., hacking) and disclosure and on dissemination of personal information.
		8.1.12.D.2	Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines.
		8.1.12.D.3	Compare and contrast international government policies on filters for censorship.
		8.1.12.D.4	Explain the impact of cyber crimes on society.

Content Area	Technology		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**E. Research and Information Literacy**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	Effective use of <u>digital tools</u> assists in gathering and managing information.	8.1.P.E.1	Use the Internet to explore and investigate ==questions== with a teacher's support.
2	Effective use of <u>digital tools</u> assists in gathering and managing information.	8.1.2.E.1	Use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions.
4	Effective use of <u>digital tools</u> assists in gathering and managing information.	8.1.4.E.1	Investigate a problem or issue found in the United States and/or another country from multiple perspectives, evaluate findings, and present possible solutions, using digital tools and online resources for all steps.
		8.1.4.E.2	Evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.
8	Effective use of digital tools assists in gathering and managing information.	8.1.8.E.1	Gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem.
12	Effective use of <u>digital tools</u> assists in gathering and managing information.	8.1.12.E.1	Develop a systematic plan of investigation with peers and experts from other countries to produce an innovative solution to a state, national, or worldwide problem or issue.
		8.1.12.E.2	Predict the impact on society of unethical use of digital tools, based on research and working with peers and experts in the field.

Content Area	Technology		
Standard	**8.1 Educational Technology:** All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.		
Strand	**F. Critical Thinking, Problem Solving, and Decision-Making**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
P	Information accessed through the use of <u>digital tools</u> assists in generating solutions and making decisions.	8.1.P.F.1	Navigate the basic functions of a browser, including how to open or close windows and use the "back" key.
2	Information accessed through the use of <u>digital tools</u> assists in generating solutions and making decisions.	8.1.2.F.1	Use <u>mapping tools</u> to plan and choose alternate routes to and from various locations.
4	Information accessed through the use of <u>digital tools</u> assists in generating solutions and making decisions.	8.1.4.F.1	Select and apply digital tools to collect, organize, and analyze data that support a scientific finding.
8	Information accessed through the use of <u>digital tools</u> assists in generating solutions and making decisions.	8.1.8.F.1	Use an <u>electronic authoring tool</u> in collaboration with learners from other countries to evaluate and summarize the perspectives of other cultures about a current event or contemporary figure.
12	Information accessed through the use of <u>digital tools</u> assists in generating solutions and making decisions.	8.1.12.F.1	Select and use specialized databases for advanced research to solve real-world problems.
		8.1.12.F.2	Analyze the capabilities and limitations of <u>current and emerging technology resources</u> and assess their potential to address educational, career, personal, and social needs.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**A. Nature of Technology: Creativity and Innovation**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Technology products and systems impact every aspect of the world in which we live.	8.2.2.A.1	Describe how technology products, systems, and resources are useful at school, home, and work.
4	Technology products and systems impact every aspect of the world in which we live.	8.2.4.A.1	Investigate factors that influence the development and function of technology products and systems.
4		8.2.4.A.2	Using a digital format, compare and contrast how a technology product has changed over time due to economic, political, and/or cultural influences.
8	Technology products and systems impact every aspect of the world in which we live.	8.2.8.A.1	Explain the impact of globalization on the development of a technological system over time.
12	Technology products and systems impact every aspect of the world in which we live.	8.2.12.A.1	Design and create a technology product or system that improves the quality of life and identify trade-offs, risks, and benefits.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**B. Design: Critical Thinking, Problem Solving, and Decision-Making**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	The design process is a systematic approach to solving problems.	8.2.2.B.1	Brainstorm and devise a plan to repair a broken toy or tool using the design process.
2		8.2.2.B.2	Investigate the influence of a specific technology on the individual, family, community, and environment.

4	The design process is a <mark>systematic</mark> approach to solving problems.	8.2.4.B.1	Develop a product using an online simulation that explores the design process.
		8.2.4.B.2	Design an alternative use for an existing product.
		8.2.4.B.3	Explain the positive and negative effect of products and systems on humans, other species, and the environment.
		8.2.4.B4	Compare and contrast how technology transfer happens within a technology, among technologies, and among other fields of study.
8	The design process is a <mark>systematic</mark> approach to solving problems.	8.2.8.B.1	Design and create a product that addresses a real-world problem using the design process and working with specific criteria and constraints.
		8.2.8.B.2	Identify the design constraints and trade-offs involved in designing a prototype (e.g., how the prototype might fail and how it might be improved) by completing a design problem and reporting results in a multimedia presentation.
		8.2.8.B.3	Solve a science-based design challenge and build a prototype using science and math principles throughout the design process.
12	The design process is a <mark>systematic</mark> approach to solving problems.	8.2.12.B.1	Design and create a product that maximizes conservation and sustainability of a scarce resource, using the design process and entrepreneurial skills throughout the design process.
		8.2.12.B.2	Design and create a prototype for solving a global problem, documenting how the proposed design features affect the feasibility of the prototype through the use of engineering, drawing, and other technical methods of illustration.
		8.2.12.B.3	Analyze the full costs, benefits, trade-offs, and risks related to the use of technologies in a potential career path.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**C. Technological Citizenship, Ethics, and Society**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society.	8.2.2.C.1	Demonstrate how reusing a product affects the local and global environment.
4	Knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society.	8.2.4.C.1	Explain the impact of disposing of materials in a responsible way.
		8.2.4.C.2	Explain the purpose of trademarks and the impact of trademark infringement on businesses.
		8.2.4.C.3	Examine ethical considerations in the development and production of a product from its inception through production, marketing, use, maintenance, and eventual disposal by consumers.
8	Knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society.	8.2.8.C.1	Explain the need for patents and the process of registering one.
		8.2.8.C.2	Compare and contrast current and past incidences of ethical and unethical use of labor in the United States or another country and present results in a media-rich presentation.
12	Knowledge and understanding of human, cultural, and societal values are fundamental when designing technology systems and products in the global society.	8.2.12.C.1	Analyze the ethical impact of a product, system, or environment, worldwide, and report findings in a web-based publication that elicits further comment and analysis.
		8.2.12.C.2	Evaluate ethical considerations regarding the sustainability of resources that are used for the design, creation, and maintenance of a chosen product.
		8.2.12.C.3	Evaluate the positive and negative impacts in a design by providing a digital overview of a chosen product and suggest potential modifications to address the negative impacts.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**D. Research and Information Fluency**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems.	8.2.2.D.1	Collect and post the results of a digital classroom survey about a problem or issue and use data to suggest solutions.
4	Information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems.	8.2.4.D.1	Analyze responses collected from owners/users of a particular product and suggest modifications in the design of the product based on their responses.
8	Information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems.	8.2.8.D.1	Evaluate the role of ethics and bias on trend analysis and prediction in the development of a product that impacts communities in the United States and/or other countries.
12	Information-literacy skills, research, data analysis, and prediction provide the basis for the effective design of technology systems.	8.2.12.D.1	Reverse-engineer a product to assist in designing a more eco-friendly version, using an analysis of trends and data about renewable and sustainable materials to guide your work.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**E. Communication and Collaboration**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Digital tools facilitate local and global communication and collaboration in designing products and systems.	8.2.2.E.1	Communicate with students in the United States or other countries using digital tools to gather information about a specific topic and share results.
4	Digital tools facilitate local and global communication and collaboration in designing products and systems.	8.2.4.E.1	Work in collaboration with peers to produce and publish a report that explains how technology is or was successfully or unsuccessfully used to address a local or global problem.
8	Digital tools facilitate local and global communication and collaboration in designing products and systems.	8.2.8.E.1	Work in collaboration with peers and experts in the field to develop a product using the design process, data analysis, and trends, and maintain a digital log with annotated sketches to record the development cycle.
12	Digital tools facilitate local and global communication and collaboration in designing products and systems.	8.2.12.E.1	Use the design process to devise a technological product or system that addresses a global issue, and provide documentation through drawings, data, and materials, taking the relevant cultural perspectives into account throughout the design and development process.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**F. Resources for a Technological World**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	Technological products and systems are created through the application and appropriate use of technological resources.	8.2.2.F.1	Identify the resources needed to create technological products and systems.
4	Technological products and systems are created through the application and appropriate use of technological resources.	8.2.4.F.1	Describe how resources are used in a technological product or system.
		8.2.4.F.2	Explain how resources are processed in order to produce technological products and systems.
8	Technological products and systems are created through the application and appropriate use of technological resources.	8.2.8.F.1	Explain the impact of resource selection and processing in the development of a common technological product or system.
		8.2.8.F.2	Explain how the resources and processes used in the production of a current technological product can be modified to have a more positive impact on the environment (e.g., by using recycled metals, alternate energy sources) and the economy.
12	Technological products and systems are created through the application and appropriate use of technological resources.	8.2.12.F.1	Determine and use the appropriate application of resources in the design, development, and creation of a technological product or system.
		8.2.12.F.2	Explain how material science impacts the quality of products.
		8.2.12.F.3	Select and utilize resources that have been modified by digital tools (e.g., CNC equipment, CAD software) in the creation of a technological product or system.

Content Area	Technology		
Standard	**8.2 Technology Education, Engineering, and Design:** All students will develop an understanding of the nature and impact of technology, engineering, technological design, and the designed world, as they relate to the individual, global society, and the environment.		
Strand	**G. The Designed World**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
2	The designed world is the product of a design process that provides the means to convert resources into products and systems.	8.2.2.G.1	Describe how the parts of a common toy or tool interact and work as part of a system.
2		8.2.2.G.2	Explain the importance of safety in the use and selection of appropriate tools and resources for a specific purpose.
4	The designed world is the product of a design process that provides the means to convert resources into products and systems.	8.2.4.G.1	Examine a malfunctioning tool and use a step-by-step process to troubleshoot and present options to repair the product.
4		8.2.4.G.2	Explain the functions of a system and subsystems.
4		8.2.4.G.3	Evaluate the function, value, and aesthetics of a technological product, system, or environment from the perspective of the user and the producer.
8	The designed world is the product of a design process that provides the means to convert resources into products and systems.	8.2.8.G.1	Explain why human-designed systems, products, and environments need to be constantly monitored, maintained, and improved.
8		8.2.8.G.2	Explain the interdependence of a subsystem that operates as part of a system.
12	The designed world is the product of a design process that provides the means to convert resources into products and systems.	8.2.12.G.1	Analyze the interactions among various technologies and collaborate to create a product or system demonstrating their interactivity.

Glossary:

Basic technology terms for preschool: Examples digital camera, battery, screen, computer, Internet, mouse, keyboard, and printer.

Controversial issue: For example, global warming, scarcity of water, alternative energy sources, election campaigns.

Current and emerging technology resources: For example, cell phones, GPS, online communities using wikis, blogs, vlogs, and/or Nings.

Data-collection technology: For example, probes, handheld devices, and geographic mapping systems.

Digital learning game: For example, Alice, Lively.

Developmentally appropriate: Students' developmental levels prescribe the learning environment and activities that are used.

Digital tools for grade 2: For example, computers, digital cameras, software..

Digital tools for grades 4, 8, and 12: For example, computers, digital cameras, probing devices, software, cell phones, GPS, online communities, VOIP, and virtual conferences.

Electronic authoring tools: Software that facilitates online book development (e.g., multimedia electronic book).

Mapping tools: For example, Google earth, Yahoo maps, and Google maps.

Media-rich: Multiple forms of digital applications in one product (e.g., graphic design, word processing, and spreadsheet).

Multimedia presentation: For example, movie, podcast, vlog.

Online discussion: UNICEF, Oracle, i-Earn, blogs, wikis.

Online learning community: For example, i-Earn, Ning, blogs, wikis, Second Life.

Operations and related applications: For example, saving a word processing file to a network drive, printing a spreadsheet.

Reverse engineer: To isolate the components of a completed system.

Shared hosted services: For example, podcasts, videos, or vlogs.

Technologies: Medical, agricultural, and related biotechnologies, energy and power technologies, information and communications technologies, transportation technologies, manufacturing technologies, and construction technologies.

Virtual environments: For example, games, simulations, websites, blogs.

Web-based publication: For example, web pages, wikis, blogs, ezines.

**New Jersey Core Curriculum Content Standards
for
21st-Century Life and Careers
INTRODUCTION**

Life and Career Education in the 21st Century

In the 21st century, life and work are conducted in a dynamic context that includes:

- A global society facing complex political, economic, technological, and environmental challenges

- A service economy driven by information, knowledge, and innovation

- Diverse communities and workplaces that rely on cross-cultural collaborative relationships and virtual social networks

- An intensely competitive and constantly changing worldwide marketplace

Providing New Jersey students with the life and career skills needed to function optimally within this dynamic context is a critical focus and organizing principle of K-12 public education. New Jersey has both an obligation to prepare its young people to thrive in this environment, and a vested economic interest in grooming an engaged citizenry made up of productive members of a global workforce that rewards innovation, creativity, and adaptation to change.

Mission: *21st-century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st-century global workplace.*

Vision: The systematic integration of 21st-century life and career skills across the K-12 curriculum and in career and technical education programs fosters a population that:

- Applies critical thinking and problem-solving skills to make reasoned decisions at home, in the workplace, and in the global community.

- Uses effective communication, communication technology, and collaboration skills to interact with cultural sensitivity in diverse communities and to work in cross-cultural teams in the multinational workplace.

- Is financially literate and financially responsible at home and in the broader community.

- Demonstrates creative and entrepreneurial thinking by recognizing and acting on promising opportunities while accepting responsibility for possible risks.

- Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions.

- Produces community, business, and political leaders who demonstrate core ethical values, including the values of democracy and free enterprise, during interactions with the global community.

Intent and Spirit of the 21st-Century Life and Career Standards

Through instruction in life and career skills, all students acquire the knowledge and skills needed to prepare for life as citizens and workers in the 21st century.

- In **Preschool,** children's social and emotional development provides the foundation for later learning about careers and life skills (http://www.nj.gov/education/ece/code/expectations/standards/ptls.pdf).

- In grades **K-5**, students are introduced to 21st-century life skills that are critical for personal, academic, and social development. They are also introduced to career awareness information and to basic personal financial literacy skills.

- In grades **6-8**, students continue to develop 21st-century life skills and personal financial literacy, while also exploring careers that support their academic and personal interests and aptitudes. As they prepare for the transition to high school, students are provided with opportunities to apply knowledge and skills learned in the classroom to real or simulated career challenges.

- In grades **9-12**, students develop increasingly sophisticated 21st-century life skills and personal financial literacy. They engage in the process of career preparation by participating in structured learning experiences, specialized programs, and advanced courses that reflect personal aptitudes and career interests found within one or more of the 16 career clusters developed by the States' Career Clusters Initiative.

The Revised Standards

There are four revised 21st-Century Life and Careers standards. Standards 9.1, 9.2, and 9.3 describe life and career skills that are integrated throughout the K-12 curriculum, while standard 9.4 describes specialized skills that are taught in grades 9-12 as part of career and technical education programs. An overview of the four standards follows.

> **Standard 9.1 21st-Century Life and Career Skills:** *All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.*

Standard 9.1 describes skills that prepare students to fully engage in civic and work life. The standard includes six strands, which reflect the <u>Framework for 21st Century Learning</u>:

1. Critical Thinking and Problem Solving
2. Creativity and Innovation
3. Collaboration, Teamwork, and Leadership
4. Cross-Cultural Understanding and Interpersonal Communication
5. Communication and Media Fluency
6. Accountability, Productivity, and Ethics

> **Standard 9.2 Personal Financial Literacy:** *All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.*

Standard 9.2 describes skills that prepare students for personal and civic financial literacy. The inclusion of Personal Financial Literacy as a standard, rather than as a strand, reflects the growing need for 21st-century citizens to be financially literate, particularly in light of the increasing number of financial choices they face due to the global economy. Financial literacy includes the application of knowledge, skills, and ethical values when making consumer and financial decisions that impact the self, the family, and the local and global communities.

Standard 9.2 is aligned to the Jump $tart Coalition for Personal Financial Literacy's National Standards in K-12 Personal Finance Education and includes seven strands:

7. Income and Careers
8. Money Management
9. Credit and Debt Management
10. Planning, Saving, and Investing
11. Becoming a Critical Consumer
12. Civic Financial Responsibility
13. Risk Management and Insurance

> **Standard 9.3 Career Awareness, Exploration, and Preparation:** *All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.*

Standard 9.3 describes skills that prepare students for career pursuits and lifelong learning. The three strands in standard 9.3 reflect the requirements outlined in New Jersey Administrative Code (N.J.A.C. 6A:8-3.2):

14. Career Awareness (grades K-4)
15. Career Exploration (grades 5-8)
16. Career Preparation (grades 9-12)

> **Standard 9.4 Career and Technical Education:** *All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees.*

Standard 9.4 describes knowledge and skills that prepare students for postsecondary education, training, and employment in a chosen career pathway. Unlike standards 9.1, 9.2, and 9.3, which apply to all students from grades K-12, standard 9.4 applies only to high school students enrolled in career and technical education programs.

The adoption of the career and technical education standard reflects the call to action in recent reports by the National Association of State Boards of Education, the National Governors Association, the U. S. Chamber of Commerce, and Achieve regarding the potential of career and technical education, as well as the requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006. These documents urge states to adopt policies and practices that effectively integrate academic content standards in career and technical education programs in order to both elevate the role of career and technical education and to align it with postsecondary education and training.

The 16 strands in standard 9.4 align with the 16 career clusters of the States' Career Clusters Initiative. Each strand is further refined to reflect multiple career pathways. By using the clusters as an organizing tool for grouping occupations and careers, Standard 9.4 identifies a common set of knowledge and skills for success within each broad career cluster, as well as for each career pathway within that cluster. This framework has been reviewed nationally by teams of business, industry, labor, education, and higher education representatives to ensure that it encompasses industry-validated knowledge and skills needed for career success.

For each of the 16 career cluster strands, content statements and cumulative progress indicators are provided for the overall career cluster, and additional content statements and cumulative progress indicators are provided for each of the career pathways encompassed by the cluster. Further, each of the 16 overarching career cluster strands is comprised of two types of cumulative progress indicators:

- Cumulative progress indicators for foundational knowledge and skills, which may be taught as part of a variety of academic and/or career and technical education courses.

- Cumulative progress indicators that are specific to the career cluster and/or career pathway under discussion.

Two additional resources are provided in connection with standard 9.4 to support navigation of standard 9.4 and understanding of career and technical education (CTE) programs:

- The Career Clusters Table describes each of the 16 career clusters and lists the career pathways associated with each cluster.
- More About CTE Programs provides a definition of career and technical education programs and points to information about the development of standard 9.4.

Resources

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New Jersey State Department of Education. (1996). New Jersey core curriculum content standards. *Trenton, NJ: Author.*

New Jersey State Department of Education. (1999). Career education and consumer, family, and life skills framework. *Trenton, NJ: Author.*

New Jersey State Department of Education. (2004). *New Jersey core curriculum content standards. Standard 9: Career education and consumer, family, and life skills*. Trenton, NJ: Author.

New Jersey State Department of Education. (2008). *Standards clarification project.* Trenton, NJ: Author. Online: http://www.nj.gov/education/aps/njscp

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (expanded 2nd ed.). Alexandria, VA: Association for Curriculum and Development.

Resources Specific to Standard 9.1 21st-Century Life and Career Skills

Partnership for 21st Century Learning. (2009). Framework for 21st century learning. *Online: http://www.21stcenturyskills.org*

Resources Specific to Standard 9.2 Personal Financial Literacy

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Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	A. Critical Thinking and Problem Solving		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	The ability to recognize a problem and apply critical thinking and problem-solving skills to solve the problem is a lifelong skill that develops over time.	9.1.4.A.1	Recognize a problem and brainstorm ways to solve the problem individually or collaboratively.
		9.1.4.A.2	Evaluate available resources that can assist in solving problems.
		9.1.4.A.3	Determine when the use of technology is appropriate to solve problems.
		9.1.4.A.4	Use data accessed on the Web to inform solutions to problems and the decision-making process.
		9.1.4.A.5	Apply critical thinking and problem-solving skills in classroom and family settings.
8	The ability to recognize a problem and apply critical thinking and problem-solving skills to solve the problem is a lifelong skill that develops over time.	9.1.8.A.1	Develop strategies to reinforce positive attitudes and productive behaviors that impact critical thinking and problem-solving skills.
		9.1.8.A.2	Implement problem-solving strategies to solve a problem in school or the community.
		9.1.8.A.3	Summarize strategies used by various organizations and agencies to solve problems that impact communities, and compare them with strategies used by similar organizations in another state or country.
		9.1.8.A.4	Design and implement a project management plan using one or more problem-solving strategies.
12	The ability to recognize a problem and apply critical thinking and problem-solving skills to solve the problem is a lifelong skill that develops over time.	9.1.12.A.1	Apply critical thinking and problem-solving strategies during structured learning experiences.
		9.1.12.A.2	Participate in online strategy and planning sessions for course-based, school-based, or outside projects.
	Critical thinking and problem solving in the 21st century are enhanced by the ability to work in cross-cultural teams in face-to-face and virtual environments.	9.1.12.A.3	Assess how a variety of problem-solving strategies are being used to address solutions to global problems by participating in online discussions with peers from other countries.
		9.1.12.A.4	Justify problem-solving strategies used in the development of a particular innovative product or practice in the United States and in another country.

Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	**B. Creativity and Innovation**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	Brainstorming activities enhance creative and innovative thinking in individual and group goal setting and problem solving.	9.1.4.B.1	Participate in brainstorming sessions to seek information, ideas, and strategies that foster creative thinking.
8	Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.	9.1.8.B.1	Use multiple points of view to create alternative solutions.
		9.1.8.B.2	Assess data gathered to solve a problem for which there are varying perspectives (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple solutions.
12	Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.	9.1.12.B.1	Present resources and data in a format that effectively communicates the meaning of the data and its implications for solving problems, using multiple perspectives.
		9.1.12.B.2	Create and respond to a feedback loop when problem solving.
		9.1.12.B.3	Assist in the development of innovative solutions to an onsite problem by incorporating multiple perspectives and applying effective problem-solving strategies during structured learning experiences, service learning, or volunteering.

Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	**C. Collaboration, Teamwork, and Leadership**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	Collaboration and teamwork enable individuals or groups to achieve common goals with greater efficiency.	9.1.4.C.1	Practice collaborative skills in groups, and explain how these skills assist in completing tasks in different settings (at home, in school, and during play).
8	Collaboration and teamwork enable individuals or groups to achieve common goals with greater efficiency.	9.1.8.C.1	Determine an individual's responsibility for personal actions and contributions to group activities.
		9.1.8.C.2	Demonstrate the use of compromise, consensus, and community building strategies for carrying out different tasks, assignments, and projects.
	Leadership abilities develop over time through participation in groups and/or teams that are engaged in challenging or competitive activities.	9.1.8.C.3	Model leadership skills during classroom and extra-curricular activities.
12	Collaboration and teamwork enable individuals or groups to achieve common goals with greater efficiency.	9.1.12.C.1	Enlist input from experts in the field, community members, and other stakeholders to design a service-learning activity that addresses a local, national, or worldwide need.
	Leadership abilities develop over time through participation in groups and/or teams that are engaged in challenging or competitive activities.	9.1.12.C.2	Analyze the common traits of effective state, national, or international leaders.
		9.1.12.C.3	Explain why some current and/or past world leaders have had a greater impact on people and society than others, regardless of their countries of origin.
		9.1.12.C.4	Demonstrate leadership and collaborative skills when participating in online learning communities and structured learning experiences.
		9.1.12.C.5	Assume a leadership position by guiding the thinking of peers in a direction that leads to successful completion of a challenging task or project.

Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	**D. Cross-Cultural Understanding and Interpersonal Communication**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	Effective communication skills convey intended meaning to others and assist in preventing misunderstandings.	9.1.4.D.1	Use effective oral and written communication in face-to-face and online interactions and when presenting to an audience.
		9.1.4.D.2	Express needs, wants, and feelings appropriately in various situations.
	Communication with people from different cultural backgrounds is enhanced by the understanding of different cultural perspectives.	9.1.4.D.3	Demonstrate an awareness of one's own culture and other cultures during interactions within and outside of the classroom.
8	Effective communication skills convey intended meaning to others and assist in preventing misunderstandings.	9.1.8.D.1	Employ appropriate conflict resolution strategies.
		9.1.8.D.2	Demonstrate the ability to understand inferences.
	Communication with people from different cultural backgrounds is enhanced by the understanding of different cultural perspectives.	9.1.8.D.3	Use effective communication skills in face-to-face and online interactions with peers and adults from home and from diverse cultures.
		9.1.8.D.4	Compare and contrast nuances in verbal and nonverbal communication in different cultures that may result in misinterpretation and misunderstanding.
		9.1.8.D.5	Justify the need for greater cross-cultural understanding due to globalization.
12	Communication with people from different cultural backgrounds is enhanced by the understanding of different cultural perspectives.	9.1.12.D.1	Interpret spoken and written communication within the appropriate cultural context.
		9.1.12.D.2	Determine the immediate and long-term effects of cross-cultural misconceptions or misunderstandings resulting from past or current international issues or events.
		9.1.12.D.3	Explain why the ability to communicate in another language in an appropriate cultural context is a valuable 21st-century skill.

Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	**E. Communication and Media Fluency**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
4	Digital media are 21st-century tools used for local and global communication.	9.1.4.E.1	Explain how digital media are used in daily life in a variety of settings.
		9.1.4.E.2	Demonstrate effective communication using digital media during classroom activities.
		9.1.4.E.3	Distinguish how digital media are used by individuals, groups, and organizations for varying purposes.
	There are ethical and unethical uses of communication and media.	9.1.4.E.4	Explain why some uses of media are unethical.
8	Digital media are 21st-century tools used for local and global communication.	9.1.8.E.1	Explain how technology has strengthened the role of digital media in the global society.
		9.1.8.E.2	Analyze the role of digital media in sales and marketing and in delivering cultural, political, and other societal messages.
		9.1.8.E.3	Differentiate between explicit and implicit digital media messages, and discuss the impact on individuals, groups, and society as a whole.
	There are ethical and unethical uses of communication and media.	9.1.8.E.4	Determine the undesired consequences of unethical uses of media.
		9.1.8.E.5	Compare and contrast ways governments regulate media advertising to protect children and adults in the United States and in other countries.
12	Digital media are 21st-century tools used for local and global communication.	9.1.12.E.1	Create messages for different purposes and audiences with sensitivity to cultural, gender, and age diversity, using various digital media outlets.
		9.1.12.E.2	Generate digital media campaigns in support of or opposing a current political, social, or economic issue.
		9.1.12.E.3	Design a digital communication system to alert other countries in the event of a natural disaster.
		9.1.12.E.4	Predict the impact of emerging media technologies on international business and globalization.
	There are ethical and unethical uses of communication and media.	9.1.12.E.5	Compare laws governing the unethical use of media in different countries.

Content Area	21st-Century Life and Careers		
Standard	**9.1 21st-Century Life & Career Skills:** All students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully as both global citizens and workers in diverse ethnic and organizational cultures.		
Strand	**F. Accountability, Productivity, and Ethics**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	The nature of the 21st-century workplace has shifted, demanding greater individual accountability, productivity, and collaboration.	9.1.4.F.1	Explain the meaning of productivity and accountability, and describe situations in which productivity and accountability are important in the home, school, and community.
		9.1.4.F.2	Establish and follow performance goals to guide progress in assigned areas of responsibility and accountability during classroom projects and extra-curricular activities.
	Ethical behaviors support human rights and dignity in all aspects of life.	9.1.4.F.3	Explain the importance of understanding and following rules in family, classroom, and community settings.
8	The nature of the 21st-century workplace has shifted, demanding greater individual accountability, productivity, and collaboration.	9.1.8.F.1	Demonstrate how productivity and accountability contribute to realizing individual or group work goals within or outside the classroom.
	Ethical behaviors support human rights and dignity in all aspects of life.	9.1.8.F.2	Explain how rules, laws, and safety practices protect individual rights in the global workplace.
		9.1.8.F.3	Relate the use of new technologies at home, in the workplace, and in other settings to incidences of ethical and/or unethical behavior.
12	The nature of the 21st-century workplace has shifted, demanding greater individual accountability, productivity, and collaboration.	9.1.12.F.1	Explain the impact of current and emerging technological advances on the demand for increased and new types of accountability and productivity in the global workplace.
	Ethical behaviors support human rights and dignity in all aspects of life.	9.1.12.F.2	Demonstrate a positive work ethic in various settings, including the classroom and during structured learning experiences.
		9.1.12.F.3	Defend the need for intellectual property rights, workers' rights, and workplace safety regulations in the United States and abroad.
		9.1.12.F.4	Explain the impact of computer hacking on products and services.

CPI #	Cumulative Progress Indicator (CPI)
9.1.12.F.5	Formulate an opinion regarding a current workplace or societal/ethical issue based on research.
9.1.12.F.6	Relate scientific advances (e.g., advances in medicine) to the creation of new ethical dilemmas.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**A. Income and Careers**		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
4	Educational achievement, career choice, and entrepreneurial skills all play a role in achieving a desired lifestyle.	9.2.4.A.1	Explain the difference between a career and a job, and identify various jobs in the community and the related earnings.
	Income often comes from different sources, including alternative sources.	9.2.4.A.2	Identify potential sources of income and their limitations.
	Income affects spending decisions and lifestyle.	9.2.4.A.3	Explain how income affects spending and take-home pay.
	Taxes and the cost of employee benefits affect the amount of disposable income.	9.2.4.A.4	Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.
8	Educational achievement, career choice, and entrepreneurial skills all play a role in achieving a desired lifestyle.	9.2.8.A.1	Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.
		9.2.8.A.2	Differentiate among ways that workers can improve earning power through the acquisition of new knowledge and skills.
		9.2.8.A.3	Relate earning power to quality of life across cultures.
		9.2.8.A.4	Relate how the demand for certain skills determines an individual's earning power.
	Income often comes from different sources, including alternative sources.	9.2.8.A.5	Explain the difference between "earned income" and "unearned income" (e.g., gifts) and why earned income is important.
	Income affects spending decisions and lifestyle.	9.2.8.A.6	Examine how labor market trends and the cost of living can affect real income, spending decisions, and lifestyle.

	Taxes and the cost of employee benefits affect the amount of disposable income.	9.2.8.A.7	Explain the purpose of the payroll deduction process, taxable income, and employee benefits.
		9.2.8.A.8	Differentiate among the types of taxes and employee benefits.
		9.2.8.A.9	Differentiate between taxable and nontaxable income.
12	Educational achievement, career choice, and entrepreneurial skills all play a role in achieving a desired lifestyle.	9.2.12.A.1	Analyze the relationship between various careers and personal earning goals.
		9.2.12.A.2	Identify a career goal and develop a plan and timetable for achieving it, including educational/training requirements, costs, and possible debt.
		9.2.12.A.3	Analyze how the economic, social, and political conditions of a time period can affect starting a business and can affect a plan for establishing such an enterprise.
		9.2.12.A.4	Summarize the financial risks and benefits of entrepreneurship as a career choice.
		9.2.12.A.5	Evaluate current advances in technology that apply to a selected occupational career cluster.
	Income often comes from different sources, including alternative sources.	9.2.12.A.6	Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.
		9.2.12.A.7	Analyze different forms of currency, how currency is used to exchange goods and services, and how it can be transferred from one person's business to another.
	Income affects spending decisions and lifestyle.	9.2.12.A.8	Analyze how personal and cultural values impact spending and other financial decisions.
	Taxes and the cost of employee benefits can affect the amount of disposable income.	9.2.12.A.9	Demonstrate how exemptions and deductions can reduce taxable income.
		9.2.12.A.10	Explain the relationship between government programs and services and taxation.
		9.2.12.A.11	Explain how compulsory government programs (e.g., Social Security, Medicare) provide insurance against some loss of income and benefits to eligible recipients.
		9.2.12.A.12	Analyze the impact of the collective bargaining process on benefits, income, and fair labor practice.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**B. Money Management**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	Money management involves setting financial goals.	9.2.4.B.1	Differentiate between financial wants and needs.
		9.2.4.B.2	Identify age-appropriate financial goals.
	Money management is reliant on developing and maintaining personal budgets.	9.2.4.B.3	Explain what a budget is and why it is important.
		9.2.4.B.4	Identify common household expense categories and sources of income.
	Money management requires understanding of cash flow systems and business practices.	9.2.4.B.5	Identify ways to earn and save.
		9.2.4.B.6	Distinguish among cash, check, credit card, and debit card.
		9.2.4.B.7	Explain the purposes of financial institutions in the community.
8	Money management involves setting financial goals.	9.2.8.B.1	Construct a simple personal savings and spending plan based on various sources of income.
		9.2.8.B.2	Justify the concept of "paying yourself first" as a financial savings strategy.
		9.2.8.B.3	Relate the concept of deferred gratification to investment, meeting financial goals, and building wealth.
		9.2.8.B.4	Analyze the effect of the economy on personal income, individual and family security, and consumer decisions.
		9.2.8.B.5	Evaluate the relationship of cultural traditions and historical influences on financial practice.
	Money management is reliant on developing and maintaining personal budgets.	9.2.8.B.6	Construct a budget to save for long-term, short-term, and charitable goals.
		9.2.8.B.7	Develop a system for keeping and using financial records.
	Money management requires understanding of cash flow systems and business practices.	9.2.8.B.8	Explain the concept of cash flow and construct cash flow statements.
		9.2.8.B.9	Create debit and credit balance sheets and income and cash statements.
		9.2.8.B.10	Determine the most appropriate use of various financial products and services (e.g., ATM, debit cards, credit cards, checkbooks).

		9.2.8.B.11	Justify safeguarding personal information when using credit cards, banking electronically, or filing forms.
		9.2.8.B.12	Evaluate the appropriate financial institutions to assist with meeting various personal financial needs and goals.
12	Money management involves setting financial goals.	9.2.12.B.1	Prioritize financial decisions by systematically considering alternatives and possible consequences.
		9.2.12.B.2	Compare strategies for saving and investing and the factors that influence how much should be saved or invested to meet financial goals.
		9.2.12.B.3	Construct a plan to accumulate emergency "rainy day" funds.
	Money management is reliant on developing and maintaining personal budgets.	9.2.12.B.4	Analyze how income and spending plans are affected by age, needs, and resources.
		9.2.12.B.5	Analyze how changes in taxes, inflation, and personal circumstances can affect a personal budget.
		9.2.12.B.6	Design and utilize a simulated budget to monitor progress of financial plans.
	Money management requires understanding of cash flow systems and business practices.	9.2.12.B.7	Develop personal financial planning strategies that respond to and use tax deductions and shelters.
		9.2.12.B.8	Describe and calculate interest and fees that are applied to various forms of spending, debt, and saving.
		9.2.12.B.9	Chart and evaluate the growth of mid- and long-term investments.
		9.2.12.B.10	Develop a plan that uses the services of various financial institutions to meet personal and family financial goals.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**C. Credit and Debt Management**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	Credit management includes making informed choices about sources of credit and requires an understanding of the cost of credit.	9.2.4.C.1	***Explain why people borrow money and the relationship between credit and debt.***
		9.2.4.C.2	***Identify common sources of credit (e.g., banks, credit card companies) and types of credit (e.g., loans, credit cards, mortgages).***
		9.2.4.C.3	***Compare and contrast credit cards and debit cards and the advantages and disadvantages of using each.***
		9.2.4.C.4	Determine the relationships among income, expenses, and interest.
	Credit worthiness is dependent on making informed credit decisions and managing debt responsibly.	9.2.4.C.5	Determine personal responsibility related to borrowing and lending.
		9.2.4.C.6	Summarize ways to avoid credit problems.
8	Credit management includes making informed choices about sources of credit and requires an understanding of the cost of credit.	9.2.8.C.1	Compare and contrast the financial products and services offered by different types of financial institutions.
		9.2.8.C.2	Compare and contrast debt and credit management strategies.
		9.2.8.C.3	Demonstrate an understanding of the terminology associated with different types of credit (e.g., credit cards, installment loans, mortgages) and compare the interest rates associated with each.
		9.2.8.C.4	Calculate the cost of borrowing various amounts of money using different types of credit (e.g., credit cards, installment loans, mortgages).
	Credit worthiness is dependent on making informed credit decisions and managing debt responsibly.	9.2.8.C.5	Determine ways to leverage debt beneficially.
		9.2.8.C.6	Determine potential consequences of using "easy access" credit (e.g., using a line of credit vs. obtaining a loan for a specific purpose).
		9.2.8.C.7	Explain the meaning and possible consequences of "predatory lending practices."
		9.2.8.C.8	Explain the purpose of a credit score and credit record, and summarize borrowers' credit report rights.

		9.2.8.C.9	Summarize the causes and consequences of personal bankruptcy.
		9.2.8.C.10	Determine when there is a need to seek credit counseling and appropriate times to utilize it.
12	Credit management includes making informed choices about sources of credit and requires an understanding of the cost of credit.	9.2.12.C.1	Compare and contrast the financial benefits of different products and services offered by a variety of financial institutions.
		9.2.12.C.2	Compare and compute interest and compound interest and develop an amortization table using business tools.
		9.2.12.C.3	Compute and assess the accumulating effect of interest paid over time when using a variety of sources of credit.
		9.2.12.C.4	Compare and contrast the advantages and disadvantages of various types of mortgages.
	Credit worthiness is dependent on making informed credit decisions and managing debt responsibly.	9.2.12.C.5	Analyze the information contained in a credit report and explain the importance of disputing inaccurate entries.
		9.2.12.C.6	Explain how predictive modeling determines "credit scores."
		9.2.12.C.7	Explain the rights and responsibilities of buyers and sellers under consumer protection laws, and discuss common unfair or deceptive business practices.
		9.2.12.C.8	Evaluate the implications of personal and corporate bankruptcy for self and others.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**D. Planning, Saving, and Investing**		
By the end of grade	Content Statement	CPI#	Cumulative Progress Indicator (CPI)
4	Information about investment options assists with financial planning.	9.2.4.D.1	Determine various ways to save.
	Appropriate application of basic economic principles leads to wiser decisions for individual, family, and business financial planning.	9.2.4.D.2	*Explain the concept of "opportunity cost."*
		9.2.4.D.3	*Explain what it means to "invest."*
		9.2.4.D.4	*Distinguish between saving and investing.*
8	Information about investment options assists with financial planning.	9.2.8.D.1	Determine how saving contributes to financial well-being.
		9.2.8.D.2	Differentiate among various savings tools and how to use them most effectively.
		9.2.8.D.3	*Differentiate among various investment options.*
		9.2.8.D.4	*Distinguish between income and investment growth.*
	Appropriate application of basic economic principles leads to wiser decisions for individual, family, and business financial planning.	9.2.8.D.5	Explain the economic principle of supply and demand.
		9.2.8.D.6	Relate saving and investing decisions to successful entrepreneurship.
		9.2.8.D.7	Calculate short- and long-term returns on various investments (e.g., stocks, bonds, mutual funds, IRAs, deferred pension plans, and so on).
		9.2.8.D.8	Assess the impact of inflation on economic decisions and lifestyles.
12	Information about investment options assists with financial planning.	9.2.12.D.1	Summarize how investing builds wealth and assists in meeting long- and short-term financial goals.
		9.2.12.D.2	*Assess factors that influence financial planning.*
		9.2.12.D.3	*Justify the use of savings and investment options to meet targeted goals.*
		9.2.12.D.4	Analyze processes and vehicles for buying and selling investments.
		9.2.12.D.5	Compare the risk, return, and liquidity of various savings and investment alternatives.
		9.2.12.D.6	Explain how government and independent financial services and products are used to achieve personal financial goals.

	9.2.12.D.7	Relate savings and investment results to achievement of financial goals.
Appropriate application of basic economic principles leads to wiser decisions for individual, family, and business financial planning.	9.2.12.D.8	***Differentiate among various investment products and savings vehicles and how to use them most effectively.***
	9.2.12.D.9	Assess the role of revenue-generating assets as mechanisms for accruing and managing wealth.
	9.2.12.D.10	***Compare and contrast the past and present role of government in the financial industry and in the regulation of financial markets.***
	9.2.12.D.11	Determine the impact of various market events on stock market prices and on other savings and investments.
	9.2.12.D.12	Evaluate how taxes affect the rate of return on savings and investments.
	9.2.12.D.13	Analyze how savings, retirement plans, and other investment options help to shift current income for purposes of tax reporting and filing.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**E. Becoming a Critical Consumer**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	The ability to prioritize wants and needs assists in making informed investments, purchases, and decisions.	9.2.4.E.1	Determine factors that influence consumer decisions related to money.
	Cost-benefit analysis informs responsible spending practices.	9.2.4.E.2	Identify ways interest rates add to the cost of goods and services.
		9.2.4.E.3	Evaluate financial information from a variety of sources.
		9.2.4.E.4	Apply comparison shopping skills to purchasing decisions.
	Consumer protection includes providing information about the range of products and services and about consumer resources, rights, and responsibilities.	9.2.4.E.5	Explain what it means to be a responsible consumer and the factors to consider when making consumer decisions.
		9.2.4.E.6	Identify personal information that should not be disclosed to others and the possible consequences of doing or not doing so.
		9.2.4.E.7	Compare and contrast product facts versus advertising claims.

8	The ability to prioritize wants and needs assists in making informed investments, purchases, and decisions.	9.2.8.E.1	Prioritize personal wants and needs when making purchases.
	Cost-benefit analysis informs responsible spending practices.	9.2.8.E.2	Analyze interest rates and fees associated with financial services, credit cards, debit cards, and gift cards.
		9.2.8.E.3	Evaluate the appropriateness of different types of monetary transactions (e.g., electronic transfer, check, certified check, money order, gift card, barter) for various situations.
		9.2.8.E.4	Compare the value of goods or services from different sellers when purchasing large quantities and small quantities.
		9.2.8.E.5	Identify the components of written and verbal contracts and the inherent responsibilities of the contracting parties.
	Consumer protection includes providing information about the range of products and services and about consumer resources, rights, and responsibilities.	9.2.8.E.6	Evaluate how fraudulent activities impact consumers, and justify the creation of consumer protection laws.
		9.2.8.E.7	***Recognize the techniques and effects of deceptive advertising.***
12	The ability to prioritize wants and needs assists in making informed investments, purchases, and decisions.	9.2.12.E.1	Analyze and apply multiple sources of financial information when prioritizing financial decisions.
		9.2.12.E.2	Determine how objective, accurate, and current financial information affects the prioritization of financial decisions.
		9.2.12.E.3	Evaluate how media, bias, purpose, and validity affect the prioritization of consumer decisions and spending.
	Cost-benefit analysis informs responsible spending practices.	9.2.12.E.4	Evaluate business practices and their impact on individuals, families, and societies.
		9.2.12.E.5	Evaluate written and verbal contracts for essential components and for obligations of the lender and borrower.
	Consumer protection includes providing information about the range of products and services and about consumer resources, rights, and responsibilities.	9.2.12.E.6	Apply consumer protection laws to the issues they address.
		9.2.12.E.7	Relate consumer fraud, including online scams and theft of employee time and goods, to laws that protect consumers.
		9.2.12.E.8	Determine when credit counseling is necessary and evaluate the resources available to assist consumers who wish to use it.
		9.2.12.E.9	Determine reasons for the increase of identity theft worldwide and evaluate the extent to which victims of identity theft are successful in fully restoring their personal identities.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**F. Civic Financial Responsibility**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
4	The potential for building and using personal wealth includes responsibility to the broader community and an understanding of the legal rights and responsibilities of being a good citizen.	9.2.4.F.1	Demonstrate an understanding of individual financial obligations and community financial obligations.
		9.2.4.F.2	Relate a country's economic system of production and consumption to building personal wealth and achieving societal responsibilities.
	Philanthropic, charitable, and entrepreneurial organizations play distinctly different but vitally important roles in supporting the interests of local and global communities.	9.2.4.F.3	Explain the roles of philanthropy, volunteer service, and charitable contributions, and analyze their impact on community development and quality of living.
		9.2.4.F.4	Identify skills related to organizing, managing, and taking on the risks of owning a business.
8	The potential for building and using personal wealth includes responsibility to the broader community and an understanding of the legal rights and responsibilities of being a good citizen.	9.2.8.F.1	Explain how the economic system of production and consumption may be a means to achieve significant societal goals.
		9.2.8.F.2	Examine the implications of legal and ethical behaviors when making financial decisions.
		9.2.8.F.3	Relate the impact of business, government, and consumer fiscal responsibility to the economy and to personal finance.
	Philanthropic, charitable, and entrepreneurial organizations play distinctly different but vitally important roles in supporting the interests of local and global communities.	9.2.8.F.4	Calculate appropriate amounts of charitable giving based on current financial status.
		9.2.8.F.5	Determine opportunities for micro-financing of global charities and causes.
12	The potential for building and using personal wealth includes responsibility to the broader community and an understanding of the legal rights and responsibilities of being a good citizen.	9.2.12.F.1	Demonstrate an understanding of the interrelationships among attitudes, assumptions, and patterns of behavior regarding money, saving, investing, and work across cultures.
		9.2.12.F.2	Summarize the concept and types of taxation used to fund public initiatives.
		9.2.12.F.3	Assess the impact of emerging global economic events on financial planning.

		9.2.12.F.4	Analyze how citizen decisions and actions can influence the use of economic resources to achieve societal goals and provide individual services.
		9.2.12.F.5	Summarize the purpose and importance of a will.
	Philanthropic, charitable, and entrepreneurial organizations play distinctly different but vitally important roles in supporting the interests of local and global communities.	9.2.12.F.6	Compare and contrast the role of philanthropy, volunteer service, and charities in community development and quality of life in a variety of cultures.
		9.2.12.F.7	Explain the concept and forms of taxation and justify the use of taxation to fund public activities and initiatives.
		9.2.12.F.8	Evaluate the effects of entrepreneurship on economic stability and quality of living in local and global communities.
		9.2.12.F.9	Assess the impact of the global economy on entrepreneurial opportunities.

Content Area	21st-Century Life and Careers		
Standard	**9.2 Personal Financial Literacy:** All students will develop skills and strategies that promote personal and financial responsibility related to financial planning, savings, investment, and charitable giving in the global economy.		
Strand	**G. Risk Management and Insurance**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
4	There are common financial risks and ways to manage risks.	9.2.4.G.1	Summarize common types of financial risks and basic risk management strategies.
	Insurance is designed to protect the consumer against unintended losses.	9.2.4.G.2	Explain the importance of protection against financial loss and reasons for risk assessment.
		9.2.4.G.3	Describe how valuable items might be damaged or lost and ways to protect them.
8	There are common financial risks and ways to manage risks.	9.2.8.G.1	Compare the impact of losses associated with different types of financial risk.
		9.2.8.G.2	Explain why it is important to develop plans for protecting current and future personal assets against loss.
	Insurance is designed to protect the consumer against unintended losses.	9.2.8.G.3	Explain the purpose and importance of health, disability, life, and consumer insurance protection.
		9.2.8.G.4	Determine criteria for deciding the amount of insurance protection needed.
		9.2.8.G.5	Analyze the need for and value of different types of insurance and the impact of deductibles.
		9.2.8.G.6	Evaluate the need for different types of extended warranties.
12	There are common financial risks and ways to manage risks.	9.2.12.G.1	Analyze risks and benefits in various financial situations.
	Insurance is designed to protect the consumer against unintended losses.	9.2.12.G.2	Differentiate between property and liability insurance protection.
		9.2.12.G.3	Compare the cost of various types of insurance (e.g., life, homeowners, motor vehicle) for the same product or service, given different liability limits and risk factors.
		9.2.12.G.4	Evaluate individual and family needs for insurance protection using opportunity-cost analysis.
		9.2.12.G.5	Compare insurance policy coverage limits and related premiums and deductibles to minimize costs.

		9.2.12.G.6	Differentiate the costs and benefits of renter's and homeowner's insurance.
		9.2.12.G.7	Compare sources of health and disability coverage, including employee benefit plans, with options in another country.
		9.2.12.G.8	Compare and contrast options for long-term healthcare insurance for home care and external care.
		9.2.12.G.9	Explain how to self-insure and how to determine when self-insurance is appropriate.
		9.2.12.G.10	Determine when and why it may be appropriate for the government to provide insurance coverage, rather than private industry.

Content Area	21st-Century Life and Careers
Standard	**9.3 Career Awareness, Exploration, and Preparation:** All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.
Strand	**A. Career Awareness**

By the end of grade	Content Statement	CPI#	Cumulative Progress Indicator (CPI)
4	Career awareness includes an understanding of the world of work and the knowledge and skills needed for traditional and nontraditional jobs and careers.	9.3.4.A.1	Identify reasons why people work and discuss how work can help a person achieve personal goals.
		9.3.4.A.2	Identify various life roles and civic and work-related activities in the school, home, and community.
		9.3.4.A.3	Appraise personal likes and dislikes and identify careers that might be suited to personal likes.
		9.3.4.A.4	Identify qualifications needed to pursue traditional and nontraditional careers and occupations.
		9.3.4.A.5	Locate career information using a variety of resources.
		9.3.4.A.6	Explain why knowledge and skills acquired in the elementary grades lay the foundation for the future academic and career success.

Content Area	21st-Century Life and Careers		
Standard	**9.3 Career Awareness, Exploration, & Preparation:** All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.		
Strand	**B. Career Exploration**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
8	Career exploration includes investigation of the contemporary workplace and an understanding of the relationships among personal abilities, education, and knowledge and skills needed to pursue 21st-century occupations and careers.	9.3.8.B.1	Develop a Personalized Student Learning Plan that includes information about career areas of interest with the assistance of adult mentors.
		9.3.8.B.2	Identify common knowledge, skills, and abilities needed within the federal 16 Career Cluster Pathways.
		9.3.8.B.3	Evaluate personal abilities, interests, and motivations and discuss how they might influence job and career selection.
		9.3.8.B.4	Identify high school and county career and technical school courses and programs that support career or occupational areas of interest.
		9.3.8.B.5	Use workplace readiness skills and career information learned from job shadowing, high school visits, speakers, volunteering, or other career exploration activities to assist with career exploration.
		9.3.8.B.6	Evaluate communication, collaboration, and leadership skills and how they might be further developed in preparation for a future career through involvement in school, home, work, and extracurricular activities.
		9.3.8.B.7	Explain what is meant by "jobs" and "careers," and examine how each tends to be distributed regionally, nationally, and globally.
		9.3.8.B.8	Compare and contrast how traditional and nontraditional occupational roles have changed or remained the same regionally, nationally, and globally.
		9.3.8.B.9	Inventory the requirements for entering different career areas of interest using online job information, such as the federal Occupational Information Network (O*NET) or the New Jersey State Career Development Website, and determine why those requirements are needed for success in a chosen career.

		9.3.8.B.10	Evaluate employment trends (including job outlook and wage trends) in areas of career interest using online resources, such as the federal Occupational Information Network (O*NET) or the New Jersey State Career Development Website.
		9.3.8.B.11	Prepare a sample résumé and cover letter as part of an application for part-time or summer employment.
		9.3.8.B.12	Explain how personal behavior, dress, attitudes, and other choices can impact the success or failure of a job applicant.
	State and federal agencies are responsible for regulating workplaces to ensure that employees are safe from harm and exploitation.	9.3.8.B.13	Locate information about working papers, including what is required to obtain them and who must sign them.
		9.3.8.B.14	Use online state and federal agency resources to identify jobs that are permitted or prohibited for minors.
	Both employers and employees have professional, legal, and ethical responsibilities in the workplace and in the global marketplace.	9.3.8.B.15	Analyze a past or current local, national, or international incident that violated professional, legal, and/or ethical responsibilities in an employment setting, and explain the impact of the incident on employees and others.
	There is a relationship between personal behavior and employability.	9.3.8.B.16	Relate academic achievement, as represented by high school diplomas, college degrees, and industry credentials, to employability and to potential level of income.
		9.3.8.B.17	Recognize that an individual's online behavior (e.g., social networking, photo exchanges, video postings) may impact opportunities for employment or advancement.
		9.3.8.B.18	Compare and contrast current and past employer hiring and employment practices related to substance use (e.g., tobacco, drugs, and alcohol).

Content Area	21st-Century Life and Careers		
Standard	9.3 Career Awareness, Exploration, & Preparation: All students will apply knowledge about and engage in the process of career awareness, exploration, and preparation in order to navigate the globally competitive work environment of the information age.		
Strand	C. Career Preparation		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	Career preparation requires purposeful planning based on research, self-knowledge, and informed choices.	9.3.12.C.1	Assess and modify Personalized Student Learning Plans to support declared career goals.
		9.3.12.C.2	Characterize education and skills needed to achieve career goals, and take steps to prepare for postsecondary options, including making course selections, preparing for and taking assessments, and participating in extra-curricular activities.
		9.3.12.C.3	Develop personal interests and activities that support declared career goals and plans.
		9.3.12.C.4	Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.
		9.3.12.C.5	Identify transferable skills in career choices and design alternative career plans based on those skills.
		9.3.12.C.6	Develop job readiness skills by participating in structured learning experiences and employment seeking opportunities.
		9.3.12.C.7	Pursue a variety of activities related to career preparation (e.g., volunteer, seek employment, and/or apply for training grants, higher education grants, and loans).
		9.3.12.C.8	Interpret how changing economic and societal needs influence employment trends and future education.
		9.3.12.C.9	Investigate career opportunities in the United States or abroad that involve working with people from diverse cultures and that require knowledge of other languages or cultures.
		9.3.12.C.10	Differentiate entrepreneurship opportunities as options for career planning, and identify the knowledge, skills, abilities, and resources required for owning a business.

	State and federal laws and regulations require specific employment and workplace safety and health policies and procedures in order to ensure that workers are free from exploitation and to ensure a safe and healthy work environment.	9.3.12.C.11	Evaluate the responsibilities of employers and employees for maintaining workplace safety, and explain health rights related to a particular occupation/career.
		9.3.12.C.12	Determine the impact of past and/or recent lawsuits and/or court decisions regarding employment laws.
		9.3.12.C.13	Comply with workplace child labor regulations and safety and health policies during structured learning experiences.
	Both employers and employees have professional, legal, and ethical responsibilities in the workplace and in the global marketplace.	9.3.12.C.14	Interpret and justify written employer organizational policies and procedures for job performance.
		9.3.12.C.15	Propose potential solutions for current workplace ethics court cases involving multinational companies.
		9.3.12.C.16	Determine the consequences of quality control failures in the United States and in another country based on issues reported in the media.
		9.3.12.C.17	Analyze relationships between companies and the communities in which they are located, and explain how the presence of companies in a community may have a positive or negative impact.
	There is a relationship between personal behavior and employability.	9.3.12.C.18	Determine how an individual's driving record (e.g., tickets, points, penalties for driving while intoxicated) and/or credit score may impact opportunities for employment, job retention, or job advancement.
		9.3.12.C.19	Compare and contrast employee substance abuse policies (e.g., tobacco, drugs, and alcohol) by industry sector.
		9.3.12.C.20	Analyze employment trends by industry sector to determine how employment and training requirements change over time.
		9.3.12.C.21	Determine the extent to which an individual's online behavior (e.g., social networking, photo exchanges, video postings) may impact opportunities for employment, job retention, or job advancement.
		9.3.12.C.22	Compare and contrast New Jersey school district policies with employer policies related to individual behavior and responsibilities (e.g., absenteeism and tardiness, plagiarism, harassment).
		9.3.12.C.23	Determine job entrance criteria (e.g., education credentials, math/writing/reading comprehension tests, drug tests) used by employers in various industry sectors.
		9.3.12.C.24	Analyze why employers use different interview techniques.

Career Clusters Table

All New Jersey career and technical education programs fall under one of the 16 career clusters of the States' Career Clusters Initiative. Each career cluster is listed in column one of the Career Clusters Table, below, along with a link to the standards document for that cluster. Column two provides a description of each career cluster. Column three shows how the organization of each career cluster is further refined into career pathways.

In standard 9.4, each of the 16 career clusters is listed as a strand (the identifier for each strand—9.4.A through 9.4.P—is also shown in column one of the Career Clusters Table). In addition, for each career cluster/strand, content statements and cumulative progress indicators are delineated for (1) the overall cluster, and (2) each specific pathway within that cluster.

CAREER CLUSTERS TABLE		
Career Cluster Name	**Career Cluster Description**	**Career Pathways**
9.4.A **Agriculture, Food, & Natural Resources**	The **Agriculture, Food, & Natural Resources Career Cluster** includes occupations and careers in production, processing, marketing, distribution, financing, and development of agricultural commodities and resources, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.	1. Food Products and Processing Systems 2. Plant Systems 3. Animal Systems 4. Power, Structural, and Technical Systems 5. Natural Resources Systems 6. Environmental Service Systems 7. Agribusiness Systems
9.4.B **Architecture & Construction**	The **Architecture & Construction Career Cluster** includes occupations and careers in designing, planning, managing, building, and maintaining the built environment.	1. Design/Pre-Construction 2. Construction 3. Maintenance/Operations
9.4.C **Arts, A/V Technology & Communications**	The **Arts, A/V Technology & Communications Career Cluster** includes occupations and careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.	1. Audio & Video Technology and Film 2. Journalism & Broadcasting 3. Printing Technologies 4. Performing Arts 5. Telecommunications Technologies 6. Visual Arts
9.4.D	The **Business, Management & Administration Career Cluster** includes	1. Administrative Services 2. Business Information Technology

CAREER CLUSTERS TABLE		
Career Cluster Name	**Career Cluster Description**	**Career Pathways**
Business, Management & Administration	occupations and careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.	3. General Management 4. Business Financial Management & Accounting 5. Human Resources 6. Operations Management
9.4.E **Education & Training**	The **Education & Training Career Cluster** includes occupations and careers in planning, managing, and providing education and training services and related learning support services.	1. Professional Support Services 2. Teaching & Training
9.4.F **Finance**	The **Finance Career Cluster** includes occupations and careers in planning, services for financial and investment planning, banking, insurance, and business financial management.	1. Accounting 2. Banking 3. Business Finance 4. Insurance 5. Securities & Investments
9.4.G **Government & Public Administration**	The **Government & Public Administration Career Cluster** includes occupations and careers in executing governmental functions to include governance, national security, foreign service, planning, revenue and taxation, regulation, and management and administration at the local, state, and federal levels.	1. Governance 2. Foreign Service 3. Planning 4. National Security
9.4.H **Health Science**	The **Health Science Career Cluster** includes occupations and careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnological research and development.	1. Therapeutic Services 2. Diagnostics Services 3. Health Informatics 4. Support Services 5. Biotechnology Research & Development
9.4.I	The **Hospitality & Tourism Career Cluster** encompasses the management, marketing,	1. Restaurants & Food & Beverage Services 2. Lodging

CAREER CLUSTERS TABLE		
Career Cluster Name	**Career Cluster Description**	**Career Pathways**
Hospitality & Tourism	and operations of restaurants and other foodservices, lodging, attractions, recreation events, and travel related services.	3. Travel & Tourism 4. Recreation, Amusements, & Attractions
9.4.J **Human Services**	The **Human Services Career Cluster** includes occupations and careers in educating and preparing individuals for employment in career pathways that relate to families and human needs.	1. Early Childhood Development & Services 2. Family & Community Services 3. Personal Care Services 4. Consumer Services
9.4.K **Information Technology**	The **Information Technology Career Cluster** includes occupations and careers in building linkages for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, Internet, multimedia, and systems integration services.	1. Network Systems 2. Information Support & Services 3. Web & Digital Communication 4. Programming & Software Development
9.4.L **Law, Public Safety, Corrections & Security**	The **Law, Public Safety, Corrections & Security Career Cluster** includes occupations and careers in planning, managing, and providing legal, public safety, corrections, protective services, and homeland security, including professional and technical support.	1. Correction Services 2. Fire & Emergency Management Services 3. Security & Protective Services 4. Law Enforcement Services 5. Legal Services
9.4.M **Manufacturing**	The **Manufacturing Career Cluster** includes occupations and careers in planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities, such as production planning and control, maintenance, and manufacturing/process engineering.	1. Manufacturing Production Process Development 2. Production 3. Maintenance, Installation, & Repair 4. Quality Assurance 5. Logistics & Inventory Control 6. Health, Safety, & Environmental Assurance

CAREER CLUSTERS TABLE		
Career Cluster Name	**Career Cluster Description**	**Career Pathways**
9.4.N **Marketing, Sales & Service**	The **Marketing, Sales & Service Career Cluster** includes occupations and careers in planning, managing, and performing marketing activities to reach organizational objectives.	1. Marketing Communications 2. Marketing Management 3. Marketing Research 4. Management & Entrepreneurship 5. Merchandising 6. Professional Sales & Marketing
9.4.O **Science, Technology, Engineering & Mathematics**	The **Science, Technology, Engineering & Mathematics Career Cluster** includes occupations and careers in planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering), including laboratory and testing services, and research and development services.	1. Engineering & Technology 2. Science & Mathematics
9.4.P **Transportation, Distribution & Logistic**	The **Transportation, Distribution & Logistics Career Cluster** includes occupations and careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services, such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.	1. Transportation Operations 2. Logistics Planning & Management Services 3. Warehousing & Distribution Center Operations 4. Facility & Mobile Equipment Maintenance 5. Transportation Systems/Infrastructure Planning, Management, & Regulation 6. Health, Safety, & Environmental Management 7. Sales & Service

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.A.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.A.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.A.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.A.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.A.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.A.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.A.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.A.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.A.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.A.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.

		9.4.12.A.11	Apply active listening skills to obtain and clarify information.
		9.4.12.A.12	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.A.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.A.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.A.15	Use oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information related to this cluster.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.A.16	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.A.17	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.A.18	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.A.19	Conduct technical research to gather information necessary for decision-making.
		9.4.12.A.20	Access and utilize suitable resources to identify and study public policies, issues, and regulations impacting this cluster.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.A.21	Employ technological tools to expedite workflow.
		9.4.12.A.22	Operate electronic mail applications to communicate.
		9.4.12.A.23	Operate Internet applications to perform tasks.
		9.4.12.A.24	Operate writing and publishing applications to prepare business communications.
		9.4.12.A.25	Operate presentation applications to prepare and deliver presentations.
		9.4.12.A.26	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.A.27	Employ database applications to manage data.
		9.4.12.A.28	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.A.29	Employ computer operations applications to manage work tasks.
		9.4.12.A.30	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.A.31	Access, manage, integrate, and disseminate information using information technology tools specific to this cluster in order to facilitate people, machines, and logistics.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A.32	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.A.33	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.A.34	Examine and summarize roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment to understand the nature and scope of this cluster and related organizations.
	9.4.12.A.35	Identify how key organizational systems affect organizational performance and the quality of products and services to demonstrate an understanding of how systems are managed and improved in this cluster.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.A.36	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
	9.4.12.A.37	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.A.38	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.A.39	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.A.40	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
	9.4.12.A.41	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
	9.4.12.A.42	Demonstrate knowledge of safe and healthful working conditions and environments that adhere to employee rights and responsibilities and employer obligations in order to promote well-being in workplaces in this cluster.
	9.4.12.A.43	Identify and assess types and sources of workplace hazards common to this cluster in order to demonstrate a working understanding of key health and safety concerns.
	9.4.12.A.44	Examine and summarize the importance of using health, safety, and environmental management systems in organizations in this cluster to express their importance to organizational performance and regulatory compliance.

	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.A.45	Employ leadership skills to accomplish goals and objectives.
		9.4.12.A.46	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.A.47	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.A.48	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.A.49	Conduct and participate in meetings to accomplish tasks.
		9.4.12.A.50	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.A.51	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.A.52	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.A.53	Demonstrate ethics specific to occupations in this cluster in order to reflect effective stewardship of resources.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.A.54	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
		9.4.12.A.55	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.A.56	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.A.57	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.A.58	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.A.59	Identify and exhibit traits for retaining employment.
		9.4.12.A.60	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.A.61	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.A.62	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.

		9.4.12.A.63	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.A.64	Examine employment opportunities in entrepreneurship as an option for career planning.
		9.4.12.A.65	Explain written organizational policies, rules, and procedures that are common to this cluster and that are used to help employees perform their jobs effectively.
		9.4.12.A.66	Select, research, and examine critical aspects of careers in one or more pathways in order to gain an understanding of the breadth of occupations within this cluster.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A.67	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.A.68	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.A.69	Demonstrate knowledge of tools, equipment, machinery, and technology used in this cluster.
		9.4.12.A.70	Compare and contrast issues affecting this cluster to demonstrate an understanding of the trends and issues important to careers in this field.
		9.4.12.A.71	Envision emerging technologies and future effects of globalization, and project the influence of these on widespread markets to demonstrate an understanding of technologies and trends that are likely to impact the cluster.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**		
Pathway	*(1) Food Products and Processing Systems Pathway*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.A(1).1	Examine and conduct food product development and research activities that demonstrate application of food science principles to enhance product quality and appeal.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A(1).2	Design procedures and plans that demonstrate application of food processing principles to manage quality control in the food product and processing industry.
		9.4.12.A(1).3	Plan services associated with the preservation and packaging of food and food products to prepare products for distribution.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.A(1).4	Identify and apply food processing, handling, and storage factors to demonstrate their potential impact on product quality and safety, including bioterrorism concerns.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	A. Agriculture, Food, & Natural Resources Career Cluster
Pathway	*(2) Plant Systems*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.A(2).1	Examine and apply knowledge of basic plant anatomy and physiology, using taxonomic and other classifications to build a working understanding of functional differences among plant structures.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12A(2).2	Describe and implement the principles of plant production and management in both domesticated and natural environments, applying principles of anatomy and physiology to enhance plant production.
		9.4.12A(2).3	Evaluate and implement the fundamentals of production and harvesting when producing plants to demonstrate plant management and production techniques.
		9.4.12A(2).4	Exercise elements of design commonly used by professionals in plant systems careers by enhancing an environment (e.g., floral, forest, landscape, or farm) for a variety of purposes.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**		
Pathway	***(3) Animal Systems***		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Safety, Health, and Environment**: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.A(3).1	Recognize and interpret animal behaviors and execute protocols for safe handling to protect both animals and humans.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A(3).2	Describe and implement the principles of animal production and management in domesticated and/or natural environments, applying knowledge of anatomy and physiology to enhance animal production.
		9.4.12.A(3).3	Analyze and implement proper nutrition using accepted protocols and processes to maintain animal performance.
		9.4.12.A(3).4	Analyze and summarize factors that influence an animal's reproductive cycle to demonstrate an understanding of the species.
		9.4.12.A(3).5	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance to demonstrate effective application of principles to optimize performance.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**		
Pathway	*(4) Power, Structural, and Technical Systems*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A(4).1	Examine structural requirements and estimate project costs in order to facilitate effective planning for projects within this pathway.
		9.4.12.A(4).2	Plan design and construction support services to facilitate the development of agricultural machinery, equipment, buildings, structures, and technical systems.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.A(4).3	Read and relate structural plans to specifications and building codes to facilitate building construction.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A(4).4	Explain physical science principles and apply them to engineering applications involving mechanical equipment, structures, biological systems, land treatment, power utilization, and technology to facilitate work within this pathway.

		9.4.12.A(4).5	Explain principles of operation and maintenance and apply them to mechanical equipment, structures, biological systems, land treatment, power utilization, and technology to facilitate work within this pathway.
		9.4.12.A(4).6	Explain principles of service and repair and apply them to mechanical equipment, structures, biological systems, land treatment, power utilization, and technology in order to maintain equipment used in this pathway.
		9.4.12.A(4).7	Construct technical sketches, drawings, and plans using basic skills in blueprint design and development to facilitate design tasks within this pathway.
		9.4.12.A(4).8	Identify a variety of technologies available to accomplish fast, accurate production in the workplaces in this pathway.
		9.4.12.A(4).9	Assess control systems that use available power sources to facilitate work within agricultural systems.
		9.4.12.A(4).10	Examine and summarize applications of geospatial technology to demonstrate a broad knowledge of technologies influencing the pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**		
Pathway	*(5) Natural Resources Systems*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.A(5).1	Communicate about natural resources using effective public venues to heighten awareness regarding conservation and resource preservation.
		9.4.12.A(5).2	Communicate about natural resource production practices and processing procedures to heighten public awareness regarding the responsible and sustainable use of natural resources.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.A(5).3	Apply scientific principles and processes to natural resource system problems and issues when planning natural resource management activities, to demonstrate understanding of the need, feasibility, and application of logical, reasoned solutions.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A(5).4	Identify, describe, and develop system management activities in natural habitats to demonstrate recognition of the important relationship between natural resource preservation and human intervention.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A(5).5	Practice responsible control and management procedures and techniques to protect or maintain natural resources in a variety of settings in this pathway.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**A. Agriculture, Food, & Natural Resources Career Cluster**
Pathway	*(6) Environmental Service Systems*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Problem-Solving and Critical Thinking:** Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.A(6).1	Apply scientific principles to the study of environmental service systems in order to facilitate development of solutions to environmental issues, problems, and applications.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A(6).2	Apply scientific principles to environmental systems management activities.
		9.4.12.A(6).3	Identify and describe environmental service systems needed to manage a facility environment (e.g., pollution control, water treatment, wastewater treatment, solid waste management, and energy).
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.A(6).4	Examine and interpret public policies and regulations impacting environmental services to determine their effect on building operations.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A(6).5	Evaluate environmental services using analytic procedures and instruments.
		9.4.12.A(6).6	Use surveying and drafting tools, equipment, machinery, and technology to accomplish planning and other tasks in this pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	A. Agriculture, Food, & Natural Resources Career Cluster		
Pathway	*(7) Agribusiness Systems*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.A(7).1	Develop budget, credit, and optimal application of business assets to promote business financial health, using generally accepted accounting principles to promote business financial well-being.
		9.4.12.A(7).2	Assess and describe inventory management using industry-specific concepts and inventory control practices to ensure adequate inventory for business demand.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.A(7).3	Employ leadership skills to accomplish goals and objectives common to business environments in this industry.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.A(7).4	Demonstrate good recordkeeping strategies and techniques to accomplish business objectives common to this industry.
		9.4.12.A(7).5	Appraise, select, and employ technological resources to accomplish business objectives common to this industry.
		9.4.12.A(7).6	Describe sales and marketing principles common to organizations in this pathway to accomplish business objectives.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**B. Architecture & Construction Career Cluster**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.B.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.B.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.B.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.B.4	Perform math operations, such as estimating and distributing materials and supplies, to complete classroom/workplace tasks.
		9.4.12.B.5	Apply principles of physics, as they relate to worksite/jobsite situations, to work with materials and load applications.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.B.6	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.B.7	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.B.8	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.B.9	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.B.10	Use correct grammar, punctuation, and terminology to write and edit documents.

		9.4.12.B.11	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.B.12	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.B.13	Apply active listening skills to obtain and clarify information.
		9.4.12.B.14	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.B.15	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.B.16	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.B.17	Use vocabulary and visual cues commonly used in design and construction to communicate successfully.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.B.18	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.B.19	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.B.20	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.B.21	Conduct technical research to gather information necessary for decision-making.
		9.4.12.B.22	Create and implement project plans to accomplish realistic planning in design and construction situations, considering available resources and requirements of a project/problem.
		9.4.12.B.23	Describe how design and construction project plans and schedules respond to unexpected events and conditions.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.B.24	Employ technological tools to expedite workflow.
		9.4.12.B.25	Operate electronic mail applications to communicate.
		9.4.12.B.26	Operate Internet applications to perform tasks.
		9.4.12.B.27	Operate writing and publishing applications to prepare business communications.
		9.4.12.B.28	Operate presentation applications to prepare and deliver presentations.
		9.4.12.B.29	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.B.30	Employ database applications to manage data.

		9.4.12.B.31	Employ collaborative/groupware applications to facilitate group work.

		9.4.12.B.32	Employ computer operations applications to manage work tasks.
		9.4.12.B.33	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.B.34	Examine comments and suggestions from customers to formulate improvements in services/products and to enhance training of staff.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.B.35	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.B.36	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.B.37	Examine how roles and responsibilities among trades/professions work in concert to complete a project/job.
		9.4.12.B.38	Examine all factors affecting the project planning process.
		9.4.12.B.39	Describe union-management relationships and contracts that involve creating a cooperative work environment.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.B.40	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.B.41	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.B.42	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.B.43	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.B.44	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.B.45	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.B.46	Assess and describe the types and sources of hazards to ensure a safe environment.

Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.B.47	Employ leadership skills to accomplish goals and objectives.
	9.4.12.B.48	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
	9.4.12.B.49	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
	9.4.12.B.50	Establish and maintain effective relationships in order to accomplish objectives and tasks.
	9.4.12.B.51	Conduct and participate in meetings to accomplish tasks.
	9.4.12.B.52	Employ mentoring skills to assist others.
	9.4.12.B.53	Establish specific goals to manage project assignments in a timely manner.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.B.54	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
	9.4.12.B.55	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
	9.4.12.B.56	Recognize legal and ethical relationships between employees and employers to establish workplace/jobsite rules, regulations, and guidelines in a design and/or construction setting.
	9.4.12.B.57	Read regulations and contracts to ensure ethical and safety elements are observed.
	9.4.12.B.58	Identify and summarize ethical and legal standards to avoid conflicts of interest in a design and/or construction setting.
Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.B.59	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
	9.4.12.B.60	Develop a Personalized Student Learning Plan to meet career goals and objectives.
	9.4.12.B.61	Demonstrate skills related to seeking and applying for employment in a desired job.
	9.4.12.B.62	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
	9.4.12.B.63	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.

		9.4.12.B.64	Identify and exhibit traits for retaining employment.
		9.4.12.B.65	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.B.66	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.B.67	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.B.68	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.B.69	Examine employment opportunities in entrepreneurship as an option for career planning.
		9.4.12.B.70	Explain written organizational policies, rules, and procedures that are common to this cluster and that are used to help employees perform their jobs effectively.
		9.4.12.B.71	Recognize the responsibilities of and personal characteristics needed to succeed in careers in this cluster to develop individual goals for professionalism.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.B.72	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.B.73	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.B.74	Read, interpret, and use technical drawings, documents, and specifications to plan a project.
		9.4.12.B.75	Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**B. Architecture & Construction Career Cluster**
Pathway	*(1) Design/Pre-Construction*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.B(1).1	Demonstrate communication skills and strategies that are used to work effectively with potential clients and others.
		9.4.12.B(1).2	Employ appropriate representational media to communicate concepts and design.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.B(1).3	Integrate structural, environmental, safety, building envelope, and building service systems in the design of buildings and structures.
		9.4.12.B(1).4	Review traditional project phases and various roles within them to plan for and implement phases within a project.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.B(1).5	Evaluate and select suitable environmental impact practices to enhance project acceptance and quality.

	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.B(1).6	Appreciate the diversity of needs, values, and social patterns in project design to appropriately meet client needs.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.B(1).7	Identify objective construction guidelines for the accommodation of people with different physical abilities to meet accessibility requirements.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.B(1).8	Employ basic methods of data collection and analysis to provide information for projects.
		9.4.12.B(1).9	Develop technical drawings drafted by hand and computer-generated plans to design structures.
		9.4.12.B(1).10	Demonstrate understanding of principles, conventions, standards, applications, and restrictions pertaining to the manufacture and use of construction materials, components, and assemblies, and incorporate this understanding into project design.
		9.4.12.B(1).11	Apply basic organizational, spatial, structural, and constructional principles to the design of interior and exterior space so that design plans are effective.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**B. Architecture & Construction Career Cluster**
Pathway	*(2) Construction*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.B(2).1	Describe contractual relationships established among all parties involved in the building process to ensure successful build of a project.
		9.4.12.B(2).2	Describe submittal approval procedures that ensure effective flow of information in the construction process.
		9.4.12.B(2).3	Evaluate construction subcontracts and describe their relationship to construction projects.
		9.4.12.B(2).4	Identify project turnover procedures needed to successfully manage construction projects.
		9.4.12.B(2).5	Plan building in accordance with contracts to meet budget and schedule.
		9.4.12.B(2).6	Describe testing and inspection procedures used to ensure successful completion of construction projects.
		9.4.12.B(2).7	Assess the purpose for scheduling as it relates to successful completion of construction projects.
		9.4.12.B(2).8	Identify closeout procedures needed to effectively complete construction projects.

Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.B(2).9	Demonstrate understanding of risk management principles and other strategies and tactics used to maintain, increase, or decrease risk.
	9.4.12.B(2).10	Create a jobsite safety program to ensure safe practices and procedures.
	9.4.12.B(2).11	Recognize and employ universal construction signs and symbols to function safely.
	9.4.12.B(2).12	Describe procedures for jobsite security to prevent liability.
	9.4.12.B(2).13	Create a classroom and/or jobsite environmental program.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.B(2).14	Manage relationships with teachers and classmates to successfully complete a construction project.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.B(2).15	Demonstrate knowledge of proper changeover procedures for successful completion of a construction project.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.B(2).16	Examine building systems and components to evaluate their usefulness to construction projects.
	9.4.12.B(2).17	Use craft skills to meet or exceed teacher and/or employer expectations.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**B. Architecture & Construction Career Cluster**
Pathway	*(3) Maintenance and Operations*

By the end of grade	Content Statement		CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.		9.4.12.B(3).1	Recognize and employ universal construction signs and symbols to function safely.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.		9.4.12.B(3).2	Use troubleshooting procedures when solving a maintenance problem to maintain project.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.		9.4.12.B(3).3	Apply construction skills when completing classroom projects and/or repairing, restoring, or renovating existing worksite structures to ensure long-term use of buildings and structures.
			9.4.12.B(3).4	Evaluate and assess an existing structure to determine the repairs or renovations required to restore operation of the structure.
			9.4.12.B(3).5	Plan and practice preventive maintenance activities to service existing structures.
			9.4.12.B(3).6	Assess and evaluate operational systems to achieve smooth operation of facilities.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**C. Arts, A/V Technology, & Communications Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.C.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.C.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.C.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.C.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.C.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.C.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.C.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.C.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.C.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.C.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.C.11	Apply active listening skills to obtain and clarify information.
		9.4.12.C.12	Develop and interpret tables, charts, and figures to support written and oral communications.

		9.4.12.C.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.C.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.C.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.C.16	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.C.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.C.18	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.C.19	Employ technological tools to expedite workflow.
		9.4.12.C.20	Operate electronic mail applications to communicate.
		9.4.12.C.21	Operate Internet applications to perform tasks.
		9.4.12.C.22	Operate writing and publishing applications to prepare business communications.
		9.4.12.C.23	Operate presentation applications to prepare and deliver presentations.
		9.4.12.C.24	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.C.25	Employ database applications to manage data.
		9.4.12.C.26	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.C.27	Employ computer operations applications to manage work tasks.
		9.4.12.C.28	Use computer-based equipment (containing embedded computers or processors) to control devices.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C.29	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.C.30	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.C.31	Analyze and summarize the history and evolution of this industry to understand the current place the field holds within society and the economy.
	9.4.12.C.32	Examine the various organizational structures adopted by groups within this field to understand the diversity and variety of functions within the industry.
	9.4.12.C.33	Analyze the economic base of this industry to demonstrate understanding of economic factors influencing the industry as a whole.
	9.4.12.C.34	Analyze and summarize evidence of interdependence between the technical and the artistic sides of this career cluster to demonstrate understanding of the systems involved in the cluster.
	9.4.12.C.35	Analyze and summarize the formal and informal influences on the abstract and formal structures of business organizations within this cluster to demonstrate an understanding of the influences on holding careers in this field.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.C.36	Demonstrate knowledge of personal and jobsite safety rules and regulations used to maintain safe and healthful working conditions and environments.
	9.4.12.C.37	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.C.38	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.C.39	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.C.40	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
	9.4.12.C.41	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.

		9.4.12.C.42	Maintain safe and healthful working conditions by completing work tasks in accordance with rights and responsibilities that protect employees' well-being in this cluster.
		9.4.12.C.43	Assess methods used to reduce hazards common to a range of worksites in this cluster to promote safe and accident-free work environments.
		9.4.12.C.44	Examine and summarize the responsibilities of various entities for promoting a safe and healthy environment to demonstrate understanding of how acceptable workplace conditions are maintained in the cluster.
		9.4.12.C.45	Examine and summarize safety-related problems common to this cluster, including those that may result from working with electrical circuits, to demonstrate a broad understanding of health and safety concerns.
		9.4.12.C.46	Apply safety procedures commonly used in this cluster when operating equipment to demonstrate a broad understanding of important safety practices.
		9.4.12.C.47	Examine and summarize the lifestyle implications and physical demands of work activities in this cluster to demonstrate a broad understanding of the nature of work in the industry.
		9.4.12.C.48	Demonstrate personal habits and procedures that ensure personal safety and well-being while on work-related assignments in various locations.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.C.49	Employ leadership skills to accomplish goals and objectives.
		9.4.12.C.50	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.C.51	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.C.52	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.C.53	Conduct and participate in meetings to accomplish tasks.
		9.4.12.C.54	Employ mentoring skills to assist others.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.C.55	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.C.56	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.C.57	Exhibit ethical conduct in writing, creating, printing, broadcasting, and performing in order to uphold high standards for professional behavior in the cluster.
		9.4.12.C.58	Analyze and apply laws affecting enterprises in this cluster to maintain up-to-date compliance with key regulations affecting the industry.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.C.59	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.C.60	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.C.61	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.C.62	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.C.63	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.C.64	Identify and exhibit traits for retaining employment.
		9.4.12.C.65	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.C.66	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.C.67	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.C.68	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.C.69	Examine employment opportunities in entrepreneurship as an option for career planning.

		9.4.12.C.70	Explain written organizational policies, rules, and procedures that are common to this cluster and that are used to help employees perform their jobs effectively.
		9.4.12.C.71	Identify, examine, and select career opportunities in one or more pathways in this cluster in order to explore career options.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C.72	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.C.73	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.C.74	Demonstrate the use of technical knowledge and skills that are common to multiple pathways in this cluster to allow for mobility among related occupations.
		9.4.12.C.75	Summarize knowledge of the systems used in multiple pathways in this cluster to keep abreast of new technological advancements and tools important to work in this cluster.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**C. Arts, A/V Technology, & Communications Career Cluste**r		
Pathway	*(1) Audio & Video Technology and Film*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(1).1	Demonstrate knowledge and understanding of how technical production support can enhance audio, video, and film production systems.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.C(1).2	Examine and summarize careers in this pathway to build an understanding of available opportunities.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(1).3	Employ knowledge and skills related to audio production equipment to demonstrate an understanding of basic tools used in this pathway.
		9.4.12.C(1).4	Employ knowledge and skills related to video production equipment to demonstrate an understanding of basic tools used in this pathway.
		9.4.12.C(1).5	Edit audio and video productions to demonstrate basic production system skills.

		9.4.12.C(1).6	Design an audio-video production to acquire an understanding of the entire production process.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**C. Arts, A/V Technology, & Communications Career Cluste**r
Pathway	*(2) Journalism & Broadcasting*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.C(2).1	Demonstrate writing processes used for a range of journalism media to build a base of skills for careers in the field.
		9.4.12.C(2).2	Demonstrate writing processes used for broadcast media to build a base of skills for careers in the field.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(2).3	Demonstrate knowledge and understanding of how technical support can be used to enhance broadcast productions.
		9.4.12.C(2).4	Examine and summarize business issues related to the pathway to gain awareness of factors that influence programming, content, and distribution in this industry.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.C(2).5	Examine and summarize ethical and legal issues related to the pathway to build awareness of responsible conduct of employees in this industry.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.C(2).6	Examine and summarize careers in this pathway to build an understanding of available opportunities.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(2).7	Demonstrate the ability to plan and deliver a broadcast production to exhibit readiness for completing key functions in the field.

Content Area	**21st-Century Life & Careers**		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**C. Arts, A/V Technology, & Communications Career Cluster**		
Pathway	**(3) Printing Technologies**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(3).1	Demonstrate knowledge of the printing process, including customer service and sales, scheduling, and quality control, to deliver products that meet customer needs and expectations.
		9.4.12.C(3).2	Analyze and summarize output processes, including digital, film, directive plate-making, and cylinders, to build an understanding of delivery of printed products.

		9.4.12.C(3).3	Examine the finishing and distribution operations related to printing to build an understanding of how to complete the printing process.
Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.		9.4.12.C(3).4	Employ knowledge of basic printing processes to demonstrate readiness for careers in the pathway.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.		9.4.12.C(3).5	Employ processes required for the production of various printed products to build an understanding of print technologies.
		9.4.12.C(3).6	Demonstrate preparation of customer materials for imaging to deliver products that meet customer needs and expectations.
		9.4.12.C(3).7	Analyze image retrieval through refinement, page assembly processes, and typeset and trapping to build an understanding of how to prepare products for printing.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**C. Arts, A/V Technology, & Communications Career Cluste**r
Pathway	*(4) Performing Arts*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	*Dance:*		
	Academic Foundations: Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.C(4).1	Demonstrate an awareness of the role of dance in various cultures to build an understanding of the nature and scope of dance in society.

	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(4).2	Compare and contrast the roles of choreographers, dancers, and others involved in the production and presentation of dance performances to build an understanding of career opportunities in the pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(4).3	Demonstrate basic dance movement and analyze basic skills needed for performing to build an understanding of career demands in the pathway.
		9.4.12.C(4).4	Demonstrate complex steps and patterns from various dance styles and traditions to convey an understanding of techniques, principles, and processes used in the pathway.
	Music:		
	Academic Foundations: Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.C(4).5	Demonstrate knowledge of music theory to convey an understanding of fundamental themes and patterns.
		9.4.12.C(4).6	Analyze aural examples of musical compositions representing diverse styles, cultures, and historical periods to build a broad understanding of the styles in the pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(4).7	Demonstrate a varied repertoire of music through vocal or instrumental performance, alone and with others, to show competence with fundamental elements used in the pathway.
	Theater and Playwriting:		
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.C(4).8	Analyze the physical, emotional, and social dimensions of characters found in dramatic texts from various styles and media to acquire an understanding of key issues affecting the creation of characters.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(4).9	Compare and contrast the roles of playwrights, actors, and others involved in the production and presentation of theatrical performances to build a perspective regarding individual roles involved in the pathway.
	9.4.12.C(4).10	Summarize and explain commercial aspects of the dramatic arts to demonstrate knowledge of the external and internal influences on the pathway.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(4).11	Apply acting technique to a range of dramatic characters and situations to build a repertoire of skills.
	9.4.12.C(4).12	Write stage, film, television, or electronic media scripts in a variety of traditional and current formats to demonstrate fundamental skills.
Technical Design and Production		
Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.C(4).13	Analyze and explain how artistic processes, organizational structure, and business principles are interrelated in the creation of arts productions to build an understanding of various influences.
	9.4.12.C(4).14	Analyze stage and production management to acquire a broad understanding of the role of technical design and other facets of arts productions.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(4).15	Analyze and explain how specific elements of technical design (e.g., lighting, sound, costumes, make-up, etc.) each contribute to arts performances in order to build a broad understanding of the role of technical design in arts productions.
	9.4.12.C(4).16	Research past and present productions and analyze the stage sets, costumes, lighting, and other technical effects that supported various performances in order to build a broad understanding of the role of technical design in arts productions.

		9.4.12.C(4).17	Demonstrate how technology may be used to reinforce, enhance, or alter performances to convey a broad understanding of the role of technical design in arts productions.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**C. Arts, A/V Technology, & Communications Career Cluster**
Pathway	*(5) Telecommunications Technologies*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Problem-Solving and Critical Thinking:** Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.C(5).1	Employ decision-making and problem-solving techniques when completing repair and replacement procedures to convey understanding of how services are delivered within this pathway.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.C(5).2	Employ knowledge of telecommunications security to build an understanding of protocols involved in maintaining consumer safety.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.C(5).3	Demonstrate knowledge of codes and regulations that impact this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.C(5).4	Use industry-specific terminology, tools, and test equipment to convey understanding of how services are delivered in this pathway.

		9.4.12.C(5).5	Demonstrate installation techniques and processes using telecommunication tools and materials to convey understanding of how services are delivered in this pathway.
		9.4.12.C(5).6	Analyze schematics, diagrams, and blueprints using industry-specific vocabulary.
		9.4.12.C(5).7	Apply knowledge of telecommunications when providing service and solving problems for customers to maintain high quality customer relationships.
		9.4.12.C(5).8	Apply knowledge of network applications to demonstrate how to deliver network systems.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**C. Arts, A/V Technology, & Communications Career Cluste**r		
Pathway	*(6) Visual Arts*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.C(6).1	Research the history of the visual arts and analyze the role of the visual arts in society to develop a broad understanding of the nature and scope of the pathway.
		9.4.12.C(6).2	Analyze how elements and principles are applied in a broad range of specific works of art.
		9.4.12.C(6).3	Explain what and how specific works of art communicate meaning and how they are used as a means to express ideas.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.C(6).4	Research careers and the qualifications they require to build an understanding of opportunities in the pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**D. Business, Management & Administration Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.D.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.D.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.D.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.D.4	Solve mathematical problems and use the information to make business decisions and enhance business management duties.
		9.4.12.D.5	Examine and apply business and economic principles and concepts in making informed business decisions that support continued business operations.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.D.6	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.D.7	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.D.8	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.D.9	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.D.10	Use correct grammar, punctuation, and terminology to write and edit documents.

		9.4.12.D.11	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.D.12	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.D.13	Apply active listening skills to obtain and clarify information.
		9.4.12.D.14	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.D.15	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.D.16	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.D.17	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.D.18	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.D.19	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.D.20	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.D.21	Employ technological tools to expedite workflow.
		9.4.12.D.22	Operate electronic mail applications to communicate.
		9.4.12.D.23	Operate Internet applications to perform tasks.
		9.4.12.D.24	Operate writing and publishing applications to prepare business communications.
		9.4.12.D.25	Operate presentation applications to prepare and deliver presentations.
		9.4.12.D.26	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.D.27	Employ database applications to manage data.
		9.4.12.D.28	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.D.29	Employ computer operations applications to manage work tasks.
		9.4.12.D.30	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.D.31	Employ technological tools to expedite workflow.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D.32	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.D.33	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.D.34	Identify new ideas, opportunities, and methods to create or start a new project or venture.
	9.4.12.D.35	Analyze the contribution of accounting systems to the fiscal stability of businesses.
	9.4.12.D.36	Employ tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.
	9.4.12.D.37	Identify methods that businesses use to recruit, train, and develop human resources.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.D.38	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
	9.4.12.D.39	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.D.40	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.D.41	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.D.42	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
	9.4.12.D.43	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.D.44	Employ leadership skills to accomplish goals and objectives.
	9.4.12.D.45	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
	9.4.12.D.46	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
	9.4.12.D.47	Establish and maintain effective relationships in order to accomplish objectives and tasks.
	9.4.12.D.48	Conduct and participate in meetings to accomplish tasks.
	9.4.12.D.49	Employ mentoring skills to assist others.

Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D.50	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
	9.4.12.D.51	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
	9.4.12.D.52	Describe management's responsibility to know and abide by laws and regulations that affect business operations.
Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.D.53	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
	9.4.12.D.54	Develop a Personalized Student Learning Plan to meet career goals and objectives.
	9.4.12.D.55	Demonstrate skills related to seeking and applying for employment in a desired job.
	9.4.12.D.56	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
	9.4.12.D.57	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
	9.4.12.D.58	Identify and exhibit traits for retaining employment.
	9.4.12.D.59	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
	9.4.12.D.60	Examine requirements for career advancement to plan for continuing education and training.
	9.4.12.D.61	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
	9.4.12.D.62	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
	9.4.12.D.63	Examine employment opportunities in entrepreneurship as an option for career planning.
	9.4.12.D.64	Explore, obtain, and develop strategies for ensuring a successful business career.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.D.65	Employ information management techniques and strategies to assist in decision-making.

		9.4.12.D.66	Employ planning and time management skills and tools to enhance results and complete tasks.
		9.4.12.D.67	Access, process, maintain, and evaluate information that assists in business decision-making.
		9.4.12.D.68	Plan the use of financial resources to protect solvency.
		9.4.12.D.69	Identify tools and strategies to influence, plan, control, and organize an organization or department.
		9.4.12.D.70	Identify and understand processes and systems used to monitor, plan, and control day-to-day business activities.
		9.4.12.D.71	Demonstrate knowledge of the principles that facilitate high quality customer relationships.
		9.4.12.D.72	Employ systems, strategies, and techniques used to collect, organize, analyze, and share information within an organization.
		9.4.12.D.73	Plan, implement, monitor, and evaluate projects.
		9.4.12.D.74	Assess strategies used in maintaining quality standards in order to ensure high quality.
		9.4.12.D.75	Examine and select risk management strategies and techniques in order to minimize potential business loss.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**D. Business, Management & Administration Career Cluster**		
Pathway	*(1) Administrative Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.D(1).1	Obtain and convey ideas and information in order to conduct business transactions.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D(1).2	Demonstrate knowledge of the principles of human resource development to enhance productivity and job satisfaction.
		9.4.12.D(1).3	Access, process, maintain, and evaluate information for projects based upon business decision-making.
		9.4.12.D(1).4	Demonstrate knowledge of the principles of conducting successful day-to-day business activities to sustain business functions and to prepare for unexpected events.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**D. Business, Management & Administration Career Cluster**
Pathway	*(2) Business Information Technology*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Ethics and Legal Responsibilities**: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D(2).1	Demonstrate knowledge of laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D(2).2	Demonstrate knowledge of the principles of effective use of financial resources.
		9.4.12.D(2).3	Access, process, maintain, and evaluate information for projects based upon business decision-making processes.
		9.4.12.D(2).4	Demonstrate knowledge of the principles of conducting successful day-to-day business activities in order to sustain business functions.
		9.4.12.D(2).5	Plan an organization or department with the goal of maximizing its contribution to business success.

Content Area	21st-Century Life & Careers		
Standard	9.4 Career and Technical Education: All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	D. Business, Management & Administration Career Cluster		
Pathway	(3) General Management		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.D(3).1	Demonstrate knowledge of economic concepts fundamental to global business operations.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.D(3).2	Obtain and convey ideas and information that impact projects based upon business decisions and organizational activities.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D(3).3	Demonstrate knowledge of day-to-day business functions that ensure continued business operations.
		9.4.12.D(3).4	Plan an organization or department with the goal of optimizing overall business success.
		9.4.12.D(3).5	Develop strategic plans to manage business growth, profit, and goals.
		9.4.12.D(3).6	Demonstrate knowledge of financial resources that protect the fiscal well-being of businesses.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.D(3).7	Demonstrate knowledge of techniques, strategies, and systems used by management to foster self-understanding and enhance business relationships.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D(3).8	Describe management's responsibility to know and abide by laws and regulations that affect business operations and transactions.

Content Area	**21st-Century Life & Careers**		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**D. Business, Management & Administration Career Cluster**		
Pathway	*(4) Business Financial Management & Accounting*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Information Technology Applications**: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.D(4).1	Operate appropriate financial software to generate useable data.
		9.4.12.D(4).2	Operate electronic spreadsheet software to create formulas and reports.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D(4).3	Observe policies and regulations when performing calculations for a given situation.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.D(4).4	Re-check computations in written documents for accuracy and quality.
		9.4.12.D(4).5	Calculate and enter data for a given situation on appropriate forms or reports.
		9.4.12.D(4).6	Record and schedule appointments and calendars to manage functions.
		9.4.12.D(4).7	Organize priorities to assure deadlines will be met.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)

		9.4.12.D(4).8	Organize documents, forms, and manuals to maintain orderly flow of work.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**D. Business, Management & Administration Career Cluster**		
Pathway	*(5) Human Resources*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.D(5).1	Obtain and convey ideas and information that aid projects based upon business decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.D(5).2	Access, process, maintain, evaluate, and disseminate information based upon business functioning to support projects.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D(5).3	Demonstrate knowledge of ways to use financial resources to ensure the financial well-being of businesses.
	9.4.12.D(5).4	Demonstrate knowledge of human resource management principles to enhance productivity and job satisfaction.
	9.4.12.D(5).5	Plan a human resource department with the goal of maximizing the department's contribution to business success.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.D(5).6	Evaluate and plan day-to-day business activities to foster a healthy and safe work environment.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.D(5).7	Demonstrate knowledge of strategies for motivating and supervising others to achieve completion of projects and goals.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D(5).8	Explain laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.D(5).9	Employ and manage the tools, techniques, and systems involved in creating, communicating, and delivering value to the public.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**D. Business, Management & Administration Career Cluster**		
Pathway	*(6) Operations Management*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.D(6).1	Demonstrate knowledge of positive, ongoing customer relationship practices.
		9.4.12.D(6).2	Plan the use of financial resources.
		9.4.12.D(6).3	Plan and monitor day-to-day activities based upon maintaining and improving operational business functions.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.D(6).4	Demonstrate knowledge of laws and regulations affecting business operations and transactions to ensure compliance with industry requirements.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.D(6).5	Demonstrate knowledge of inventory tracking technology to facilitate operational controls.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**E. Education & Training Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.E.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.E.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.E.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.E.4	Demonstrate knowledge of the fundamental principles of psychology to enhance learner achievement.
		9.4.12.E.5	Demonstrate knowledge of the fundamental principles of sociology to enhance learner achievement.
		9.4.12.E.6	Demonstrate knowledge about the history and belief systems of multiple cultural, ethnic, and racial groups to enhance learner achievement.
		9.4.12.E.7	Analyze knowledge of the relationships between education and society to enhance learner achievement.
		9.4.12.E.8	Demonstrate knowledge of a variety of instructional models to enhance learner achievement.
		9.4.12.E.9	Demonstrate knowledge of a range of assessment methods to enhance learner achievement.
		9.4.12.E.10	Demonstrate knowledge of economic principles to enhance understanding of professional practices.

	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.E.11	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.E.12	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.E.13	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.E.14	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.E.15	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.E.16	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.E.17	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.E.18	Apply active listening skills to obtain and clarify information.
		9.4.12.E.19	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.E.20	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.E.21	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.E.22	Identify verbal communication skills that enhance learning and that strengthen stakeholder commitment to the learning organization.
		9.4.12.E.23	Identify communication skills for interactive situations that enhance learning and that strengthen stakeholder commitment to the learning organization.
		9.4.12.E.24	Identify writing skills that enhance learning and that strengthen stakeholder commitment to the learning organization.
		9.4.12.E.25	Identify reading strategies within content areas that enhance learner achievement.

	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.E.26	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.E.27	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.E.28	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.E.29	Conduct technical research to gather information necessary for decision-making.
		9.4.12.E.30	Model behavior that promotes learner achievement by applying problem-solving and critical thinking skills.
		9.4.12.E.31	Evaluate educational perspectives, policies, and procedures using critical thinking to intelligently develop solutions to educational issues.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.E.32	Employ technological tools to expedite workflow.
		9.4.12.E.33	Operate electronic mail applications to communicate.
		9.4.12.E.34	Operate Internet applications to perform tasks.
		9.4.12.E.35	Operate writing and publishing applications to prepare communications.
		9.4.12.E.36	Operate presentation applications to prepare and deliver presentations.
		9.4.12.E.37	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.E.38	Employ database applications to manage data.
		9.4.12.E.39	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.E.40	Employ computer operations applications to manage tasks.
		9.4.12.E.41	Use computer-based equipment (containing embedded computers or processors) to control devices.

	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.E.42	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.E.43	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.E.44	Explain system theory and its relationship to the learning system.
		9.4.12.E.45	Assess instructional systems that facilitate learning within educational and training settings.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.E.46	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.E.47	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.E.48	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.E.49	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.E.50	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.E.51	Evaluate risks to safety, health, and the environment in learning settings.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.E.52	Employ leadership skills to accomplish goals and objectives.
		9.4.12.E.53	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.E.54	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.E.55	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.E.56	Conduct and participate in meetings to accomplish tasks.
		9.4.12.E.57	Employ mentoring skills to assist others.

		9.4.12.E.58	Facilitate professional practice by employing project and strategic planning skills for projects.
		9.4.12.E.59	Facilitate professional practice by employing knowledge of group processes and skills for working collaboratively.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.E.60	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.E.61	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.E.62	Analyze and explain ethical and legal boundaries of professional practice in learning settings to enhance professionalism in education and training.
		9.4.12.E.63	Analyze and explain legal rights that apply to stakeholders and practitioners within learning settings to enhance professionalism in education and training.
		9.4.12.E.64	Demonstrate knowledge of ethical and legal behavior to enhance professionalism in education and training.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.E.65	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
		9.4.12.E.66	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.E.67	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.E.68	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.E.69	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.E.70	Identify and exhibit traits for retaining employment.
		9.4.12.E.71	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.E.72	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.E.73	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.

		9.4.12.E.74	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.E.75	Explore, describe, and determine career options using research skills in order to plan for a career in education and training.
		9.4.12.E.76	Research state-specific licensing, certification, and credentialing requirements to practice in educational and training settings.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.E.77	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.E.78	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.E.79	Assess and select instructional strategies that enhance learner achievement.
		9.4.12.E.80	Employ organizational and logic skills to facilitate professional practice.
		9.4.12.E.81	Conduct, interpret, and share research findings to enhance professional practice.
		9.4.12.E.82	Employ group management skills to enhance professional practice.
		9.4.12.E.83	Research formative and summative assessment skills needed to enhance professional practice.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**E. Education & Training Career Cluster**		
Pathway	*(1) Professional Support Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Problem-Solving and Critical Thinking:** Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.E(1).1	Research the success of various resources and support services available in learning organizations and apply this understanding to enhance the learning environment.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.E(1).2	Evaluate strategies, techniques, and tools used to determine the needs of diverse learners.
		9.4.12.E(1).3	Identify and describe ways that the needs of learners can be used to enhance learner achievement.
		9.4.12.E(1).4	Evaluate strategies, techniques, and tools to raise awareness of the needs of diverse learners.
		9.4.12.E(1).5	Promote learning progress by using planning methods based on learner needs.
		9.4.12.E(1).6	Identify resources and support services in learning organizations to meet learner needs.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**E. Education & Training Career Cluster**		
Pathway	*(2) Teaching & Training*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.E(2).1	Use fundamental knowledge of subject matter to plan/prepare effective instruction.
		9.4.12.E(2).2	Apply knowledge of learning and developmental theory to describe individual learners.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.E(2).3	Demonstrate how knowledge of learning theory can be used to establish a positive climate that promotes learning.
		9.4.12.E(2).4	Demonstrate how knowledge of learning theory and motivational, social, and psychological theories can be used to guide learners' personal conduct.
		9.4.12.E(2).5	Demonstrate how knowledge of learning theory and organizational and relationship-building skills can be used to manage instructional activities and related procedures.
		9.4.12.E(2).6	Demonstrate knowledge of learning theory when planning the physical elements of an educational or training setting to optimize learning.
		9.4.12.E(2).7	Identify research used to improve professional knowledge and skills used in learning environments.
		9.4.12.E(2).8	Develop learning organizational vision by employing community-building skills and strategies.
		9.4.12.E(2).9	Demonstrate knowledge of strategies needed to maintain relationships with stakeholders to increase stakeholder support for learning organizations.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.E(2).10	Use content knowledge and instructional skills to construct standards-based educational goals.
		9.4.12.E(2).11	Examine and select teaching/learning theories and instructional skills to plan appropriate educational strategies.
		9.4.12.E(2).12	Use knowledge of content, teaching/learning, and assessment to plan appropriate assessment/evaluation strategies.
		9.4.12.E(2).13	Identify and locate materials/resources needed to support instructional plans.
		9.4.12.E(2).14	Design courses/programs to meet the needs of learners and organizations.
		9.4.12.E(2).15	Assess and select appropriate instructional strategies to advance learning in a learning setting.
		9.4.12.E(2).16	Evaluate classroom-based learner responses to plan appropriate in-process adaptations to instructional plans and advance learner achievement.
		9.4.12.E(2).17	Evaluate formal assessment/evaluation tools and associated data to adjust learning plans and advance learner achievement.
		9.4.12.E(2).18	Evaluate examples of teaching and training performance to determine effectiveness of instructional practices.
		9.4.12.E(2).19	Demonstrate knowledge of recordkeeping methods used to monitor and guide learner progress.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**F. Finance Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.F.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.F.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.F.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.F.4	Solve mathematical problems to obtain information for decision-making in financial settings.
		9.4.12.F.5	Discuss economic principles and concepts that are fundamental to financial operations.
		9.4.12.F.6	Apply sociological knowledge of group behavior to understand financial decision-making by consumers.
		9.4.12.F.7	Apply psychological knowledge of individual behavior to understand financial motivations of consumers.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.F.8	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.F.9	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.F.10	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.F.11	Evaluate and use information resources to accomplish specific tasks.

		9.4.12.F.12	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.F.13	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.F.14	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.F.15	Apply active listening skills to obtain and clarify information.
		9.4.12.F.16	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.F.17	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.F.18	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.F.19	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.F.20	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.F.21	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.F.22	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.F.23	Employ technological tools to expedite workflow.
		9.4.12.F.24	Operate electronic mail applications to communicate.
		9.4.12.F.25	Operate Internet applications to perform tasks.
		9.4.12.F.26	Operate writing and publishing applications to prepare business communications.
		9.4.12.F.27	Operate presentation applications to prepare and deliver presentations.
		9.4.12.F.28	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.F.29	Employ database applications to manage data.
		9.4.12.F.30	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.F.31	Employ computer operations applications to manage tasks.

		9.4.12.F.32	Use computer-based equipment (containing embedded computers or processors) to control devices.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F.33	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.F.34	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.F.35	Discuss the concepts, processes, and skills used to identify new ideas, opportunities, and methods and to create or start a new finance project or venture.
		9.4.12.F.36	Analyze the contribution of accounting systems to the fiscal stability of businesses.
		9.4.12.F.37	Describe tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.
		9.4.12.F.38	Demonstrate industry-specific knowledge of human resources management to enhance productivity and job satisfaction.
		9.4.12.F.39	Describe tools, techniques, and systems used to create, communicate, and deliver value to customers, as well as to manage customer relationships in ways that benefit both the organization and stakeholders.
		9.4.12.F.40	Demonstrate knowledge of customer relations techniques and strategies used in this cluster to foster positive, ongoing relationships with customers.
		9.4.12.F.41	Plan day-to-day activities to enable continued functioning of businesses in this cluster.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.F.42	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.F.43	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.F.44	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.F.45	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.F.46	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

		9.4.12.F.47	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.F.48	Demonstrate knowledge of safety, health, and environmental controls used to enhance productivity of businesses in this cluster.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.F.49	Employ leadership skills to accomplish goals and objectives.
		9.4.12.F.50	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.F.51	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.F.52	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.F.53	Conduct and participate in meetings to accomplish tasks.
		9.4.12.F.54	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F.55	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.F.56	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.F.57	Demonstrate knowledge of laws, regulations, and ethical behaviors that affect operations and transactions of businesses in this cluster.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F.58	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
		9.4.12.F.59	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.F.60	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.F.61	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.F.62	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.F.63	Identify and exhibit traits for retaining employment.
		9.4.12.F.64	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.F.65	Examine requirements for career advancement to plan for continuing education and training.

		9.4.12.F.66	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.F.67	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.F.68	Examine employment opportunities in entrepreneurship as an option for career planning.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.F.69	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.F.70	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.F.71	Plan the use of financial resources to protect solvency.
		9.4.12.F.72	Plan a finance-based business organization or department.
		9.4.12.F.73	Plan day-to-day activities required for continued functioning of businesses in this cluster.
		9.4.12.F.74	Discuss techniques and strategies used to foster positive, ongoing relationships with customers in this cluster.
		9.4.12.F.75	Access and evaluate financial information to assist business decision-making.
		9.4.12.F.76	Evaluate a financial product or service mix in order to respond to market opportunities.
		9.4.12.F.77	Demonstrate knowledge of financial risk-management strategies and techniques used to minimize business losses.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**F. Finance Career Cluster**		
Pathway	*(1) Accounting*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F(1).1	Access and evaluate financial information to assist business decision-making.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F(1).2	Describe laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F(1).3	Apply career planning concepts, tools, and strategies to explore, plan, obtain, and develop a career in this pathway.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.F(1).4	Use accounting tools, strategies, and systems to plan the use and management of financial resources.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**F. Finance Career Cluster**		
Pathway	*(2) Banking*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.F(2).1	Demonstrate knowledge of personalized communication strategies used in this pathway to determine client needs and wants and to develop responses intended to influence purchasing decisions and enhance future business opportunities.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F(2).2	Demonstrate knowledge of customer relations strategies that promote ongoing positive relationships with banking customers and enhance organizational image.
		9.4.12.F(2).3	Plan the use of financial resources that enhance banking performance.
		9.4.12.F(2).4	Demonstrate knowledge of tools, strategies, and systems needed to operate banking equipment.
		9.4.12.F(2).5	Plan day-to-day activities within a banking organization to ensure secure operations.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F(2).6	Describe laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F(2).7	Apply career planning concepts, tools, and strategies to explore, plan, obtain, and develop a career in this pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**F. Finance Career Cluster**		
Pathway	*(3) Business Finance*		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F(3).1	Plan the use of financial resources to ensure business stability.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F(3).2	Describe laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F(3).3	Apply career planning concepts, tools, and strategies to explore, plan, obtain, and develop a career in this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.F(3).4	Demonstrate knowledge of risk-management strategies and techniques used in this industry to minimize business losses.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**F. Finance Career Cluster**		
Pathway	**(4) Insurance**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.F(4).1	Demonstrate knowledge of personalized communication strategies used in this industry to determine client needs and wants and to develop responses intended to influence purchasing decisions and enhance future business opportunities.

	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F(4).2	Access and evaluate information that assists in making decisions in this industry.
		9.4.12.F(4).3	Plan day-to-day activities to ensure continued functioning of businesses in this industry.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F(4).4	Describe laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F(4).5	Apply career planning concepts, tools, and strategies to explore plan, obtain, and develop a career in this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.F(4).6	Demonstrate knowledge of underwriting techniques and strategies to gather, access, and evaluate risks posed by potential clients in this industry.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**F. Finance Career Cluster**
Pathway	*(5) Securities & Investments*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.F(5).1	Demonstrate knowledge of personalized communication strategies used in this industry to determine client needs and wants and to develop responses intended to influence purchasing decisions and enhance future business opportunities.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.F(5).2	Plan the use of financial resources to prepare for performing key duties in this industry.
		9.4.12.F(5).3	Plan day-to-day operations activities to ensure continued functioning of businesses in this industry.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.F(5).4	Describe laws and regulations affecting business operations and transactions in order to ensure compliance with industry requirements.

	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.F(5). 5	Apply career planning concepts, tools, and strategies to explore plan, obtain, and develop a career in this pathway.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**G. Government & Public Administration Career Cluster**

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.G.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.G.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.G.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.G.4	Interpret and apply geography knowledge and skills to demonstrate understanding of concepts and skills essential for success in the cluster.
		9.4.12.G.5	Distinguish the functions of government and public administration in society to demonstrate an understanding of key issues.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.G.6	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.G.7	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.

		9.4.12.G.8	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.G.9	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.G.10	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.G.11	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.G.12	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.G.13	Apply active listening skills to obtain and clarify information.
		9.4.12.G.14	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.G.15	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.G.16	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.G.17	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.G.18	Evaluate appropriate communication formats to facilitate the flow of ideas and information among stakeholders in government, public administration, the business community, and the general public.
		9.4.12.G.19	Identify negotiation skills that achieve the goals of government.
		9.4.12.G.20	Communicate in one or more foreign languages to enhance performance in careers in the cluster.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.G.21	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.G.22	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.G.23	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.G.24	Conduct technical research to gather information necessary for decision-making.

		9.4.12.G.25	Demonstrate how democratic principles are applied in the process of governmental and administrative policy-making to achieve the public will.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.G.26	Employ technological tools to expedite workflow.
		9.4.12.G.27	Operate electronic mail applications to communicate.
		9.4.12.G.28	Operate Internet applications to perform tasks.
		9.4.12.G.29	Operate writing and publishing applications to prepare communications.
		9.4.12.G.30	Operate presentation applications to prepare and deliver presentations.
		9.4.12.G.31	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.G.32	Employ database applications to manage data.
		9.4.12.G.33	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.G.34	Employ computer operations applications to manage tasks.
		9.4.12.G.35	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.G.36	Use emerging and specialized technologies to execute tasks and processes that achieve objectives specific to this cluster.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.G.37	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.G.38	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.G.39	Analyze and summarize the systems used by this cluster to achieve strategic objectives.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.G.40	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.G.41	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.

		9.4.12.G.42	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.G.43	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.G.44	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.G.45	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.G.46	Describe safe and healthful working conditions and environments that promote well-being in workplaces in this cluster.
		9.4.12.G.47	Demonstrate knowledge of occupational safety and health, employee rights and responsibilities, and employers' obligations when executing work tasks related to this cluster in order to promote safe and healthful working conditions.
		9.4.12.G.48	Assess types and sources of hazards common to workplaces in this cluster to demonstrate understanding of health and safety concerns.
		9.4.12.G.49	Apply understanding of hazards common to workplaces in this cluster by selecting appropriate procedures to maintain safe environments.
		9.4.12.G.50	Design plans and policies to respond to public health, public safety, and environmental concerns.
		9.4.12.G.51	Identify public hazards and determine appropriate abatement strategies and safety procedures.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.G.52	Employ leadership skills to accomplish goals and objectives.
		9.4.12.G.53	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.G.54	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.G.55	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.G.56	Conduct and participate in meetings to accomplish tasks.
		9.4.12.G.57	Employ mentoring skills to assist others.
		9.4.12.G.58	Develop an organizational vision and strategic plan to inform stakeholders of the goals of a government or public administration agency.

		9.4.12.G.59	Design human resource strategies to maximize the organizational potential of government and public administration agencies.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.G.60	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.G.61	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.G.62	Assess and select a standard of practice that is sufficient to meet legal and ethical requirements as well as the public's expectations for government and public administration.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.G.63	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
		9.4.12.G.64	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.G.65	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.G.66	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.G.67	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.G.68	Identify and exhibit traits for retaining employment.
		9.4.12.G.69	Identify and explore career pathways within the career cluster to learn about possible career opportunities.
		9.4.12.G.70	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.G.71	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.G.72	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.G.73	Examine employment opportunities in entrepreneurship as an option for career planning.

		9.4.12.G.74	Interpret organizational policies, rules, and procedures that ensure government and public administration employees effectively perform their jobs.
		9.4.12.G.75	Compare and evaluate career pathways within this cluster to build understanding of the requirements across multiple pathways.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.G.76	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.G.77	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.G.78	Describe how human, financial, material, and information resources may be used in a manner that instills public trust.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**G. Government & Public Administration Career Cluster**
Pathway	*(1) Governance*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Problem-Solving and Critical Thinking:** Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.G(1).1	Use research and organizational skills to identify factual information applicable to matters of public policy.
		9.4.12.G(1).2	Develop and articulate reasoned, persuasive arguments to support public policy options or positions.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.G(1).3	Select appropriate political processes to build consensus and resolve differing opinions and positions.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.G(1).4	Design policy advocacy strategies to gain support for changes in policies, laws, regulations, ordinances, programs, or procedures.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**G. Government & Public Administration Career Cluster**		
Pathway	*(2) Foreign Service*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.G(2).1	Describe how foreign service professionals' knowledge of history, law, geography, natural resources, and economics; of sociology, politics, business, and culture; and of U.S. foreign policy would be used to create American foreign policy positions and objectives for diplomacy with other countries.
		9.4.12.G(2).2	Describe how foreign service professionals' knowledge of world history, law, geography, natural resources, and economics; of sociology, politics, business, and culture; and of U.S. foreign policy would be used to promote new or modified U.S. Foreign Service efforts.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.G(2).3	Describe how knowledge of U.S. and host-country laws, regulations, policies, and procedures can be used to manage administrative matters.
		9.4.12.G(2).4	Describe how knowledge of host-country laws, customs, and effective administrative practices can be applied to manage diplomatic operations.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**G. Government & Public Administration Career Cluster**
Pathway	*(3) Planning*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.G(3).1	Analyze strategies that facilitate coherent integration of multiple plans or coordination of government/agency functions.
		9.4.12.G(3).2	Develop comprehensive plans for land use, housing, parks and recreation, transportation, economic development, and public facilities to manage change and allocate resources.
		9.4.12.G(3).3	Formulate plans and policies that meet social, economic, and physical needs and achieve the goals of the government or public agency.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**G. Government & Public Administration Career Cluster**
Pathway	*(4) National Security*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.G(4).1	Participate in courses that instruct persons who perform tasks related to national and homeland security.
		9.4.12.G(4).2	Recognize appropriate duties, responsibilities, and authority of all levels of personnel in an organization to facilitate maximum utilization of human resources.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.G(4).3	Demonstrate leadership skills and strategies necessary to ensure compliance with rules of engagement and other applicable ethical standards.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**H. Health Science Career Cluster**

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.H.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.H.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.H.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.H.4	Demonstrate knowledge of human structure and function as well as diseases and disorders to pursue the full range of postsecondary education and career opportunities in this cluster.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.H.5	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.H.6	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.H.7	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.H.8	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.H.9	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.H.10	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.

		9.4.12.H.11	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.H.12	Apply active listening skills to obtain and clarify information.
		9.4.12.H.13	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.H.14	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.H.15	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.H.16	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.H.17	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.H.18	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.H.19	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.H.20	Employ technological tools to expedite workflow.
		9.4.12.H.21	Operate electronic mail applications to communicate.
		9.4.12.H.22	Operate Internet applications to perform tasks.
		9.4.12.H.23	Operate writing and publishing applications to prepare communications.
		9.4.12.H.24	Operate presentation applications to prepare and deliver presentations.
		9.4.12.H.25	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.H.26	Employ database applications to manage data.
		9.4.12.H.27	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.H.28	Employ computer operations applications to manage tasks.
		9.4.12.H.29	Use computer-based equipment (containing embedded computers or processors) to control devices.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.H.30	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.H.31	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.H.32	Identify key systems that affect the roles, services, and quality of care performed within a department, an organization, and the overall healthcare environment.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.H.33	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
	9.4.12.H.34	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.H.35	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.H.36	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.H.37	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.H.38	Employ leadership skills to accomplish goals and objectives.
	9.4.12.H.39	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
	9.4.12.H.40	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
	9.4.12.H.41	Establish and maintain effective relationships in order to accomplish objectives and tasks.
	9.4.12.H.42	Conduct and participate in meetings to accomplish tasks.
	9.4.12.H.43	Employ mentoring skills to assist others.
	9.4.12.H.44	Demonstrate an understanding of the roles and responsibilities of all members of the healthcare team, including their ability to promote the delivery of quality healthcare.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.H.45	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.H.46	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.H.47	Demonstrate an understanding of the legal responsibilities, limitations, and implications affecting different types of workers in the healthcare delivery setting in order to ensure compliance with legal requirements.
		9.4.12.H.48	Demonstrate an understanding of accepted ethical practices with respect to cultural, social, and ethnic differences, and explain how this understanding helps ensure delivery of quality healthcare.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.H.49	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.H.50	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.H.51	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.H.52	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.H.53	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.H.54	Identify and exhibit traits for retaining employment.
		9.4.12.H.55	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.H.56	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.H.57	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.H.58	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.H.59	Examine employment opportunities in entrepreneurship as an option for career planning.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H.60	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.H.61	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.H.62	Demonstrate knowledge of technical skills required for career pathways in this cluster, including occupational safety techniques, OSHA Standard Precautions, and safety procedures designed to protect clients, co-workers, and self.
		9.4.12.H.63	Demonstrate knowledge of technical skills required for career pathways in this cluster by obtaining related certificates, such as Cardiopulmonary Resuscitation (CPR) and First Aid.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**H. Health Science Career Cluster**		
Pathway	*(1) Therapeutic Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.H(1).1	Explain planned procedures and goals to patients/clients and use a range of response strategies to address patient/client questions and concerns.
		9.4.12.H(1).2	Communicate patient/client information among team members allowing for feedback as needed to facilitate a team approach to patient care.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.H(1).3	Demonstrate knowledge of facility protocol and regulatory guidelines for collecting patient/client information.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H(1).4	Demonstrate knowledge of the process for assessing, monitoring, and reporting patient/client health status to the treatment team within scope of practice.
		9.4.12.H(1).5	Demonstrate knowledge of the protocols for using patient/client health status information within scope of practice to document, evaluate, and adapt treatment plans.
		9.4.12.H(1).6	Demonstrate knowledge of how to evaluate patient/client needs, strengths, and problems within scope of practice to determine if treatment goals are being reached.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**H. Health Science Career Cluster**		
Pathway	*(2) Diagnostic Services*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.H(2).1	Communicate information within a healthcare classroom and demonstrate how to convey this information to appropriate departments and professionals in a timely manner to facilitate sharing of key diagnostic information used in treating patients.
		9.4.12.H(2).2	Demonstrate knowledge of how to explain procedures and goals to patients/clients accurately and effectively, using a range of response strategies to address patient/client questions and concerns.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.H(2).3	Interpret and respond to requests for procedures, plan implementation of services, and prepare for specific procedures in the course of conducting regular diagnostic services.
		9.4.12.H(2).4	Interpret and demonstrate knowledge of the purpose of different procedures, and perform procedures in the classroom.
		9.4.12.H(2).5	Demonstrate and apply knowledge of the principles of quality assurance, performance improvement, and timely reporting when conducting and reporting diagnostic evaluations, and use appropriate communication channels to maintain high standards of performance.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H(2).6	Demonstrate knowledge of how to assess and report patient/client health status information to monitor and document patient progress.

		9.4.12.H(2).7	Demonstrate understanding of the principles of body mechanics for positioning, transferring, and transporting patients/clients by performing them without injury to the patient/client or self.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**H. Health Science Career Cluster**		
Pathway	**(3) Health Informatics**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.H(3).1	Communicate health/medical information accurately and within legal/regulatory guidelines to uphold the strictest standards of confidentiality.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.H(3).2	Describe the resources, routes, and flow of information within the healthcare system and participate in the design and implementation of effective information systems or processes.
		9.4.12.H(3).3	Describe the scope of systems operations used to capture, retrieve, and maintain information from internal and external sources utilizing internal and external information and resources accurately and efficiently.

Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.H(3).4	Describe the content and diverse uses of healthcare information, and accurately document, communicate, and maintain appropriate information in compliance with legal and regulatory requirements.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H(3).5	Apply the quantitative and qualitative terminology and codes for a range of medical information and analyze the information for designated purposes in order to facilitate the flow of information among individuals in a healthcare environment.
	9.4.12.H(3).6	Read, interpret, and extract information from medical records and documents, applying knowledge of medical terminology and codes to facilitate the abstraction, coding, and other use of key information.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**H. Health Science Career Cluster**		
Pathway	*(4) Support Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.H(4).1	Review, differentiate, assess, and enhance responsibilities and task performance in order to safely follow established internal and external guidelines and provide effective, high quality support.
		9.4.12.H(4).2	Assess and identify appropriate ways to maximize the use of available resources for both purchasing and maintenance of equipment and materials.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.H(4).3	Adopt work practices to maintain a clean and healthy environment, and demonstrate best practices to reduce or eliminate pathogenic organisms.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H(4).4	Promote the establishment, maintenance, and improvement of healthcare facility standards and assist in the development and implementation of healthcare facility standards.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	H. Health Science Career Cluster
Pathway	*(5) Biotechnology Research & Development*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.H(5).1	Summarize the goals of biotechnology research and development and describe how biotechnological products that improve the quality of life are developed within legal and ethical protocols.
		9.4.12.H(5).2	Apply biochemistry, cell biology, genetics, mathematics, microbiology, molecular biology, organic chemistry, and statistics concepts to conduct effective biotechnology research and development.
		9.4.12.H(5).3	Demonstrate basic knowledge of recombinant DNA, genetic engineering, bioprocessing, monoclonal antibody production, nanotechnology, bioinformatics, genomics, proteomics, and transcriptomics that is used to conduct biotechnology research and development.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.H(5).4	Summarize and explain the ethical, moral, and legal issues related to biotech research, product development, and product use in society.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.H(5).5	Identify and explain processes used for biotechnology product design, development, and production and describe how they work together to demonstrate an understanding of the biotechnology product development process.

		9.4.12.H(5).6	Demonstrate the principles of solution preparation, sterile techniques, contamination control, and measurement and calibration of instruments following biosafety protocols to maintain a safe laboratory environment.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**I. Hospitality & Tourism Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.I.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.I.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.I.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.I.4	Demonstrate knowledge of marketing techniques used to sell products and services in this cluster.
		9.4.12.I.5	Apply knowledge of cultures and information from geographical studies to develop products and services for this industry.
		9.4.12.I.6	Identify effects of the economy on this industry to effectively plan products and services.
		9.4.12.I.7	Compare and contrast management styles that are appropriate to various types of establishments in this cluster to gain familiarity with the requirements for all venues.

	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.I.8	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.I.9	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.I.10	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.I.11	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.I.12	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.I.13	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.I.14	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.I.15	Apply active listening skills to obtain and clarify information.
		9.4.12.I.16	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.I.17	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.I.18	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.I.19	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.I.20	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.I.21	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.I.22	Conduct technical research to gather information necessary for decision-making.
		9.4.12.I.23	Demonstrate the principles of budgeting and forecasting to maximize profitability and growth of establishments in this cluster.
		9.4.12.I.24	Examine comments and suggestions from the customer service area to formulate improvements in services/products and to enhance training of staff.

	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.I.25	Employ technological tools to expedite workflow.
		9.4.12.I.26	Operate electronic mail applications to communicate.
		9.4.12.I.27	Operate Internet applications to perform tasks.
		9.4.12.I.28	Operate writing and publishing applications to prepare communications.
		9.4.12.I.29	Operate presentation applications to prepare and deliver presentations.
		9.4.12.I.30	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.I.31	Employ database applications to manage data.
		9.4.12.I.32	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.I.33	Employ computer operations applications to manage tasks.
		9.4.12.I.34	Use computer-based equipment (containing embedded computers or processors) to control devices.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.I.35	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.I.36	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.I.37	Evaluate organizational systems used in this cluster to determine which more effectively serve customers.
		9.4.12.I.38	Identify and compare services and products from related industries to understand how they affect hospitality and tourism products and services.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.I.39	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.I.40	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.I.41	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.I.42	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.I.43	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

		9.4.12.I.44	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.I.45	Maintain safe and healthful working conditions and environments in this cluster to promote well-being.
		9.4.12.I.46	Demonstrate knowledge of employee rights and responsibilities and employers' obligations concerning occupational safety and health in order to promote safe and healthful working conditions in this cluster.
		9.4.12.I.47	Assess types and sources of workplace hazards common to hospitality and tourism work settings in order to demonstrate a working understanding of key health and safety concerns in this cluster.
		9.4.12.I.48	Demonstrate knowledge of methods used in this cluster to control hazards and maintain safe environments.
		9.4.12.I.49	Review safety and sanitation procedures and apply them to ensure a safe and healthy work environment.
		9.4.12.I.50	Analyze the effects of nutrition, stress, and exercise on employee performance in this cluster.
		9.4.12.I.51	Analyze the potential effects of exposure to common chemicals and other hazardous materials used in this cluster in order to prevent health problems that may result from their use.
		9.4.12.I.52	Recognize potential, real, and perceived hazards and emergency situations common to this cluster and implement appropriate safety and security measures.
		9.4.12.I.53	Evaluate security measures to protect customers and limit business liability.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.I.54	Employ leadership skills to accomplish goals and objectives.
		9.4.12.I.55	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.I.56	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.I.57	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.I.58	Conduct and participate in meetings to accomplish tasks.
		9.4.12.I.59	Employ mentoring skills to assist others.
		9.4.12.I.60	Demonstrate knowledge of how conflict resolution strategies are used in this cluster to resolve conflicts and satisfy others.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.I.61	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.I.62	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.I.63	Describe the ethical and legal responsibilities of businesses in this cluster and explain their implications for guest/customer and employee conduct.
		9.4.12.I.64	Examine professional and workplace ethics and legal responsibilities to develop guidelines for responsible conduct in this cluster.
		9.4.12.I.65	Identify ethical issues and concerns in this cluster to aid in making career choices.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.I.66	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.I.67	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.I.68	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.I.69	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.I.70	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.I.71	Identify and exhibit traits for retaining employment.
		9.4.12.I.72	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.I.73	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.I.74	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.I.75	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.I.76	Examine employment opportunities in entrepreneurship as an option for career planning.

		9.4.12.I.77	Explain written organizational policies, rules, and procedures that are common to this cluster and that are used to help employees perform their jobs effectively.
		9.4.12.I.78	Compare and evaluate career pathways within this cluster to build understanding of the requirements across multiple pathways.
		9.4.12.I.79	Compare opportunities in independently owned and chain-affiliated businesses in this cluster to understand the advantages and disadvantages of working in each.
		9.4.12.I.80	Demonstrate understanding of advancement procedures and the promotional work ladder in this cluster to plan career objectives.
		9.4.12.I.81	Demonstrate understanding of roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment and identify how they affect the quality of the product or service this cluster offers.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.I.82	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.I.83	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.I.84	Demonstrate recognized customer service skills and technology needed to be successful in this cluster.
		9.4.12.I.85	Demonstrate understanding of different types of payment options that customers use to pay for services in this cluster.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**I. Hospitality & Tourism Career Cluster**
Pathway	*(1) Restaurants & Food & Beverage Services*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.I(1).1	Use basic reading, writing, and mathematical skills to provide food production and services to ensure a positive guest/customer experience.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.I(1).2	Use knowledge of cultures and information from geographical studies to guide guest/customer service decisions.
		9.4.12.I(1).3	Demonstrate listening, writing, and speaking skills to enhance guest/customer satisfaction.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.I(1).4	Improve staff performance by planning staffing decisions using accepted managerial skills.
		9.4.12.I(1).5	Research costs, pricing, and market demands, as well as effective marketing strategies used in the pathway, to manage business profitability.
		9.4.12.I(1).6	Manage problems in ways that ensure continuity of quality service in industry businesses.
		9.4.12.I(1).7	Evaluate companies' standard operating procedures related to food and beverage production and guest services to understand how they help ensure the provision of quality products and services.

	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.I(1).8	Demonstrate knowledge of safety and sanitation procedures used in this industry and apply these procedures to maintain safe environments.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.I(1).9	Demonstrate knowledge of ethical and legal responsibilities for guest/customer and employee conduct and explain their role in maintaining high quality standards in the industry.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.I(1).10	Research and compare career opportunities and qualifications to broaden awareness of careers available in this industry.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.I(1).11	Use computerized systems to manage food service operations and guest/customer services.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**I. Hospitality & Tourism Career Cluster**
Pathway	*(2) Lodging*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Information Technology Applications**: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.I(2).1	Use telecommunications equipment to accomplish tasks.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.I(2).2	Develop a staffing guide to schedule various lodging departments or specific staff positions.
		9.4.12.I(2).3	Explain how businesses in this industry manage inventories to maintain adequate quantities of both recycled and non-recycled items.
		9.4.12.I(2).4	Analyze functions performed by different divisions and departments within a lodging operation and explain the interactions among areas.

	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.I(2).5	Explain how security and other control procedures are used to protect guests/customers and minimize risks in this industry.
		9.4.12.I(2).6	Explain how cash control procedures are used to protect funds in this industry.
		9.4.12.I(2).7	Explain how guests/customers and property are protected in this industry to minimize business losses and liability.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.I(2).8	Research the duties of and qualifications for managerial positions in back-of-the-house lodging operations to guide career choices.
		9.4.12.I(2).9	Research the duties and qualifications for managerial positions in front-of-the-house lodging operations to guide career choices.
		9.4.12.I(2).10	Compare and contrast entry-level, skilled level, and managerial positions in the lodging industry and distinguish qualifications and characteristics needed for each type of position.
		9.4.12.I(2).11	Compare opportunities in independently owned and chain-affiliated businesses in this industry to understand the advantages and disadvantages of each.
		9.4.12.I(2).12	Describe the importance of housekeeping standards to assure guest/customer satisfaction.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.I(2).13	Explain procedures used in this industry to meet guest/customer needs, including procedures for registration, rate assignment, room assignment, and determination of payment methods.
		9.4.12.I(2).14	Understand the importance of check-out procedures to ensure guest/customer satisfaction and verify settlement of account.
		9.4.12.I(2).15	Employ effective reservation procedures to meet guest/customer needs and to maximize occupancy.
		9.4.12.I(2).16	Determine the size of an annual linen purchase needed to maintain desired quantities based on varying occupancy levels.
		9.4.12.I(2).17	Explain the relationship between a status report and maintaining a property's quality and quantity standards for housekeeping.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**I. Hospitality & Tourism Career Cluster**
Pathway	*(3) Travel & Tourism*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.I(3).1	Identify time zones and explain how they impact travel arrangements.
		9.4.12.I(3).2	Explain how information about seasons and domestic and international maps are used to create or enhance travel.
		9.4.12.I(3).3	Employ unit and time conversion skills to develop schedules and to compute cost, distance, and time (including travel time).
		9.4.12.I(3).4	Explain global positioning systems (GPS) and how they are used for travel.
		9.4.12.I(3).5	Develop an awareness of diverse cultures to enhance travel planning.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.I(3).6	Select the most effective communication techniques and media venues to convey marketing information to a target audience.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.I(3).7	Observe and summarize potential, real, and perceived hazards of surroundings to recognize and implement appropriate safety and security measures (e.g., lighting, walking surface remediation, etc.).
		9.4.12.I(3).8	Create a proactive solution to address common safety hazards, including hazards involving lighting, sound, and surface areas.
		9.4.12.I(3).9	Establish procedures to educate customers about identified safety and security issues.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.I(3).10	Demonstrate familiarity with industry-specific terminology, including acronyms, abbreviations, and definitions, and use this terminology to communicate within the industry.
		9.4.12.I(3).11	Identify diverse transportation, lodging, cruise, and food service options that can be used to produce a customized product.
		9.4.12.I(3).12	Identify and compare services and products from related industries to understand how they affect travel and tourism products and services.
		9.4.12.I(3).13	Identify the community characteristics necessary to develop and maintain cooperative tourism efforts.
		9.4.12.I(3).14	Match customer needs, wants, and expectations to appropriate travel products.
		9.4.12.I(3).15	Design promotional packages to effectively market travel and tourism products.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**I. Hospitality & Tourism Career Cluster**		
Pathway	*(4) Recreation, Amusements, & Attractions*		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.I(4).1	Analyze each venue in this pathway to determine its merchandising, program, and product potential as well as the maintenance technology on which it depends.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.I(4).2	Identify safety and security issues unique to each venue in this pathway to implement appropriate safety and security measures.
		9.4.12.I(4).3	Create a resource base to help manage emergency situations in this industry.
		9.4.12.I(4).4	Examine identified safety and security issues in this industry that require customer education in order to maintain a safe and accident-free venue.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.I(4).5	Identify career opportunities in this pathway to broaden awareness of careers available in the cluster.

		9.4.12.I(4).6	Examine identified admission procedures to manage and control individuals and groups.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.I(4).7	Compare different ticket sales options to establish best practices and to maximize sales.
		9.4.12.I(4).8	Evaluate the types of information and directions a guest/customer needs at facility entry points to become familiar with their surroundings.
		9.4.12.I(4).9	Identify effective marketing strategies used in this pathway.
		9.4.12.I(4).10	Examine the different venues in this pathway to gain knowledge of merchandising, program, and product potential.
		9.4.12.I(4).11	Explore the types of products available in this pathway to gain awareness of the operational requirements of each.
		9.4.12.I(4).12	Examine and implement admission and traffic control procedures to manage and control people, groups, and vehicles.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**J. Human Services Career Cluster**		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.J.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.J.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.J.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.J.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.J.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.J.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.J.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.J.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.J.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.J.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.J.11	Apply active listening skills to obtain and clarify information.
		9.4.12.J.12	Develop and interpret tables, charts, and figures to support written and oral communications.

		9.4.12.J.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.J.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.J.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.J.16	Employ critical thinking and interpersonal skills to resolve conflicts
		9.4.12.J.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.J.18	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.J.19	Employ technological tools to expedite workflow.
		9.4.12.J.20	Operate electronic mail applications to communicate.
		9.4.12.J.21	Operate Internet applications to perform tasks.
		9.4.12.J.22	Operate writing and publishing applications to prepare communications.
		9.4.12.J.23	Operate presentation applications to prepare and deliver presentations.
		9.4.12.J.24	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.J.25	Employ database applications to manage data.
		9.4.12.J.26	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.J.27	Employ computer operations applications to manage work tasks.
		9.4.12.J.28	Use computer-based equipment (containing embedded computers or processors) to control devices.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.J.29	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.J.30	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.J.31	Apply principles of planning, design, development, and evaluation when creating professional programs to accomplish long-range goals.
		9.4.12.J.32	Analyze and select human resources to accomplish team objectives in this cluster.

	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.J.33	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.J.34	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.J.35	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.J.36	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.J.37	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.J.38	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.J.39	Describe and assess rules and laws affecting this cluster to promote occupational safety and health.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.J.40	Employ leadership skills to accomplish goals and objectives.
		9.4.12.J.41	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.J.42	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.J.43	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.J.44	Conduct and participate in meetings to accomplish tasks.
		9.4.12.J.45	Employ mentoring skills to assist others.
		9.4.12.J.46	Describe quality service, explain what it means to provide quality human services to clients, and model those behaviors.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.J.47	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.J.48	Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.
		9.4.12.J.49	Model ethical and legal conduct in this cluster.
		9.4.12.J.50	Describe actions that comply with legal requirements for personal liability to guide personal conduct in this cluster.

	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.J.51	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.J.52	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.J.53	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.J.54	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.J.55	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.J.56	Identify and exhibit traits for retaining employment.
		9.4.12.J.57	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.J.58	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.J.59	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.J.60	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.J.61	Examine employment opportunities in entrepreneurship an option for career planning.
		9.4.12.J.62	Explain written organizational policies, rules, and procedures that are common to this cluster and that are used to help employees perform their jobs effectively.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.J.63	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.J.64	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.J.65	Describe and apply technical knowledge and skills required to be successful in careers in this cluster.
		9.4.12.J.66	Analyze resources for cost effectiveness to assist with planning the delivery of human services.
		9.4.12.J.67	Describe human development principles to enhance the well-being of individuals served by this cluster.

Content Area	21st-Century Life & Careers		
Standard	9.4 Career and Technical Education: All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	J. Human Services Career Cluster		
Pathway	(1) Early Childhood Development & Services		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.J(1).1	Describe and use grammatically correct English to enhance learning, direct behavior, and strengthen classroom management.
		9.4.12.J(1).2	Demonstrate knowledge of principles of child growth and development, including social, emotional, physical, and cognitive milestones, to provide appropriate and comprehensive program offerings.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.J(1).3	Demonstrate listening and communication skills, including listening respectfully and attentively to the child to facilitate ongoing development.
		9.4.12.J(1).4	Demonstrate listening and communication skills, including listening respectfully and attentively to parents/guardians to facilitate the child's ongoing development.
		9.4.12.J(1).5	Demonstrate listening and communication skills, including listening respectfully and attentively to staff members to facilitate child development activities.
		9.4.12.J(1).6	Write plainly, synthesizing and summarizing information to assure it is easily understood by parents/guardians and staff members.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.J(1).7	Analyze situations and apply problem-solving and critical thinking skills to provide solutions.

	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.J(1).8	Select and use appropriate technology to enhance and organize childcare and education programs.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.J(1).9	Research knowledge of safety and sanitation procedures associated with environments in this pathway to assure compliance and readiness for potential hazards.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.J(1).10	Describe an inviting and encouraging atmosphere to encourage parent/guardian and family participation.
		9.4.12.J(1).11	Create and plan parent-teacher conferences, open houses, and other family forums to enhance family and community involvement.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.J(1).12	Describe ethical and legal responsibilities, laws, and regulations to protect children and families.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.J(1).13	Research necessary education and state-specific requirements to practice in this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.J(1).14	Incorporate play and other activities in program plans to develop children's skills.
		9.4.12.J(1).15	Evaluate curriculum for multicultural awareness activities to ensure a culturally rich and inviting learning environment.
		9.4.12.J(1).16	Evaluate curriculum for inclusiveness of special needs children.

Content Area	21st-Century Life & Careers		
Standard	9.4 Career and Technical Education: All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	J. Human Services Career Cluster		
Pathway	(2) Family & Community Services		
By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	Academic Foundations: Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.J(2).1	Increase awareness of applicable services in this pathway by identifying and articulating how individuals receive information in various individual, social, historical, economic, and cultural contexts.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.J(2).2	Evaluate and identify a range of effective communication strategies and skills necessary to establish a collaborative relationship with others in this pathway.
		9.4.12.J(2).3	Demonstrate knowledge of how to communicate with family systems to benefit clients.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.J(2).4	Recognize concerns and plan how to assist individuals to make informed decisions.
		9.4.12.J(2).5	Analyze and identify various treatment plans that adjust to meet client needs.
		9.4.12.J(2).6	Examine crisis prevention, intervention, and resolution strategies to formulate emergency plans.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.J(2).7	Explain the rules of confidentiality to inspire client confidence in this pathway.
		9.4.12.J(2).8	Examine laws governing abuse, neglect, confidentiality, and other health and safety situations to establish legal aspects of operation.

	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.J(2).9	Research degrees, certifications, diplomas, or credentials required for employment and careers in this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.J(2).10	Describe formal and informal assessment practices to create interventions to assist clients in this pathway.
		9.4.12.J(2).11	Locate available community support and service networks to align needs of clients with community resources.
		9.4.12.J(2).12	Locate community resources to demonstrate awareness of assistance available to help clients in this pathway.
		9.4.12.J(2).13	Research state and local social service providers to expand the base of resources available to assist clients in this pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**J. Human Services Career Cluster**		
Pathway	*(3) Personal Care Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.J(3).1	Describe and apply economic and accounting principles and practices to promote business success and growth in this pathway.
		9.4.12.J(3).2	Describe and apply principles of biology by identifying living tissues, cells, and organisms to select and provide safe and effective personal care products and services.
		9.4.12.J(3).3	Describe and apply principles of chemistry by explaining chemical processes and the composition, structure, and properties of substances to provide a broad range of personal care services.
		9.4.12.J(3).4	Describe and apply basic principles of human anatomy to classify potential problems and to provide needed personal care services.

	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.J(3).5	Demonstrate knowledge of advertising principles when selecting media to attract and retain clients in this pathway.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.J(3).6	Demonstrate how to assist individuals by recognizing concerns and making informed decisions to provide appropriate personal care services.
		9.4.12.J(3).7	Develop individualized plans that reflect client/family preferences, needs, and interests to create a course of treatment/action.
		9.4.12.J(3).8	Demonstrate knowledge of time management principles and techniques to achieve objectives and effectively serve clients, their families, and the community.
		9.4.12.J(3).9	Interpret and evaluate client satisfaction and propose solutions, procedures, and products to enhance future services and client interactions.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.J(3).10	Employ technology to analyze data and information to make appropriate recommendations and conclusions for personal care services.
		9.4.12.J(3).11	Demonstrate how to maintain electronic records of client services using procedures to securely store and retrieve personal care and client information.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.J(3).12	Identify vendor resources to provide maximum benefit for clients, service providers, businesses, or organizations in this pathway.
		9.4.12.J(3).13	Identify and assess systems in this pathway that providers can use obtain the range of personal care resources needed for business practice, and that allow providers to access those resources at appropriate times.
		9.4.12.J(3).14	Describe organizational policies, procedures, and regulations used to establish organizational priorities, accomplish the mission, and provide high quality service to a diverse set of clients and families in this pathway.

Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.J(3). 15	Select and summarize emergency policies and procedures to achieve a safe and healthy environment at all times.
	9.4.12.J(3). 16	Maintain a clean record of safety when providing services in this pathway by recognizing and assessing risks and potentially hazardous situations.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.J(3). 17	Employ leadership skills to maintain positive relationships that enhance personal care business opportunities.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.J(3). 18	Research current information and resources on personal care services to attract new clients and satisfy and retain present clients.
	9.4.12.J(3). 19	Demonstrate how to synthesize client and professional information to attract new clients and retain present clients.
	9.4.12.J(3). 20	Demonstrate knowledge of administrative/clerical procedures and systems to provide client satisfaction.
	9.4.12.J(3). 21	Select various methods of obtaining feedback from clients and their families to understand their expectations and promote high quality standards.
	9.4.12.J(3). 22	Research techniques, principles, tools, and instruments for developing efficient and safe delivery of client services to enhance client satisfaction.
	9.4.12.J(3). 23	Demonstrate principles of mechanics when choosing, evaluating, and maintaining service equipment to provide continued client services.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**J. Human Services Career Cluster**		
Pathway	*(4) Consumer Services*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.J(4).1	Assess strategies used to motivate clients/consumers to follow through with recommendations to better serve the client/consumer interests.
		9.4.12.J(4).2	Explain consumer services, using appropriate language, in order to complete transactions.
		9.4.12.J(4).3	Create accurate public service information to educate various audiences about consumer services.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.J(4).4	Employ critical thinking skills when solving financial/economic problems to deliver appropriate recommendations to clients.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.J(4).5	Use standard business tools or procedures to create consumer service information and facilitate client interactions.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.J(4).6	Demonstrate how to establish physically and psychologically healthy environments to inspire client confidence in the consumer services provided.

	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.J(4).7	Describe ethical and legal responsibilities associated with providing consumer services to serve the best interests of clients/consumers.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.J(4).8	Research necessary credentials and licensures and meet state-specific requirements to prepare for a career in this pathway.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.J(4).9	Select appropriate business procedures and equipment to produce satisfying client outcomes and business success.
		9.4.12.J(4).10	Research industry-specific products and equipment and demonstrate understanding of product/equipment features and uses to inform client and consumers.
		9.4.12.J(4).11	Locate and synthesize current research on products and services to enhance presentations to clients/consumers.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**K. Information Technology Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.K.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.K.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.K.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.

	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.K.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.K.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.K.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.K.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.K.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.K.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.K.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.K.11	Apply active listening skills to obtain and clarify information.
		9.4.12.K.12	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.K.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.K.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.K.15	Demonstrate how to develop positive customer relations to build and maintain a customer base in this cluster.
		9.4.12.K.16	Demonstrate how to perform scheduling functions to meet customer needs in this cluster.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.K.17	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.K.18	Employ critical thinking and interpersonal skills to resolve conflicts
		9.4.12.K.19	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.

		9.4.12.K.20	Conduct technical research to gather information necessary for decision-making.
		9.4.12.K.21	Use information technology design processes and guidelines to produce a quality information technology product or service.
		9.4.12.K.22	Implement problem-solving processes to evaluate and verify the nature of problems in this cluster.
		9.4.12.K.23	Employ organizational and design principles to sort and group information used in this cluster.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.K.24	Employ technological tools to expedite workflow.
		9.4.12.K.25	Operate electronic mail applications to communicate.
		9.4.12.K.26	Operate Internet applications to perform tasks.
		9.4.12.K.27	Operate writing and publishing applications to prepare communications.
		9.4.12.K.28	Operate presentation applications to prepare and deliver presentations.
		9.4.12.K.29	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.K.30	Employ database applications to manage data.
		9.4.12.K.31	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.K.32	Employ computer operations applications to manage tasks.
		9.4.12.K.33	Use computer-based equipment (containing embedded computers or processors) to control devices.

		9.4.12.K.34	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.K.35	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.K.36	Analyze and summarize the use of information technology to enhance business effectiveness.
		9.4.12.K.37	Implement cross-functional teams to achieve project goals specific to this cluster.
		9.4.12.K.38	Employ project management knowledge to oversee information technology projects.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.K.39	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.K.40	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.K.41	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.K.42	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.K.43	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.K.44	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.K.45	Employ leadership skills to accomplish goals and objectives.
		9.4.12.K.46	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.K.47	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.K.48	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.K.49	Conduct and participate in meetings to accomplish tasks.

		9.4.12.K.50	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.K.51	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.K.52	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.K.53	Apply standard practices and behaviors that meet legal and ethical requirements and exhibit positive cyber-citizenry to demonstrate understanding of legal issues faced by professionals in this cluster.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.K.54	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.K.55	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.K.56	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.K.57	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.K.58	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.K.59	Identify and exhibit traits for retaining employment.
		9.4.12.K.60	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.K.61	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.K.62	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.K.63	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.K.64	Examine employment opportunities in entrepreneurship as an option for career planning.
		9.4.12.K.65	Identify and explain the implications that information technology has for business transformation and development to demonstrate an understanding of the impact the industry has on business.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.K.66	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.K.67	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.K.68	Demonstrate knowledge of the hardware components associated with information systems.
		9.4.12.K.69	Compare classes of software associated with the development and maintenance of information systems to develop software and maintain computer systems.
		9.4.12.K.70	Identify and compare new information systems trends and technologies to build an understanding of their potential influence on industry practices.
		9.4.12.K.71	Summarize basic data communications components and trends to maintain and update information technology systems.
		9.4.12.K.72	Demonstrate technical knowledge of the Internet to develop and maintain information technology systems.
		9.4.12.K.73	Access and use Internet services to service and update information technology systems and to complete other information technology tasks.
		9.4.12.K.74	Install and configure software programs to maintain and update information technology systems.
		9.4.12.K.75	Demonstrate knowledge of Web page basics to convey an understanding of Web page design and functioning.
		9.4.12.K.76	Employ information technology knowledge and procedures when configuring or modifying an operating system to ensure optimal system functioning.
		9.4.12.K.77	Perform standard computer backup procedures to protect information.
		9.4.12.K.78	Recognize and analyze potential information technology security threats to develop and maintain security measures.
		9.4.12.K.79	Maintain computer systems to ensure optimal functioning of information technology systems.
		9.4.12.K.80	Provide support and training to maintain proper network functioning.
		9.4.12.K.81	Identify and describe quality assurance concepts to develop an understanding of the requirements for quality information technology products/services.

		9.4.12.K.82	Describe the use of computer forensics to prevent and solve information technology crimes and security breaches.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**K. Information Technology Career Cluster**		
Pathway	*(1) Network Systems*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Technical Skills:** Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.K(1).1	Identify and analyze an individual's or a business organization's network system needs and requirements to design a network.
		9.4.12.K(1).2	Analyze a network system to determine if it meets specifications.
		9.4.12.K(1).3	Design a network system using industry-specific technologies, tools, and standards to demonstrate a basic understanding of network architecture.
		9.4.12.K(1).4	Perform network system installation and configuration to launch a network system.
		9.4.12.K(1).5	Perform network administration and monitoring to maintain a network system.
		9.4.12.K(1).6	Perform network maintenance and user support services to maintain a network system.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**K. Information Technology Career Cluster**		
Pathway	*(2) Information Support & Services*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Technical Skills:** Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.K(2).1	Perform user support to maintain service.
		9.4.12.K(2).2	Manage software systems to maintain and update service.
		9.4.12.K(2).3	Use hardware design, operation, and maintenance knowledge and skills to provide user support.
		9.4.12.K(2).4	Demonstrate and apply knowledge of operating system design, operation, and maintenance to provide informational support and perform service tasks.
		9.4.12.K(2).5	Demonstrate the use of networking concepts to develop a network.
		9.4.12.K(2).6	Employ knowledge of information system analysis and design to evaluate information systems.
		9.4.12.K(2).7	Employ system installation and maintenance skills when setting up and maintaining an information system to demonstrate application of fundamental system knowledge.
		9.4.12.K(2).8	Employ system administration and control skills to monitor an information system.
		9.4.12.K(2).9	Employ technical writing and documentation skills to keep records necessary for an information system.
		9.4.12.K(2).10	Identify and implement quality assurance processes to maximize information system operation.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**K. Information Technology Career Cluster**		
Pathway	*(3) Web & Digital Communication*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.K(3).1	Prepare specifications for digital communication products to communicate specifications to various audiences.
		9.4.12.K(3).2	Create and implement a digital communication product to meet customer needs.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.K(3).3	Gather and analyze customer requirements for digital communications to best meet consumer needs.
		9.4.12.K(3).4	Define the scope of work in a written form to summarize and meet customer requirements for digital communication.
		9.4.12.K(3).5	Identify and implement quality assurance processes to deliver quality digital communication products and services.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.K(3).6	Consider intellectual property issues when creating Web pages and comply with intellectual property rights statutes and regulations.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.K(3).7	Iterate through the design and development process to create a uniform Web-based or digital product.
		9.4.12.K(3).8	Participate in a user-focused design and development process to produce Web-based and digital communication solutions.
		9.4.12.K(3).9	Design and employ the use of motion graphics to create a visual Web-based or digital design.
		9.4.12.K(3).10	Demonstrate the effective use of tools, including tools for product development, product management, and production, to complete Web-based or digital communication projects.
		9.4.12.K(3).11	Employ knowledge of Web design, programming, and administration to develop and maintain Web-based applications.
		9.4.12.K(3).12	Perform maintenance and customer support functions for digital communication products to maintain quality products that meet customer needs.
		9.4.12.K(3).13	Test a digital communication product to evaluate its functionality.

Content Area	**21st-Century Life & Careers**
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**K. Information Technology Career Cluster**
Pathway	*(4) Programming & Software Development*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Technical Skills:** Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.K(4).1	Identify and analyze customer software needs and requirements to guide programming and software development.
		9.4.12.K(4).2	Create and use information technology strategies and project plans when solving specific problems to deliver a product that meets customer specifications.
		9.4.12.K(4).3	Identify and analyze system and software requirements to ensure maximum operating efficiency.

		9.4.12.K(4).4	Demonstrate the effective use of software development tools to develop software applications.
		9.4.12.K(4).5	Use the software development process to design a software application and deliver it to the customer.
		9.4.12.K(4).6	Produce a computer application, in code, to demonstrate proficiency in developing an application using the appropriate programming language.
		9.4.12.K(4).7	Implement software testing procedures to ensure quality products.
		9.4.12.K(4).8	Perform quality assurance tasks to produce quality products.
		9.4.12.K(4).9	Perform maintenance and customer support functions to maintain software applications.
		9.4.12.K(4).10	Develop and maintain a database to store information.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.L.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.L.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.L.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.L.4	Demonstrate English language arts knowledge and skills, including industry-specific applications, to enable pursuit of the full range of postsecondary education and career opportunities associated with the cluster.

		9.4.12.L.5	Demonstrate mathematics knowledge and skills, including industry-specific applications, to enable pursuit of the full range of postsecondary education and career opportunities associated with the cluster.
		9.4.12.L.6	Demonstrate science knowledge and skills, including industry-specific applications, to enable pursuit of a full range of postsecondary education and career opportunities associated with the cluster.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L.7	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.L.8	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.L.9	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.L.10	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.L.11	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.L.12	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.L.13	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.L.14	Apply active listening skills to obtain and clarify information.
		9.4.12.L.15	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.L.16	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.L.17	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.L.18	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.L.19	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.L.20	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.

		9.4.12.L.21	Conduct technical research to gather information necessary for decision-making.
		9.4.12.L.22	Formulate ideas, proposals, and solutions to address problems common to this cluster to ensure effective and efficient delivery of safety and/or security services to targeted consumers.
		9.4.12.L.23	Apply critical thinking strategies to facilitate team discussions about solutions to problems common to this cluster to contribute to the formulation of effective solutions.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L.24	Employ technological tools to expedite workflow.
		9.4.12.L.25	Operate electronic mail applications to communicate.
		9.4.12.L.26	Operate Internet applications to perform tasks.
		9.4.12.L.27	Operate writing and publishing applications to prepare communications.
		9.4.12.L.28	Operate presentation applications to prepare and deliver presentations.
		9.4.12.L.29	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.L.30	Employ database applications to manage data.
		9.4.12.L.31	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.L.32	Employ computer operations applications to manage tasks.
		9.4.12.L.33	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.L.34	Demonstrate the effective use of computer-based equipment (i.e., containing embedded computers or processors) to control electromechanical devices commonly used in this cluster.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.L.35	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.L.36	Describe and use quality control systems and practices to ensure quality products and services.

	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.L.37	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.L.38	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.L.39	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.L.40	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.L.41	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.L.42	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.L.43	Assess measures to maintain safe and healthful working conditions in environments common to this cluster in order to protect employees' well-being.
		9.4.12.L.44	Complete work tasks in accordance with applicable employer rules concerning occupational safety and health to promote safe and healthful working conditions in this cluster.
		9.4.12.L.45	Assess methods to reduce accident hazards common to office, facility, and mobile operations environments in this cluster to promote safe and accident-free work environments.
		9.4.12.L.46	Assess group health hazards common to environments in this cluster to promote healthy work environments.
		9.4.12.L.47	Research and evaluate records and reports about the safety, health, and environmental performance of workplaces in this cluster to identify potential hazards and workplace problems.
		9.4.12.L.48	Demonstrate procedures involved with administering basic first-aid and CPR in order to respond to workplace emergencies in this cluster.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.L.49	Employ leadership skills to accomplish goals and objectives.
		9.4.12.L.50	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.L.51	Employ teamwork skills to achieve collective goals and use team members' talents effectively.

		9.4.12.L.52	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.L.53	Conduct and participate in meetings to accomplish tasks.
		9.4.12.L.54	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L.55	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.L.56	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.L.57	Analyze and summarize the legal responsibilities associated with different roles and functions in this cluster to build understanding of appropriate professional, ethical behavior.
		9.4.12.L.58	Analyze and synthesize information about the laws, ordinances, regulations, and organizational rules that affect this cluster to demonstrate understanding of expectations for employees in the field.
		9.4.12.L.59	Evaluate strategies for responding to unethical or illegal actions of individuals and organizations and demonstrate how they are used to respond to unethical situations.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.L.60	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.L.61	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.L.62	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.L.63	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.L.64	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.L.65	Identify and exhibit traits for retaining employment.
		9.4.12.L.66	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.L.67	Examine requirements for career advancement to plan for continuing education and training.

		9.4.12.L.68	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.L.69	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.L.70	Examine employment opportunities in entrepreneurship as an option for career planning.
		9.4.12.L.71	Interpret written policies, procedures, and rules that describe and govern effective performance in workplaces in this cluster.
		9.4.12.L.72	Compare and evaluate career pathways within this cluster to build understanding of the requirements across multiple pathways.
		9.4.12.L.73	Analyze the characteristics required for success in different careers in this cluster to develop a personal perspective on the nature of the work, entry-level requirements, career paths, and challenges of this industry.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L.74	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.L.75	Employ planning and time management skills and tools to enhance results and complete work tasks.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**
Pathway	*(1) Corrections Services*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.L(1).1	Demonstrate knowledge of psychosocial principles and strategies to facilitate and deal with human behavior encountered in corrections environments.

Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L(1).2	Apply active listening skills in multiple settings common to corrections environments, such as group meetings and presentations, in order to obtain and clarify information and to implement directives and procedures.
	9.4.12.L(1).3	Execute verbal and oral communication techniques to deliver presentations and communicate technical information related to corrections environments.
	9.4.12.L(1).4	Demonstrate knowledge of how to interpret, analyze, and evaluate nonverbal messages to distinguish fact from fabrication in messages received in corrections environments.
	9.4.12.L(1).5	Demonstrate knowledge of how to design effective written and visual materials using specific academic writing strategies to document and communicate incidents, activities, evidence, observations, and other important information related to corrections environments.
Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.L(1).6	Demonstrate knowledge of conflict resolution techniques and skills in order to resolve conflicts among individuals.
	9.4.12.L(1).7	Demonstrate knowledge of how to analyze hostile situations and execute anger and/or conflict management strategies in order to take charge of problems that arise in corrections settings.
	9.4.12.L(1).8	Demonstrate knowledge of how to observe and evaluate the surrounding environment for signs of potential problems and/or danger in order to proactively address potential problems in corrections settings.
Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L(1).9	Use information technology systems to track public offenders in order to maintain accurate records within and among corrections institutions.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.L(1).10	Analyze and interpret standard operational procedures used in the criminal justice system in order to maintain security in corrections environments.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.L(1).11	Research, analyze, and interpret appropriate state and federal laws and documents to ensure corrections facility compliance with these requirements.
	9.4.12.L(1).12	Demonstrate understanding of regulations and procedures designed to ensure the health and well-being of inmates in corrections facilities.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.L(1).13	Assume leadership responsibilities commonly assigned to employees in corrections environments in order to demonstrate the ability to lead and collaborate with others.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L(1).14	Analyze and interpret constitutional rights and other laws affecting corrections systems in order to promote a system with zero errors in performance regarding respect for individual rights.
	9.4.12.L(1).15	Analyze and summarize key implications that the U. S. legal system has for corrections services to demonstrate understanding and knowledge of influences on corrections systems.
	9.4.12.L(1).16	Analyze and select techniques used to manage crisis situations in corrections environments to protect individuals and society.
	9.4.12.L(1).17	Apply knowledge of mental disorders, physical disabilities, communication disorders, and unusual behaviors to describe how to identify, communicate with, and assist individuals requiring additional assistance in order to perform regular corrections officer duties.

		9.4.12.L(1).18	Describe model behaviors used during interactions with prisoners that demonstrate concern for persons with disabilities or impairments in order to foster public cooperation and make corrections services more effective.
		9.4.12.L(1).19	Describe protocols created to reduce or address sexual harassment or abuse while performing corrections duties in order to reduce violations of this kind in corrections environments.
		9.4.12.L(1).20	Describe how to appraise situations that require the use of force and how to select appropriate times to use varying degrees of force, including deadly force, in order to demonstrate understanding of the proper use of force in corrections environments.
		9.4.12.L(1).21	Model appropriate reactions to situations involving Fourth Amendment rights, such as arrest authority, search and seizure, and probable cause, in order to demonstrate an understanding of the amendment's impact on actions of corrections officers and on corrections environments.
		9.4.12.L(1).22	Evaluate and summarize the rights of an individual being interrogated under the Fifth and Sixth Amendments in order to ensure trial, jury, and due process rights for individuals within corrections environments.
		9.4.12.L(1).23	Analyze and summarize the impact of the Fourteenth Amendment as it relates to due process and equal protection in order to ensure protection of constitutional rights for individuals in corrections environments.
		9.4.12.L(1).24	Analyze and summarize limits on and types of interrogation procedures in order to protect the rights of both U.S. and non-U.S. citizens in corrections environments.
		9.4.12.L(1).25	Analyze and summarize the ethical and legal responsibilities of corrections staff to demonstrate understanding of responsible staff behavior, and to ensure the protection of legal rights in corrections environments.
		9.4.12.L(1).26	Analyze and interpret constitutional rights and other laws affecting corrections systems in order to promote a system with zero errors in performance regarding respect for individual rights.

	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.L(1).27	Use reliable sources to research and evaluate employment opportunities in corrections services in order to find corrections careers that align with individual mental and physical abilities.
		9.4.12.L(1).28	Model skills and behaviors that demonstrate an adequate level of drive in order to seek, apply for, obtain, and accept employment in the corrections services field.
		9.4.12.L(1).29	Create, implement, and revise a plan for continuing education and training in the correctional services field in order to promote career advancement, personal development, and a positive image for corrections services employees.
		9.4.12.L(1).30	Compare and contrast custodial and non-custodial career opportunities in correctional environments in order to identify multiple opportunities for employment in the corrections services field.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L(1).31	Summarize and apply knowledge of technical skills and procedures common to careers in this field to effectively complete day-to-day operations of corrections facilities.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**		
Pathway	*(2) Fire & Emergency Management Services*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L(2).1	Speak and write using communications equipment and platforms common to fire and emergency management services in order to communicate effectively and professionally while executing work duties.
		9.4.12.L(2).2	Operate radio communications systems common to emergency and fire management services in order to effectively convey and receive urgent information.

	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.L(2).3	Describe how to use first-responder and other emergency response skills to manage an incident scene in order to conduct and manage on-scene accident activities until relieved by a superior officer.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L(2).4	Demonstrate knowledge of up-to-date information technology applications to facilitate handling of fire and emergency management situations.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.L(2).5	Model behaviors, strategies, and protocols that demonstrate an understanding of the objectives of, and a commitment to the mission of, fire and emergency management operations in order to carry out duties while responding to a range of incidents.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.L(2).6	Describe safety procedures and protocols associated with local, state, and federal regulations in order to effectively and safely conduct fire and emergency management duties.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.L(2).7	Develop an individual professional growth plan in order to improve team building and leadership skills required to function in guiding roles within the fire and emergency management field.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L(2).8	Summarize laws, ordinances, regulations, and organizational rules that govern fire and emergency management operations in order to perform assigned duties within these established rules and protocols.

Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.L(2).9	Compare and contrast relevant aspects of careers in fire and emergency management services in order to demonstrate an understanding of opportunities available in the field.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L(2).10	Describe protocols for handling emergency situations that range from minor medical and fire emergencies to area-wide incidents in order to demonstrate understanding of key skills used to respond effectively in such instances.
	9.4.12.L(2).11	Demonstrate knowledge of requirements for operating, maintaining, and repairing equipment in order to ensure that equipment is functional and ready for use in fire, medical, and other emergency situations.
	9.4.12.L(2).12	Examine equipment and summarize the range of applications for its use in fire and emergency management incidents in order to demonstrate the ability to use the equipment when needed.
	9.4.12.L(2).13	Design an appropriate Incident Command System in order to ensure the effective management of logistical procedures at an incident scene.
	9.4.12.L(2).14	Demonstrate understanding of common codes and symbols used to identify materials as hazardous in order to properly handle potentially hazardous material in fire and emergency management environments.
	9.4.12.L(2).15	Analyze and summarize hazardous materials transportation modes in order to ensure the safe transport of substances from fire, medical, and other emergency scenes.
	9.4.12.L(2).16	Develop public information plans involving both key community audiences and local fire and emergency management facilities in order to enhance public awareness of fire and other emergency prevention and safety measures.
	9.4.12.L(2).17	Evaluate special operation rescue teams designed to address situations with unusual needs and explain when they would be called upon in order to demonstrate the ability to recognize emergency situations that warrant their use.

| | | 9.4.12.L(2).18 | Examine and summarize the range of factors and issues involved in using Preparedness and Response Systems in order to demonstrate understanding of the systems available for managing large-scale disasters. |
| | | 9.4.12.L(2).19 | Examine and summarize the key functions and techniques of critical infrastructure protection in order to ensure protection of potential targets from terrorism and/or natural disasters. |

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**
Pathway	*(3) Security & Protective Services*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.L(3).1	Compare and contrast proprietary and contracted security operations to demonstrate an understanding of the benefits and challenges of each in providing protective and security services.
		9.4.12.L(3).2	Examine crime prevention concepts to understand how they can be applied and how they relate to security and protective services functions.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L(3).3	Exhibit active listening and speaking techniques when communicating to accurately receive and transmit security-related directives, technical concepts, and other information.
		9.4.12.L(3).4	Employ verbal communication techniques to deliver presentations and communicate technical information.
		9.4.12.L(3).5	Demonstrate knowledge of how to interpret, analyze, and evaluate nonverbal messages to distinguish fact from fabrication.
		9.4.12.L(3).6	Demonstrate competency in writing using a range of formats common to this pathway.

	9.4.12.L(3).7	Employ verbal communication techniques when using radio and other communications devices common to this pathway.
	9.4.12.L(3).8	Describe the importance of good public relations techniques and how they can be used in security settings and crisis situations.
Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.L(3).9	Demonstrate the use of conflict resolution skills to resolve conflicts among individuals.
Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L(3).10	Demonstrate the use of information technology tools common to this pathway.
Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.L(3).11	Compare and contrast the criminal justice field and the security field, examining roles, responsibilities, tools, and techniques, in order to better understand the needs of this pathway.
	9.4.12.L(3).12	Apply basic management principles to demonstrate effective supervision and management of a security force or an organization's security program.
	9.4.12.L(3).13	Analyze and summarize the importance of and the roles individuals play in intelligence analysis in order to understand its importance to crime prevention and homeland security.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.L(3).14	Describe safety, health, and environmental responsibilities of security personnel for establishing and maintaining safe work environments.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.L(3).15	Examine and summarize the importance of establishing relationships with people, organizations, and functions in order to demonstrate the role of liaison in the security and protective services field.

Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L(3).16	Analyze and summarize the impact of industry-specific legal issues on the security and protective services field.
	9.4.12.L(3).17	Apply ethical and legal reasoning in a range of situations faced by security and protective services personnel.
	9.4.12.L(3).18	Model appropriate responses to situations involving Fourth Amendment rights to demonstrate an understanding of the amendment's impact on actions related to security and protective services.
	9.4.12.L(3).19	Evaluate and summarize the rights of an individual being interrogated under the Fifth and Sixth Amendments in order to ensure trial, jury, and due process rights for individuals.
	9.4.12.L(3).20	Analyze and summarize the impact of the Fourteenth Amendment as it relates to due process and equal protection in order to ensure that security and protective services professionals respect the constitutional rights of individuals they encounter.
	9.4.12.L(3).21	Analyze and summarize the limits and types of interrogation procedures in order to protect the rights of both and non-U.S. citizens.
	9.4.12.L(3).22	Compare and contrast alternatives to unethical or illegal actions taken by organizations in private security situations, select the best approach, and justify that selection.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L(3).23	Explain how risk management principles can be applied to protect assets in a range of security settings.
	9.4.12.L(3).24	Demonstrate a basic understanding of security systems and their role in an overall security strategy.
	9.4.12.L(3).25	Examine and summarize procedures for basic incident responses in order to demonstrate an understanding of the security officer's role and responsibility in handling them.
	9.4.12.L(3).26	Demonstrate proficiency in the performance of selected tasks related to the roles and responsibilities of security officers.
	9.4.12.L(3).27	Compare and contrast personnel security approaches in government and commercial settings.
	9.4.12.L(3).28	Compare and contrast types and techniques of security investigations as they apply to business settings.

		9.4.12.L(3).29	Examine and summarize the need to protect sensitive information, and the concepts and techniques used by security professionals to ensure the security of information and other intangible assets.
		9.4.12.L(3).30	Examine and summarize the need to protect information technology and associated systems to understand the role of security professionals in protecting these assets.
		9.4.12.L(3).31	Analyze and summarize the value of initial and follow-up security training programs for employees to understand the security specialist's role in preparing and providing that training.
		9.4.12.L(3).32	Analyze and summarize the roles of security surveys, inspections, and exercises to properly assess security needs, test existing protection measures, and prepare employees for unexpected situations.
		9.4.12.L(3).33	Examine and summarize the concepts of "preparedness" and "response" for disaster situations to demonstrate understanding of the security professional's role in unforeseen events.
		9.4.12.L(3).34	Compare and contrast the elements and techniques of critical infrastructure protection to reduce the risk associated with key terrorist targets and to reduce the impact of natural disasters.
		9.4.12.L(3).35	Compare and contrast crime prevention concepts to understand how they can be applied and how they relate to security and protective services functions.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**		
Pathway	***(4) Law Enforcement Services***		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.L(4).1	Demonstrate knowledge of the U.S. legal system and legal responsibilities related to law enforcement services.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L(4).2	Demonstrate knowledge of verbal and nonverbal communication strategies encountered in the pathway, including body language, gestures, verbal content, tone, and inflection, in order to interpret suspect behavior and implement effective communication techniques.
		9.4.12.L(4).3	Demonstrate writing skills that facilitate accurate and clear note-taking and report writing in order to effectively complete police incident reports.
		9.4.12.L(4).4	Demonstrate the ability to properly operate communications equipment used in law enforcement dispatch centers, and obtain 9-1-1 Dispatch Certification.
		9.4.12.L(4).5	Demonstrate knowledge of how to evaluate verbally and physically hostile situations in order to implement anger/conflict management strategies and resolve problems that arise in law enforcement settings.
		9.4.12.L(4).6	Demonstrate empathy for individuals from special populations, with a focus on hate crime and sex crime victims, in order to foster public cooperation and enhance the effectiveness of law-enforcement.

	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L(4).7	Demonstrate understanding of the role computer forensics plays in identifying patterns and solving crimes in order to convey understanding of how computers influence the resolution of crimes.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.L(4).8	Evaluate and select agency-approved community policing strategies to foster community involvement and cooperation in law enforcement.
		9.4.12.L(4).9	Plan and develop a program, in collaboration with the community, to enhance understanding of crime prevention and loss-prevention activities.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L(4).10	Demonstrate behaviors that model integrity and a commitment to ethical behavior, including casual contexts, such as when offered free coffee, in order to convey character traits required for employment in the pathway.
		9.4.12.L(4).11	Examine and summarize Fourth Amendment concerns in the areas of search and seizure and probable cause.
		9.4.12.L(4).12	Examine and summarize the rights of an individual being interrogated under the Fifth and Sixth Amendments in order to ensure trial, jury, and due process rights for individuals in the law enforcement environments.
		9.4.12.L(4).13	Examine and summarize the impact of the Fourteenth Amendment as it relates to due process and equal protection, with a focus on both current events and historical accounts in order to ensure that law enforcement professionals respect the constitutional rights of individuals they encounter.
		9.4.12.L(4).14	Examine and summarize limits on and types of interrogation procedures, with a focus on Miranda rights and the Fifth Amendment, in order to protect the rights of both U.S. and non-U.S. citizens in the course of providing law enforcement services.
		9.4.12.L(4).15	Examine and summarize state and local ordinances and law enforcement procedures regarding driving under the influence and public intoxication.

		9.4.12.L(4).16	Examine and summarize procedures and protocols involved in basic civil law enforcement procedures in order to serve writs, warrants, and summonses.
		9.4.12.L(4).17	Describe how to ensure compliance with established procedures to avoid the violation of constitutional rights.
		9.4.12.L(4).18	Describe how to ensure compliance with established procedures to avoid the violation of constitutional protections regarding search and seizure, with a focus on the Terry stop (stop and frisk) and attaining warrants.
		9.4.12.L(4).19	Examine and summarize state and local laws and law enforcement procedures related to driving under the influence violations, with a focus on field sobriety tests, in order to enhance enforcement.
		9.4.12.L(4).20	Describe how to present testimony in legal proceedings in accordance with courtroom procedures, and demonstrate this skill by participating in mock trials.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L(4).21	Analyze and assess appropriate techniques for managing crisis situations in order to maintain public safety.
		9.4.12.L(4).22	Examine and summarize crowd management strategies and skills used by law enforcement professionals in order to maintain control over large gatherings.
		9.4.12.L(4).23	Examine and summarize procedures and protocols used to address and resolve domestic violence issues.
		9.4.12.L(4).24	Describe established procedures and laws affecting motor vehicle traffic stops in order to enhance compliance and enforcement.
		9.4.12.L(4).25	Examine and summarize procedures for properly processing crime scenes for fingerprint evidence.
		9.4.12.L(4).26	Examine and summarize strategies to properly protect, document and process crime scenes and all related evidence.
		9.4.12.L(4).27	Describe how to conduct interviews and interrogations using appropriate law enforcement procedures in order to ensure the protection of individual rights and effective information gathering.
		9.4.12.L(4).28	Examine and summarize techniques and protocols for effectively and safely responding to crimes in progress, including radio techniques, in order to ensure individual and public safety.

	9.4.12.L(4).29	Assess and select appropriate responses and procedures for assisting individuals who require special assistance from law enforcement personnel, such as individuals with mental disorders, physical disabilities, communication disorders, and other special needs.
	9.4.12.L(4).30	Examine and summarize protocols and procedures intended to protect the rights of juvenile victims and offenders.
	9.4.12.L(4).31	Describe how to investigate and document a motor vehicle accident in compliance with prescribed procedures.
	9.4.12.L(4).32	Describe how to evaluate situations that require the use of force, how to analyze and select the appropriate level of force, and how to determine when to use personal protective equipment.
	9.4.12.L(4).33	Describe the signs and symptoms of possible child abuse and neglect.
	9.4.12.L(4).34	Describe the safe handling and the inherent dangers associated with the handling of dangerous drugs and the behavioral symptoms of drug use.
	9.4.12.L(4).35	Demonstrate proper handcuffing techniques.
	9.4.12.L(4).36	Examine and summarize the skills used in operating RADAR speed-measuring equipment in order to enforce existing traffic laws.
	9.4.12.L(4).37	Examine and summarize the range of law enforcement issues involved in Preparedness and Response Systems to demonstrate understanding of systems involved in preparing for and managing large-scale disasters.
	9.4.12.L(4).38	Examine and summarize the key law enforcement functions and techniques related to critical infrastructure protection in order to protect potential targets from terrorism and/or natural disasters.
	9.4.12.L(4).39	Assess intelligence analysis techniques and procedures used to deter crime and identify homeland security initiatives to demonstrate an understanding of the influence intelligence may have on law enforcement.
	9.4.12.L(4).40	Examine and summarize the rights of victims and witnesses as well as procedures for protecting them.
	9.4.12.L(4).41	Describe how to conduct building searches.
	9.4.12.L(4).42	Describe the paper collection of evidence to prevent corruption of crime scenes.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**L. Law, Public Safety, Corrections, & Security Career Cluster**		
Pathway	*(5) Legal Services*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.L(5).1	Analyze and summarize the roles of the three branches of the U.S. Government (i.e., the judicial, legislative, and executive branches) in order to demonstrate an understanding of how government influences legal services.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.L(5).2	Demonstrate techniques for effective listening in order to manage receipt of orally communicated information in legal services environments.
		9.4.12.L(5).3	Demonstrate verbal and oral communications skills for communicating effectively in legal services environments.
		9.4.12.L(5).4	Analyze and interpret nonverbal communications in order to distinguish fact from fabrication in messages received in legal services environments.
		9.4.12.L(5).5	Demonstrate specific academic writing strategies used by professionals in legal services environments.
		9.4.12.L(5).6	Use legal terminology accurately to effectively communicate within the legal services community.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.L(5).7	Demonstrate skill using information technology tools that legal services professionals use to perform daily tasks.
		9.4.12.L(5).8	Analyze and summarize the role computer forensics plays in preventing and solving crimes in order to demonstrate an understanding of key factors influencing the resolution of crimes.

	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.L(5).9	Evaluate and model appropriate reactions to situations involving Fourth Amendment rights in order to demonstrate an understanding of the impact this amendment has on individuals providing legal services and their actions.
		9.4.12.L(5).10	Evaluate and summarize the rights of an individual being interrogated under the Fifth and Sixth Amendments in order to ensure trial, jury, and due process rights for individuals in legal services environments.
		9.4.12.L(5).11	Analyze and summarize the impact of the Fourteenth Amendment as it relates to due process and equal protection in order to ensure that legal service professionals respect the constitutional rights of individuals they encounter.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.L(5).12	Demonstrate the technical knowledge and skills required of legal services professionals in order to prepare for the full range of careers in the pathway.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**M. Manufacturing Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.M.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.M.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.M.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.M.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.M.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.M.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.M.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.M.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.M.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.M.11	Apply active listening skills to obtain and clarify information.

		9.4.12.M.12	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.M.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.M.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.M.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.M.16	Employ critical thinking and interpersonal skills to resolve.
		9.4.12.M.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.M.18	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.M.19	Employ technological tools to expedite workflow.
		9.4.12.M.20	Operate electronic mail applications to communicate.
		9.4.12.M.21	Operate Internet applications to perform tasks.
		9.4.12.M.22	Operate writing and publishing applications to prepare communications.
		9.4.12.M.23	Operate presentation applications to prepare and deliver presentations.
		9.4.12.M.24	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.M.25	Employ database applications to manage data.
		9.4.12.M.26	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.M.27	Employ computer operations applications to manage tasks.
		9.4.12.M.28	Use computer-based equipment (containing embedded computers or processors) to control devices.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.M.29	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.M.30	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.M.31	Summarize and explain how manufacturing businesses operate to demonstrate an understanding of key functions of organizations in the cluster.
	9.4.12.M.32	Analyze and summarize how manufacturing businesses improve performance to demonstrate an understanding of various methods for enhancing production.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M.33	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
	9.4.12.M.34	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.M.35	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.M.36	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.M.37	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
	9.4.12.M.38	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
	9.4.12.M.39	Maintain safe and healthful working conditions and environments to ensure employee safety.
	9.4.12.M.40	Understand employee rights and responsibilities and employers obligations concerning occupational safety and health.
	9.4.12.M.41	Assess types and sources of workplace hazards common to manufacturing business environments in order to maintain safe working conditions.
	9.4.12.M.42	Demonstrate understanding of how to control workplace hazards in manufacturing business environments in order to maintain safe working conditions.

		9.4.12.M.43	Summarize safety, health, and environmental management systems to convey an understanding of how manufacturing businesses comply with governmental policies and procedures.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.M.44	Employ leadership skills to accomplish goals and objectives.
		9.4.12.M.45	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.M.46	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.M.47	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.M.48	Conduct and participate in meetings to accomplish tasks.
		9.4.12.M.49	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.M.50	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.M.51	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.M.52	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.M.53	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.M.54	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.M.55	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.M.56	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.M.57	Identify and exhibit traits for retaining employment.

		9.4.12.M.58	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.M.59	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.M.60	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.M.61	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.M.62	Examine employment opportunities in entrepreneurship as an option for career planning.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.M.63	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.M.64	Employ planning and time management skills and tools to enhance results and complete work tasks.
		9.4.12.M.65	Describe and employ technical knowledge and skills required for careers in manufacturing in order to perform basic workplace activities.

Content Area	21st-Century Life & Careers			
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)			
Strand	**M. Manufacturing Career Cluster**			
Pathway	*(1) Manufacturing Production Process Development*			

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M(1).1	Demonstrate how to communicate with co-workers and/or external customers to ensure that manufacturing production processes meet business requirements.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.M(1).2	Research new manufacturing processes to manage production of new and/or improved products.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.M(1).3	Develop quality improvement processes to maintain quality during the manufacturing production process.
		9.4.12.M(1).4	Develop a continuous improvement plan to ensure production of high quality products that meet customer expectations.
		9.4.12.M(1).5	Strategize ways to improve production processes in order to achieve manufacturing goals and meet customer and product standards.

| | Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement. | 9.4.12.M(1). 6 | Assess and select a variety of techniques and solutions to ensure safe production of products as well as safe and productive workplaces. |
| | Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway. | 9.4.12.M(1). 7 | Design a new product that meets identified customer needs, while also demonstrating the use of strategies and techniques for developing manufacturing production processes. |

Content Area	21st-Century Life & Careers
Standard	9.4 Career and Technical Education: All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	M. Manufacturing Career Cluster
Pathway	(2) Production

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M(2). 1	Demonstrate how to communicate with others to ensure production meets business requirements.

Category	Standard	Description
Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.M(2).2	Coordinate work teams when designing and/or producing products to enhance performance of the production process.
	9.4.12.M(2).3	Recognize problems related to production processes, and design corrections to assure that products meet quality standards.
	9.4.12.M(2).4	Describe production process audits and inspections used to maintain quality and encourage continuous improvement.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M(2).5	Summarize and employ safety protocols to maintain a safe and productive production workplace.
	9.4.12.M(2).6	Research the safe use of manufacturing process equipment in order to protect personal well-being in the work environment.
	9.4.12.M(2).7	Identify equipment safety resources (e.g., equipment manufacturers and national safety organizations).
	9.4.12.M(2).8	Maintain equipment, tools, and workstations to provide safe work environments and meet company regulations.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.M(2).9	Design a product that satisfies a customer's desires to demonstrate the relationship between production processes and meeting customer needs.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**M. Manufacturing Career Cluster**		
Pathway	*(3) Maintenance, Installation, & Repair*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M(3).1	Communicate with others regarding maintenance, installation, and repair issues and trends in order to meet business needs.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.M(3).2	Analyze the impact of staffing, including the impact of separation from employment and absenteeism, on the production process.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M(3).3	Demonstrate knowledge of maintenance and repair processes and protocols used to maintain safe and productive workplaces.
		9.4.12.M(3).4	Demonstrate knowledge of the safe use of manufacturing equipment in order to ensure safety during maintenance, installation, and repair work.

	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.M(3).5	Develop hands-on knowledge of equipment operation to identify maintenance needs and maximize performance.
		9.4.12.M(3).6	Analyze and select installation, customization, or upgrade techniques in order to ensure the proper functioning of manufacturing equipment.
		9.4.12.M(3).7	Create a preventive maintenance schedule to maintain manufacturing equipment, tools, and workstations.
		9.4.12.M(3).8	Describe predictive and preventive maintenance strategies used to ensure that production processes run smoothly.
		9.4.12.M(3).9	Identify and diagnose equipment problems in order to effectively repair manufacturing equipment.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**M. Manufacturing Career Cluster**		
Pathway	*(4) Quality Assurance*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M(4).1	Use communications strategies common to quality assurance careers to ensure that production meets business requirements.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.M(4).2	Analyze and select strategies for coordinating work teams to produce a product that meets quality assurance standards.
		9.4.12.M(4).3	Evaluate production operations for product and process quality to maintain quality assurance.
		9.4.12.M(4).4	Demonstrate understanding of ways to enhance product and process to meet quality standards.
		9.4.12.M(4).5	Develop continuous improvement activities for use in the manufacturing environment to enhance the quality of products or processes.
		9.4.12.M(4).6	Employ processes, data, and tools to produce a product that satisfies customer needs for quality, value-added products.
		9.4.12.M(4).7	Analyze and select continuous improvement processes to maintain quality products and processes.
		9.4.12.M(4).8	Inspect manufacturing materials, report quality issues, and release only manufacturing materials that meet quality specifications.

	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M(4).9	Describe safety inspections and training needed to maintain quality assurance and to provide safe and productive manufacturing workplaces.

Content Area	**21st-Century Life & Careers**
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**M. Manufacturing Career Cluster**
Pathway	*(5) Logistics & Inventory Control*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.M(5).1	Communicate with co-workers and/or external customers about logistics and inventory control issues to ensure production meets business requirements.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M(5).2	Describe and/or implement safety inspections and practices common to the pathway to maintain safe and productive classrooms and/or workplaces.
		9.4.12.M(5).3	Examine emerging safety issues related to using green energy and to green environments.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.M(5).4	Ship and receive products and materials using logistics and inventory control procedures and processes to meet business requirements.
		9.4.12.M(5).5	Use logistics and inventory control processes and procedures to demonstrate how to manage inventory to meet production requirements.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**M. Manufacturing Career Cluster**
Pathway	*(6) Health, Safety, & Environmental Assurance*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Problem-Solving and Critical Thinking:** Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.M(6).1	Evaluate procedures used to plan for safety in a new production process in order to ensure health, safety, and environmental well-being.
		9.4.12.M(6).2	Analyze investigations of health, safety, and/or environmental incidents and hazards in order to maintain healthy and safe manufacturing work environments.
		9.4.12.M(6).3	Evaluate preventive inspections of health, safety, and/or environmental hazards in order to ensure healthy and safe manufacturing work environments.
		9.4.12.M(6).4	Evaluate a job safety and health analysis of manufacturing jobs, equipment, and processes in order to identify priorities for health, safety, and environmental assurance programs.
		9.4.12.M(6).5	Analyze safety inspections findings and implement appropriate safety practices in order to improve the health and safety of manufacturing workplaces.
		9.4.12.M(6).6	Evaluate and summarize training in health, safety, and/or environmental issues needed to provide safe, healthy, and productive manufacturing work environments.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.M(6).7	Demonstrate the safe use of manufacturing equipment in order to assure heath and safety in work environments.
		9.4.12.M(6).8	Examine and summarize health, safety, and/or environmental programs, projects, policies, or procedures in order to ensure healthy and safe manufacturing work environments.
		9.4.12.M(6).9	Examine and summarize continuous improvement protocols, techniques, and practices in order to enhance the health and safety of manufacturing work environments.

		9.4.12.M(6).10	Examine and summarize health, safety, and/or environmental quality assurance programs in order to ensure healthy and safe manufacturing work environments.

-Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**N. Marketing Career Cluster**

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.N.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.N.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.N.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.N.4	Solve mathematical problems to obtain information for marketing decision-making.
		9.4.12.N.5	Understand economic principles and concepts fundamental to business operations.
		9.4.12.N.6	Apply sociological knowledge of group behavior to understand customer decision-making.
		9.4.12.N.7	Apply psychological knowledge of individual behavior to understand customer motivation.

	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N.8	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.N.9	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.N.10	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.N.11	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.N.12	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.N.13	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.N.14	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.N.15	Apply active listening skills to obtain and clarify information.
		9.4.12.N.16	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.N.17	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.N.18	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.N.19	Obtain and convey marketing ideas and information to facilitate business operations.
		9.4.12.N.20	Evaluate and summarize the concepts and strategies used to communicate information about products, services, images, and/or ideas to achieve desired outcomes.
		9.4.12.N.21	Demonstrate knowledge of personalized communication strategies used in this cluster to determine client needs and wants and to develop responses intended to influence purchasing decisions and enhance future business opportunities.

	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.N.22	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.N.23	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.N.24	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.N.25	Conduct technical research to gather information necessary for decision-making.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.N.26	Employ technological tools to expedite workflow.
		9.4.12.N.27	Operate electronic mail applications to communicate.
		9.4.12.N.28	Operate Internet applications to perform tasks.
		9.4.12.N.29	Operate writing and publishing applications to prepare business communications.
		9.4.12.N.30	Operate presentation applications to prepare and deliver presentations.
		9.4.12.N.31	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.N.32	Employ database applications to manage data.
		9.4.12.N.33	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.N.34	Employ computer operations applications to manage work tasks.
		9.4.12.N.35	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.N.36	Apply technological tools used by marketers to expedite workflow.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N.37	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
	9.4.12.N.38	Describe and use quality control systems and practices to ensure quality products and services.
	9.4.12.N.39	Analyze and summarize the concepts, processes, and skills associated with identifying new ideas, opportunities, and methods and with creating or starting new marketing projects or business ventures.
	9.4.12.N.40	Analyze the contribution of accounting systems to the fiscal stability of businesses.
	9.4.12.N.41	Demonstrate knowledge of tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources for marketing activities.
	9.4.12.N.42	Demonstrate knowledge of tools techniques, and systems that marketers use to plan, staff, lead, and organize their human resources.
	9.4.12.N.43	Demonstrate knowledge of the tools, techniques, and systems that marketers use to create, communicate, and deliver value to customers and to manage customer relationships in ways that benefit both the organization and stakeholders.
	9.4.12.N.44	Demonstrate knowledge of the techniques and strategies used to foster positive, ongoing relationships with customers.
	9.4.12.N.45	Plan day-to-day activities required for continued business operations.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.N.46	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
	9.4.12.N.47	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
	9.4.12.N.48	Identify emergency procedures that are necessary to provide aid in workplace accidents.
	9.4.12.N.49	Identify response techniques to create a disaster and/or emergency response plan.
	9.4.12.N.50	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

		9.4.12.N.51	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.N.52	Demonstrate knowledge of safety, health, and environmental controls used to enhance productivity in the workplace.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.N.53	Employ leadership skills to accomplish goals and objectives.
		9.4.12.N.54	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.N.55	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.N.56	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.N.57	Conduct and participate in meetings to accomplish tasks.
		9.4.12.N.58	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.N.59	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.N.60	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.N.61	Understand management's responsibility to know and abide by laws, regulations, and ethical behavior that affect operations and transactions.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N.62	Identify and demonstrate positive work behaviors and personal qualities needed to succeed in the classroom and/or to be employable.
		9.4.12.N.63	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.N.64	Demonstrate skills related to seeking and applying for employment in a desired job.
		9.4.12.N.65	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.N.66	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.N.67	Identify and exhibit traits for retaining employment.
		9.4.12.N.68	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.

		9.4.12.N.69	Examine requirements for career advancement to plan for continuing education and training.	
		9.4.12.N.70	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.	
		9.4.12N.71	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.	
		9.4.12.N.72	Examine employment opportunities in entrepreneurship as an option for career planning.	
		9.4.12N.73	Understand concepts, tools, and strategies used to explore, obtain, and develop marketing careers.	
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.N.74	Employ information management techniques and strategies to assist in decision-making.	
		9.4.12.N.75	Employ planning and time management skills and tools to enhance results and complete work tasks.	
		9.4.12.N.76	Understand tools and strategies used to access, process, maintain, evaluate, and disseminate marketing information to assist with business decision-making.	
		9.4.12.N.77	Plan the use of financial resources to protect solvency.	
		9.4.12.N.78	Analyze and differentiate management tools, techniques, and strategies used in planning, controlling, and organizing a marketing organization or department to maintain the business or department's growth and development.	
		9.4.12.N.79	Evaluate and summarize the processes used to monitor, plan, and control the day-to-day activities required for continued business operations.	
		9.4.12.N.80	Analyze and summarize the concepts and processes needed to identify, select, monitor, and evaluate sales channels.	
		9.4.12.N.81	Demonstrate knowledge of the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate marketing information for use in making business decisions.	
		9.4.12.N.82	Evaluate and summarize the concepts and strategies used to determine marketing strategies and target them to specific audiences.	
		9.4.12.N.83	Evaluate and summarize the concepts and strategies used to determine and adjust prices to maximize return and meet customers' perceptions of value.	

		9.4.12.N.84	Evaluate and summarize the concepts and processes used to obtain, develop, maintain, and improve a product or service mix in response to market opportunities.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**N. Marketing Career Cluster**		
Pathway	*(1) Marketing Communications*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N(1).1	Evaluate and summarize the concepts, strategies, and systems used to obtain and convey ideas and information in this pathway.
		9.4.12.N(1).2	Research the concepts and strategies marketers use to communicate information about products, services, images, and/or ideas to achieve desired outcomes.
		9.4.12.N(1).3	Analyze the concepts and strategies marketers use to determine and target marketing communications strategies to specific audiences.
		9.4.12.N(1).4	Research the concepts, systems, and tools marketers use when making decisions to gather, access, synthesize, evaluate, and disseminate marketing information.
		9.4.12.N(1).5	Research the concepts and actions marketers use to determine client needs and wants, and to develop personalized responses intended to influence purchasing decisions and enhance future business opportunities.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.N(1).6	Employ the tools, strategies, and systems marketers use to access, process, maintain, evaluate, and disseminate information in order to assist with decision-making.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N(1).7	Analyze the processes and systems marketers implement to monitor, plan, and control the day-to-day activities required for continued business operations.
	9.4.12.N(1).8	Assess the tools, techniques, and systems that businesses in this pathway use to plan, staff, lead, and organize human resources.
	9.4.12.N(1).9	Employ the tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources in this pathway.
	9.4.12.N(1).10	Evaluate and summarize the tools, techniques, and systems that marketers use to create, communicate, and deliver value to customers and manage customer relationships in ways that benefit both the organization and stakeholders.
	9.4.12.N(1).11	Analyze the concepts and strategies marketers use to determine and adjust prices for marketing communications.
	9.4.12.N(1).12	Research the concepts and processes marketers use to obtain, develop, maintain, and improve a product or service mix in response to market opportunities.
Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.N(1).13	Employ techniques, strategies, and systems used to foster self-understanding and enhance relationships with others in this pathway.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.N(1).14	Analyze and summarize laws and regulations that affect marketing business operations and transactions.
Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(1).15	Research the concepts, tools, and strategies marketers use to explore, obtain, and develop their careers in order to reach personal and professional goals.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**N. Marketing Career Cluster**
Pathway	*(2) Marketing Management*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N(2).1	Evaluate and select concepts and strategies used in this pathway to communicate information about products, services, images, and/or ideas to achieve desired outcomes.
		9.4.12.N(2).2	Demonstrate understanding of personalized communications strategies marketers use to determine client needs and wants, and to develop responses intended to influence purchasing decisions and enhance future business opportunities.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.N(2).3	Facilitate decision-making by evaluating and selecting tools, strategies, and systems used in this industry to access, process, maintain, evaluate, and disseminate information
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N(2).4	Employ tools, strategies, and systems used in this industry to plan the use of financial resources.
		9.4.12.N(2).5	Employ tools, techniques, and systems used in this industry to plan and organize human resources.
		9.4.12.N(2).6	Demonstrate knowledge of processes and systems used in this industry to plan, monitor, and control the day-to-day activities required for continued operations.
		9.4.12.N(2).7	Apply concepts and processes used in this pathway to identify, select, monitor, and evaluate sales channels in order to minimize costs and maximize effectiveness.
		9.4.12.N(2).8	Evaluate and select tools, techniques, and systems used to plan, control, and organize a marketing organization or department.

		9.4.12.N(2).9	Apply concepts and strategies used in this industry to determine and adjust prices in order to maximize return and meet customers' perceptions of value.
		9.4.12.N(2).10	Evaluate and select concepts and processes used in this industry to obtain, develop, maintain, and improve a product or service mix in response to market opportunities.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(2).11	Understand concepts, tools, and strategies used to explore, obtain, and develop marketing careers.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**N. Marketing Career Cluster**
Pathway	*(3) Marketing Research*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N(3).1	Employ processes and systems used in this industry to monitor, plan, and control day-to-day marketing research activities in order to contribute to continued functioning.
		9.4.12.N(3).2	Employ tools, techniques, and systems used in this industry to plan, control, and organize a marketing research organization or department.

	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.N(3).3	Employ concepts, tools, strategies, and systems used in this pathway to access, process, maintain, evaluate, and disseminate information in order to assist business decision-making.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(3).4	Employ concepts, tools, and strategies used in this pathway to explore, obtain, and develop marketing research careers.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**N. Marketing Career Cluster**
Pathway	*(4) Management & Entrepreneurship*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N(4).1	Communicate and apply interpersonal skills to manage a business.
		9.4.12.N(4).2	Apply promotional knowledge and skill to communicate information in order to achieve a desired outcome.

Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N(4).3	Plan for organizational development and growth to facilitate business success.
	9.4.12.N(4).4	Organize work efforts and staff to enhance work flow.
	9.4.12.N(4).5	Staff the business operation to expedite work efforts.
	9.4.12.N(4).6	Plan and evaluate purchasing activities to minimize expenses.
	9.4.12.N(4).7	Maintain fiscal control of business operations to limit expenses.
	9.4.12.N(4).8	Employ distribution knowledge and skill to manage supply-chain activities.
	9.4.12.N(4).9	Employ financial knowledge and skill to make business decisions.
	9.4.12.N(4).10	Manage marketing information to make business decisions.
	9.4.12.N(4).11	Employ pricing strategies to maximize return and meet customers' perceptions of value.
	9.4.12.N(4).12	Obtain, develop, maintain, and improve a product/service mix to respond to market opportunities.
	9.4.12.N(4).13	Manage the sales function to determine client needs and wants, and respond through planned, personalized communication.
Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.N(4).14	Create safety and security plans to minimize loss and to maximize return.
	9.4.12.N(4).15	Resolve safety and security breaches to create a safe working environment and to minimize loss.
Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.N(4).16	Apply ethics and government regulations to protect the business.
Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(4).17	Analyze sales careers to determine interest.
	9.4.12.N(4).18	Compare individual abilities, interests, and attitudes with those associated with entrepreneurial success in order to determine compatibility.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**N. Marketing Career Cluster**
Pathway	*(5) Merchandising*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N(5).1	Communicate information about retail products, services, images, and/or ideas to achieve desired outcomes.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.N(5).2	Employ concepts, systems, and tools used in this industry to gather, access, synthesize, evaluate, and disseminate information in order to assist decision-making.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.N(5).3	Understand fundamental economic principles and concepts that impact business operations and merchandising decisions.
		9.4.12.N(5).4	Employ business tools, techniques, and systems used in this pathway to plan, staff, lead, and organize human resources.
		9.4.12.N(5).5	Employ tools, techniques, and systems used in this pathway to create, communicate, and deliver value to customers, and to manage customer relationships in ways that benefit both the organization and stakeholders.
		9.4.12.N(5).6	Employ processes and systems used in this pathway to plan, monitor, and control day-to-day activities in order to maintain continued functioning.
		9.4.12.N(5).7	Apply concepts and processes used in this pathway to move, store, locate, and/or transfer ownership of retail goods and services.

		9.4.12.N(5).8	Employ concepts and strategies used in this pathway to determine and target select audiences in order to facilitate merchandising activities.
		9.4.12.N(5).9	Employ concepts and strategies used in this pathway to determine and adjust prices in order to maximize return and meet customer's perceptions of value.
		9.4.12.N(5).10	Employ merchandising concepts and processes used in this pathway to obtain, develop, maintain, and improve a product or service mix in response to market opportunities.
		9.4.12.N(5).11	Employ concepts and actions used in this pathway to determine client needs and wants, and to respond to clients through planned, personalized communications intended to influence purchasing decisions and enhance future sales opportunities.
		9.4.12.N(5).12	Employ concepts, tools, and strategies used in this industry to explore, obtain, and develop merchandising careers.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(5).13	Employ concepts, tools, strategies used in this industry to explore, obtain, and develop merchandising careers.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**N. Marketing Career Cluster**		
Pathway	*(6) Professional Sales & Marketing*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Communication Skills:** All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.N(6).1	Gather, access, synthesize, evaluate, and disseminate information to aid in making sales.
		9.4.12.N(6).2	Employ concepts and actions used in this pathway to determine client needs and wants and to develop personalized communications intended to influence purchasing decisions and enhance future business opportunities.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.N(6).3	Understand concepts, tools, and strategies used in this pathway to explore, obtain, and develop sales careers.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**O. Science, Technology, Engineering, & Mathematics Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.O.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.O.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.O.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.O.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.O.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.O.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.O.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.O.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.O.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.O.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.O.11	Apply active listening skills to obtain and clarify information.

		9.4.12.O.12	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.O.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.O.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
		9.4.12.O.15	Prepare science, technology, engineering, and mathematics material in oral, written, or visual formats to provide information to an intended audience and to fulfill the specific communication needs of that audience.
		9.4.12.O.16	Apply active listening skills to obtain or clarify information pertaining to plans, processes, projects, or designs.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.O.17	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.O.18	Employ critical thinking and interpersonal skills to resolve conflicts.
		9.4.12.O.19	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.O.20	Conduct technical research to gather information necessary for decision-making.
		9.4.12.O.21	Effectively develop and apply the skills inherent in systems engineering in which requirements, configuration, integration, project management, quality assurance, and process applications are necessary.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.O.22	Employ technological tools to expedite workflow.
		9.4.12.O.23	Operate electronic mail applications to communicate.
		9.4.12.O.24	Operate Internet applications to perform tasks.
		9.4.12.O.25	Operate writing and publishing applications to prepare communications.
		9.4.12.O.26	Operate presentation applications to prepare and deliver presentations.
		9.4.12.O.27	Employ spreadsheet applications to organize and manipulate data.

		9.4.12.O.28	Employ database applications to manage data.
		9.4.12.O.29	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.O.30	Employ computer operations applications to manage tasks.
		9.4.12.O.31	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.O.32	Effectively use information technology to gather, store, and communicate data in appropriate formats.
		9.4.12.O.33	Evaluate and demonstrate skill with a range of technological tools designed to manipulate, report, or operate with data acquisition.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.O.34	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.O.35	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.O.36	Examine and summarize roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment to understand the nature and scope of organizations in this cluster.
		9.4.12.O.37	Identify how key organizational systems affect organizational performance and the quality of products and services to demonstrate an understanding of how systems are managed and improved in this cluster.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.O.38	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.O.39	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.O.40	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.O.41	Identify response techniques to create a disaster and/or emergency response plan.

		9.4.12.O.42	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.O.43	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.O.44	Apply appropriate safety practices in environments in this cluster to ensure a safe workplace.
		9.4.12.O.45	Develop an awareness of safety, health, and environmental hazards inherent in this cluster and apply appropriate precautions when solving problems, developing plans, implementing processes, or completing projects to proactively promote safety.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.O.46	Employ leadership skills to accomplish goals and objectives.
		9.4.12.O.47	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.O.48	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.O.49	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.O.50	Conduct and participate in meetings to accomplish tasks.
		9.4.12.O.51	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.O.52	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.O.53	Interpret and explain written organizational policies and procedures to help employees perform their jobs according to employer rules and expectations.
		9.4.12.O.54	Demonstrate workplace ethics specific to occupations in this cluster in order to reflect effective stewardship of resources.
	Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.O.55	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
		9.4.12.O.56	Develop a Personalized Student Learning Plan to meet career goals and objectives.
		9.4.12.O.57	Demonstrate skills related to seeking and applying for employment in a desired job.

		9.4.12.O.58	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
		9.4.12.O.59	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
		9.4.12.O.60	Identify and exhibit traits for retaining employment.
		9.4.12.O.61	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
		9.4.12.O.62	Examine requirements for career advancement to plan for continuing education and training.
		9.4.12.O.63	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
		9.4.12.O.64	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
		9.4.12.O.65	Examine employment opportunities in entrepreneurship as an option for career planning.
		9.4.12.O.66	Select, research, and examine critical aspects of career opportunities in one or more pathways to gain an understanding of the breadth of occupations within this cluster.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.O.67	Employ information management techniques and strategies to assist in decision-making.
		9.4.12.O.68	Employ planning and time management skills and tools to enhance results and complete work tasks.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**O. Science, Technology, Engineering, & Mathematics Career Cluster**		
Pathway	*(1) Engineering & Technology*		

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.O(1).1	Apply the concepts, processes, guiding principles, and standards of school mathematics to solve science, technology, engineering, and mathematics problems.
		9.4.12.O(1).2	Apply and use algebraic, geometric, and trigonometric relationships, characteristics, and properties to solve problems.
		9.4.12.O(1).3	Demonstrate the ability to select, apply, and convert systems of measurement to solve problems.
		9.4.12.O(1).4	Demonstrate the ability to use Newton's laws of motion to analyze static and dynamic systems with and without the presence of external forces.
		9.4.12.O(1).5	Explain relevant physical properties of materials used in engineering and technology.
		9.4.12.O(1).6	Explain relationships among specific scientific theories, principles, and laws that apply to technology and engineering.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.O(1).7	Use mathematics, science, and technology concepts and processes to solve problems in projects involving design and/or production (e.g., medical, agricultural, biotechnological, energy and power, information and communication, transportation, manufacturing, and construction).
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.O(1).8	Select and use a range of communications technologies, including word processing, spreadsheet, database, presentation, email, and Internet applications, to locate and display information.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.O(1).9	Employ concepts and processes for the application of technology to engineering.
		9.4.12.O(1).10	Model technical competence by developing processes and concepts for using different technologies.

		9.4.12.O(1).11	Demonstrate understanding of processes and concepts that are key to understanding the design process.
		9.4.12.O(1).12	Model technical competence by developing and applying processes and concepts in the design process.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**O. Science, Technology, Engineering, & Mathematics Career Cluster**
Pathway	*(2) Science & Mathematics*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.O(2).1	Develop an understanding of how science and mathematics function to provide results, answers, and algorithms for engineering activities to solve problems and issues in the real world.
		9.4.12.O(2).2	Apply science and mathematics when developing plans, processes, and projects to find solutions to real world problems.
		9.4.12.O(2).3	Assess the impact that science and mathematics have on society when used to develop projects or products.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.O(2).4	Use scientific and mathematical problem-solving skills and abilities to develop realistic solutions to assigned projects, and illustrate how science and mathematics impact problem-solving in modern society.
		9.4.12.O(2).5	Demonstrate critical thinking abilities and skills needed to review information, to explain statistical analyses, and to translate, interpret, and summarize research and statistical data collected and analyzed as the result of an investigation.
	Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.O(2).6	Demonstrate the knowledge and technical skills needed to obtain and succeed in a chosen scientific and mathematical field.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Academic Foundations:** Academic concepts lay the foundation for the full range of career and postsecondary education opportunities within the career cluster.	9.4.12.P.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.P.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
		9.4.12.P.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
	Communication Skills: All clusters rely on effective oral and written communication strategies for creating, expressing, and interpreting information and ideas that incorporate technical terminology and information.	9.4.12.P.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
		9.4.12.P.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
		9.4.12.P.6	Locate, organize, and reference written information from various sources to communicate with others.
		9.4.12.P.7	Evaluate and use information resources to accomplish specific occupational tasks.
		9.4.12.P.8	Use correct grammar, punctuation, and terminology to write and edit documents.
		9.4.12.P.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
		9.4.12.P.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
		9.4.12.P.11	Apply active listening skills to obtain and clarify information.

		9.4.12.P.12	Develop and interpret tables, charts, and figures to support written and oral communications.
		9.4.12.P.13	Listen to and speak with diverse individuals to enhance communication skills.
		9.4.12.P.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
	Problem-Solving and Critical Thinking: Critical and creative thinking strategies facilitate innovation and problem-solving independently and in teams.	9.4.12.P.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
		9.4.12.P.16	Employ critical thinking and interpersonal skills to resolve conflicts with staff and/or customers.
		9.4.12.P.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
		9.4.12.P.18	Conduct technical research to gather information necessary for decision-making.
		9.4.12.P.19	Formulate ideas, proposals, and solutions related to problems with this cluster to ensure effective and efficient delivery of products or services to consumers.
		9.4.12.P.20	Analyze and evaluate ideas, proposals, and solutions related to problems in this cluster and select the best deliverable to meet business objectives.
		9.4.12.P.21	Develop, implement, and evaluate solutions related to problems in this cluster using a structured problem-solving process to improve business functioning.
	Information Technology Applications: Technology is used to access, manage, integrate, and disseminate information.	9.4.12.P.22	Employ technological tools to expedite workflow.
		9.4.12.P.23	Operate electronic mail applications to communicate.
		9.4.12.P.24	Operate Internet applications to perform tasks.
		9.4.12.P.25	Operate writing and publishing applications to prepare communications.
		9.4.12.P.26	Operate presentation applications to prepare and deliver presentations.
		9.4.12.P.27	Employ spreadsheet applications to organize and manipulate data.
		9.4.12.P.28	Employ database applications to manage data.
		9.4.12.P.29	Employ collaborative/groupware applications to facilitate group work.
		9.4.12.P.30	Employ computer operations applications to manage tasks.

		9.4.12.P.31	Use computer-based equipment (containing embedded computers or processors) to control devices.
		9.4.12.P.32	Demonstrate the effective use of computer-based equipment (i.e., equipment driven by embedded computers or processors) to control electromechanical devices commonly used in this cluster.
		9.4.12.P.33	Use geographic information systems (GIS) software applications common to this cluster to coordinate and facilitate business-related tasks.
	Systems: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.P.34	Describe the nature and types of business organizations to build an understanding of the scope of organizations.
		9.4.12.P.35	Describe and use quality control systems and practices to ensure quality products and services.
		9.4.12.P.36	Analyze and summarize the roles and business functions involved in organizations in this cluster to demonstrate understanding of the industry as a system.
		9.4.12.P.37	Analyze performance of organizations in this cluster using industry-accepted metrics to demonstrate understanding of how organizations manage and improve business functioning.
		9.4.12.P.38	Demonstrate understanding of important trends influencing the field by assessing and summarizing the impact of various economic, social, and technological changes on an organization as well as on the cluster as a whole.
		9.4.12.P.39	Evaluate risk management strategies used in the cluster to prevent and reduce risks and exposures in order to demonstrate understanding of risk management as a tool for improving organizational performance.
		9.4.12.P.40	Demonstrate an understanding of the impact that regulations have on business functioning by analyzing and summarizing the roles and functions of government in regulating and supporting organizations in the cluster.
		9.4.12.P.41	Demonstrate an understanding of ongoing relationships with both internal and external customer groups in order to sustain business operations in this cluster.
		9.4.12.P.42	Develop plans and budgets to accomplish organizational goals and objectives.

		9.4.12.P.43	Develop plans for improving organizational performance in the areas of customer service and operations in order to achieve acceptable levels of customer satisfaction.
		9.4.12.P.44	Assess measures to demonstrate compliance with organizational policies and government laws and regulations affecting this cluster.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.P.45	Demonstrate knowledge of personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments.
		9.4.12.P.46	Demonstrate knowledge of employee rights and responsibilities and employers' obligations to maintain workplace safety and health.
		9.4.12.P.47	Identify emergency procedures that are necessary to provide aid in workplace accidents.
		9.4.12.P.48	Identify response techniques to create a disaster and/or emergency response plan.
		9.4.12.P.49	Explain health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
		9.4.12.P.50	Evaluate organizational policies and procedures that contribute to continuous improvement in performance and compliance.
		9.4.12.P.51	Assess measures to maintain safe and healthful working conditions in organizations in this cluster.
		9.4.12.P.52	Describe how employer rules concerning worksite occupational safety and health promote safe and healthful working conditions in this cluster.
		9.4.12.P.53	Assess methods to reduce workplace hazards common in the cluster in order to promote safe and accident-free work environments.
		9.4.12.P.54	Assess health hazards common to the cluster in order to promote healthy work environments.
		9.4.12.P.55	Describe regulatory areas in the cluster to demonstrate an understanding of key protocols for protecting health, safety, and the environment.
		9.4.12.P.56	Analyze and explain major aspects of and benefits promoted by the implementation of health, safety, and environmental management systems in organizations in this cluster.

		9.4.12.P.57	Analyze and explain how government agencies promote compliance and improved health, safety, and environmental performance in organizations in this cluster.
		9.4.12.P.58	Analyze and explain the methods employed to promote improved health, safety, and environmental performance in this cluster in order to build understanding of how organizations approach improved performance in important areas.
		9.4.12.P.59	Describe health, safety, and environmental procedures and protocols established for organizations in this cluster.
		9.4.12.P.60	Evaluate current practices and develop a comprehensive plan to improve health, safety, and environmental performance.
	Leadership and Teamwork: Effective leadership and teamwork strategies foster collaboration and cooperation between business units, business partners, and business associates toward the accomplishment of organizational goals.	9.4.12.P.61	Employ leadership skills to accomplish goals and objectives.
		9.4.12.P.62	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
		9.4.12.P.63	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
		9.4.12.P.64	Establish and maintain effective relationships in order to accomplish objectives and tasks.
		9.4.12.P.65	Conduct and participate in meetings to accomplish tasks.
		9.4.12.P.66	Employ mentoring skills to assist others.
	Ethics and Legal Responsibilities: Legal responsibilities, professional ethics, and codes of conduct affect management practices, business performance, and regulatory compliance, as well as the confidence of customers, business partners, and investors.	9.4.12.P.67	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
		9.4.12.P.68	Interpret and explain written organizational policies and procedures that help workers perform their tasks according to employer rules and expectations.
		9.4.12.P.69	Analyze and summarize legal responsibilities associated with different roles and functions within organizations in this cluster to demonstrate awareness of the influence that laws and regulations have on ethics in the workplace.
		9.4.12.P.70	Demonstrate understanding of corporate policies in light of ethical and legal responsibilities.
		9.4.12.P.71	Evaluate strategies for responding to unethical or illegal actions of individuals and organizations and demonstrate how to respond to such situations.

Employability and Career Development: Employability skills and career and entrepreneurship opportunities build the capacity for successful careers in a global economy.	9.4.12.P.72	Identify and demonstrate positive work behaviors and personal qualities needed to succeed.
	9.4.12.P.73	Develop a Personalized Student Learning Plan to meet career goals and objectives.
	9.4.12.P.74	Demonstrate skills related to seeking and applying for employment in a desired job.
	9.4.12.P.75	Maintain a career portfolio to document knowledge, skills, and experience in a career field.
	9.4.12.P.76	Demonstrate skills in evaluating and comparing employment opportunities in order to accept employment positions that match career goals.
	9.4.12.P.77	Identify and exhibit traits for retaining employment.
	9.4.12.P.78	Identify and explore careers in one or more career pathways to build an understanding of the opportunities available in the cluster.
	9.4.12.P.79	Examine requirements for career advancement to plan for continuing education and training.
	9.4.12.P.80	Research professional development opportunities needed to keep current on relevant trends and information within the cluster.
	9.4.12.P.81	Examine licensing, certification, and credentialing requirements at the national, state, and local levels to maintain compliance with industry requirements.
	9.4.12.P.82	Examine employment opportunities in entrepreneurship as an option for career planning.
	9.4.12.P.83	Evaluate written organizational policies, rules, and procedures in order to function ethically and effectively within the workplace.
	9.4.12.P.84	Assess and evaluate career opportunities in one or more pathways to broaden awareness of careers available in the cluster.
Technical Skills: Technical knowledge and skills play a role in all careers within the cluster and pathway.	9.4.12.P.85	Employ information management techniques and strategies to assist in decision-making.
	9.4.12.P.86	Employ planning and time management skills and tools to enhance results and complete work tasks.
	9.4.12.P.87	Analyze and assess the roles and functions of transportation-related technological systems used in this cluster in order to demonstrate awareness of necessary technical skills.

		9.4.12.P.88	Measure and analyze the output of technological systems used in this cluster in order to enhance performance and reliability of timing, cost projecting, and forecasting in transportation operations.
		9.4.12.P.89	Summarize the potential impact technological systems may have on health, safety, and environmental risks in this cluster in order to demonstrate an understanding of the impact a technological system can have on managing compliance.
		9.4.12.P.90	Evaluate and recommend a technological system for implementation to demonstrate an understanding of the factors involved in selecting an appropriate system to manage risk and compliance in this cluster.
		9.4.12.P.91	Research and describe efforts to improve the use and performance of technological systems in this cluster in order to provide the correct data needed to make informed decisions related to managing risk and compliance.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**		
Pathway	*(1) Transportation Operations*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.P(1).1	Develop transportation plans to move people and/or goods to meet customer requirements.
		9.4.12.P(1).2	Assess performance of transportation operations to improve service levels, enhance quality, and reduce costs.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.P(1).3	Assess compliance with company policies and government laws and regulations to better manage safety, security, health, economic, and environmental risk.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**
Pathway	*(2) Logistics Planning & Management Services*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems:** • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.P(2).1	Analyze company or customer needs to develop targeted and successful logistics planning and management services.
		9.4.12.P(2).2	Analyze the performance of logistics systems to provide targeted and successful logistics planning and management services.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**
Pathway	**(3) Warehousing & Distribution Center Operations**

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.P(3).1	Plan storage of incoming and outgoing goods and materials to demonstrate efficient and effective warehouse and distribution center operations.
		9.4.12.P(3).2	Assess performance of warehousing and distribution operations to meet customer and business requirements.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.P(3).3	Analyze warehouse and distribution center operations for compliance with company policies and government laws and regulations in order to improve operations and promote safe and environmentally friendly workplaces.

Content Area	21st-Century Life & Careers			
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)			
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**			
Pathway	***(4) Facility & Mobile Equipment Maintenance***			
By the end of grade	**Content Statement**		**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.		9.4.12.P(4).1	Develop preventive maintenance plans and systems to meet business and equipment manufacturer requirements.
			9.4.12.P(4).2	Monitor and evaluate the performance of maintenance plans and systems.
			9.4.12.P(4).3	Develop and manage repair plans.
			9.4.12.P(4).4	Develop plans for improving facilities/equipment/system performance.

Content Area	21st-Century Life & Careers		
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)		
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**		
Pathway	*(5) Transportation Systems/Infrastructure Planning, Management, & Regulations*		
By the end of grade	**Content Statement**	**CPI #**	**Cumulative Progress Indicator (CPI)**
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12.P(5).1	Assess infrastructure conditions and plan maintenance in order to enhance systems used to transport people and products.
		9.4.12.P(5).2	Assess and plan implementation of transportation services to provide safe, reliable, high quality transportation for people and products.
	Safety, Health, and Environment: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.P(5).3	Assess and manage transportation systems to improve system utilization, flow, safety, and environmental performance.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**
Pathway	*(6) Health, Safety, & Environmental Management*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Safety, Health, and Environment**: Implementation of health, safety, and environmental management systems and organizational policies and procedures impacts organizational performance, regulatory compliance, and continuous improvement.	9.4.12.P(6).1	Evaluate and implement rules and regulations to comply with health, safety, and environmental requirements.
		9.4.12.P(6).2	Assess and recommend health, safety, and environmental improvements to promote safe, healthy transportation and logistics environments.

Content Area	21st-Century Life & Careers
Standard	**9.4 Career and Technical Education:** All students who complete a career and technical education program will acquire academic and technical skills for careers in emerging and established professions that lead to technical skill proficiency, credentials, certificates, licenses, and/or degrees. (For descriptions of the 16 career clusters, see the Career Clusters Table.)
Strand	**P. Transportation, Distribution, & Logistics Career Cluster**
Pathway	*(7) Sales & Service*

By the end of grade	Content Statement	CPI #	Cumulative Progress Indicator (CPI)
12	**Systems**: • Roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment impact business operations. • Key organizational systems impact organizational performance and the quality of products and services. • Understanding the global context of 21st-century industries and careers impacts business operations.	9.4.12P(7).1	Demonstrate knowledge of transportation, logistics, and distribution-related sales and service operations on an ongoing basis.
		9.4.12P(7).2	Demonstrate knowledge of transportation-related products and services in order to promote development of existing and future client base.

More About CTE Programs

1. As per N.J.A.C. 6A:19-3.1, **"**CTE programs" means a program curriculum, which shall include:

- A coherent sequence of courses of not fewer than three identifiable courses.
- Classroom instruction combined and coordinated with field, shop, or laboratory experiences, structured learning experiences, or other experiences which are appropriate to the competencies of the 16 career clusters.
- Academic content that is aligned to the New Jersey Core Curriculum Content Standards for secondary programs.
- Content that meets industry-approved or nationally recognized skill standards.
- Industry-based skill certificates, when available.
- Opportunities to participate in structured learning experiences.
- Opportunities to participate in career and technical student organizations.
- A career and technical education safety and health program and plan.
- Adequate resources required to operate the program, including sufficient and appropriate instructional and support staff, facilities, and equipment.
- A plan to establish relevant postsecondary education and training linkages.
- Procedures for the evaluation of student and program performance, and methods to improve programs based upon evaluation results.

2. Carl D. Perkins Career and Technical Education Improvement Act of 2006
SEC. 2. PURPOSE.
The purpose of this Act is to develop more fully the academic and career and technical skills of secondary education students and postsecondary education students who elect to enroll in career and technical education programs, by—

(1) building on the efforts of States and localities to develop challenging academic and technical standards and to assist students in meeting such standards, including preparation for high skill, high wage, or high demand occupations in current or emerging professions;

(2) promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instruction, and that link secondary education and postsecondary education for participating career and technical education students;

(3) increasing State and local flexibility in providing services and activities designed to develop, implement, and improve career and technical education, including tech prep education;

(4) conducting and disseminating national research and disseminating information on best practices that improve career and technical education programs, services, and activities;

(5) providing technical assistance that—

(A) promotes leadership, initial preparation, and professional development at the State and local levels; and

(B) improves the quality of career and technical education teachers, faculty, administrators, and counselors;

(6) supporting partnerships among secondary schools, postsecondary institutions, baccalaureate degree granting institutions, area career and technical education schools, local workforce investment boards, business and industry, and intermediaries; and

(7) providing individuals with opportunities throughout their lifetimes to develop, in conjunction with other education.

3. "New Jersey Five-Year State Plan for Career and Technical Education" means the State plan for career and technical education created as per the requirements of the Carl D. Perkins Career and Technical Education Act of 2006 and approved by the New Jersey State Board of Education in June 2009. The State plan was created in consultation with academic and career and technical education teachers, faculty, and administrators; career guidance and academic counselors; eligible recipients; charter school authorizers and organizers consistent with State law; parents and students; institutions of higher education; the State tech prep coordinator and representatives of tech prep consortia (if applicable); entities participating in activities described in section 111 of Public Law 105-220; interested community members (including parents and community organizations); representatives of special populations; representatives of business and industry (including representatives of small business); and representatives of labor organizations in the State, and in consultation with the Governor of the State.

4. **"Career Clusters"** mean groupings of occupations/career specialties used as an organizing tool for curriculum design and instruction. Occupations/career specialties are grouped into career clusters based on the fact that they require a set of common knowledge and skills for career success (see States' Career Cluster Initiative, below). The knowledge and skills represented by career clusters prepare learners for a full range of occupations/career specialties, focusing on the holistic, polished blend of technical, academic, and employability knowledge and skills. This approach enhances the more traditional approach to career and technical education in which instruction may focus on one or two occupations and emphasize only specific occupational skills.

5. States' Career Cluster Initiative: The States' Career Clusters Initiative (SCCI) is an initiative established under the National Career Technical Education Foundation to provide career clusters as a tool for seamless transition from education to career in this era of changing workplace demands. SCCI helps states as they connect career technical education (CTE) to education, workforce preparation, and economic development. To this end, SCCI develops new products and promotes information-sharing, techniques, and methods to aid the development and implementation of career clusters within states.

6. **"Career Pathways"** mean sub-groupings of occupations/career specialties used as an organizing tool for curriculum design and instruction. Occupations/career specialties are grouped into pathways based on the fact that they require a set of common knowledge and skills for career success.

7. **"Knowledge and Skills"** mean industry-validated statements that describe what learners/employees need to know and be able to do for career success within a career cluster and/or career pathway.

8. National Association of State Directors of Career and Technical Education Consortium: Founded in 1920, the National Association of State Directors of Career Technical Education Consortium is the Washington, D.C.-based professional society of the state and territory agency heads responsible for career technical education. The state directors are committed to leadership and results.

9. **National Advisory Committees (NACs):** The career cluster national advisory committees of the States' Career Clusters Initiative are composed of leaders from education, business/industry, government entities, professional associations, and labor. NACs collaborate in regard to content review of Cluster Knowledge and Skills Statements and other career cluster-related business. The career cluster leaders for each of the 16 national advisory committees are:

Agriculture, Food, & Natural Resources: National Council for Agricultural Education
Architecture & Construction: Home Builders Institute
Arts, Audio/Video Technology & Communications: VTECS, A Consortium for Innovative Career and Workforce Development Resources
Business Management & Administration: National Association of State Directors of Career and Technical Education Consortium
Education & Training: Michigan Department of Labor & Economic Growth and Career Communications, Inc.
Finance: National Association of State Directors of Career and Technical Education Consortium
Government & Public Administration: National Association of State Directors of Career and Technical Education Consortium
Health Science: The National Consortium on Health Science & Technology Education
Hospitality & Tourism: National Association of State Directors of Career and Technical Education Consortium
Human Services: National Association of State Directors of Career and Technical Education Consortium
Information Technology: CompTIA
Law, Public Safety, Corrections & Security: The National Partnership for Careers in Law, Public Safety, Corrections and Security
Manufacturing: National Council for Advanced Manufacturing
Marketing: National Association of State Directors of Career and Technical Education Consortium
Science, Technology, Engineering & Mathematics: Project Lead the Way
Transportation, Distribution, & Logistics: Interim Leader: Illinois Office of Educational Services

10. **Standard 9.4 Pre-Focus Groups:** The following career and technical education teacher professional organizations and individuals provided input to the New Jersey Department of Education, Office of Career and Technical Education, in developing the draft of Standard 9.4 Career and Technical Education:

- **Agriculture:** NJ FFA Association state director and teacher advisors
- **Arts, A/V Technology, and Communications:** NJ Television Educators Consortium and Ms. Christina Marte, Ocean County Vocational Technical School District, National Dance Education Organization Teacher of the Year
- **Business, Management, and Administration:** New Jersey Future Business Leaders of America
- **Health:** NJ Health Occupations Students of America
- **Hospitality and Tourism:** Cape May County Technical School District Hospitality & Tourism Tech Prep grant program
- **Human Services:** NJ Family, Home and Consumer Sciences Career and Technical Student Association
- **IT:** NJ Technology Student Association and the NJ Business/Technology Education Association
- Law, Public Safety, Corrections & Security: Cape May County Vocational School District Law and Public Safety Tech Prep grant program

- **Manufacturing:** Career and Technical Education Association of New Jersey
- **Marketing:** NJ DECA, an Association of Marketing Students
- **STEM:** Technology: Project Lead the Way Engineering grant program, Watchung Hills Regional High School and Project Lead the Way Science grant program, Williamstown High School
- **Transportation, Distribution & Logistics:** Dennis Sienicki, Hunterdon County Polytech automotive instructor and New Jersey evaluation team leader for National Automotive Technician Education Foundation

11. "**Career and Technical Education Teaching Certificates"** means an instructional certificate with a career and technical education endorsement, issued by the New Jersey Department of Education, which authorize the holder to teach approved career and technical education programs in all public schools in accord with N.J.A.C. 6A:9-11.2. N.J.A.C. 6A:9-9.2(a)9.iv, Endorsements and authorizations

12. **New Jersey Career and Technical Education Advisory Council:** The New Jersey Department of Education, Office of Career and Technical Education (OCTE), formed the New Jersey Career and Technical Education Advisory Council (Advisory Council) in accordance with Section 122(a)(3) of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) and the Guide for Submission of State Plans, in order to initiate a process to elicit public input on the draft Five-Year State Plan.

MIDDLE SCHOOL HEALTH – SUPPLEMENTAL FILMS

Bill Nye Series (2003-2007)	Osmosis Jones(2002)
Body Systems, Nutrition, Addiction	The Incredible Human Machine (2008)
National Geographic – Human Body Series (2000)	Setting and Achieving Goals (2002)
Teen Health – Hygiene (2003)	Fitness and Conditioning (2000)
Broken Bones (2001)	Growing Up Program (2004)
Project Alert – Drugs and Alcohol (2001 - 2007)	Supersize Me (2004)
The Muscular System (2001)	Discovery Channel – Strength (2008)
Human Body – Pushing the Limits (2007)	Antibiotics – The Wonder Drug (2000)
Discovery Channel – Heart Attack (2000)	Food, Health, and Exercise (2003)
Understanding Eating Disorders (2003)	No Ifs, Ands, or Butts (2002)
Getting Stupid (2003)	Think Twice – Marijuana and Cancer (2002)
Spit Tobacco Exposed (2000)	Oprah – Dr. Oz / Body Parts (2007)
Think What's Wrong With Inhalants (2001)	AIDS – Everything You Should Know (2001)
Up (2007)	Obesity (2001)
Fat Like Me (2003)	Our Immune System (2001)
In The Mix – Eat Smart and Exercise (2006)	Body Defense and Disease (2004)
Super Bugs – Common Cold (2005)	Sexual Responsibility (2004)
Deadly Desires (2003)	AIDS : Ending the Epidemic (2002)
Straight Talk About STDs (2002)	The Science of HIV (2000)
Smoking: Truth or Dare (2003)	Teen Files – Tobacco (2003)
Kicking Nicotine (2004)	Drinking and Driving Kills (2001)
Teen Files – Truth About Drinking (2003)	Standard Deviants – Nutrition (2007)
Understanding Obesity (2001)	Eat This, Not That (2008)
Nova – The Universe Within (2008)	The Meth Epidemic (2006)
The Common Cold (2000)	When in Doubt, Throw it Out (2000)
Marijuana (2002)	Wash Those Hands (2000)
The Age of AIDS (2006)	Heart Attack (2000)
I Can't Breathe – A Smoker's Story (2003)	Life After a Cancer Diagnosis (2006)
Marijuana – Facts, Myths and Decisions (2007)	Party Drugs (2005)
Prescriptions for Trouble (2004)	Hunger Point (2003)
My Pyramid – Simple Steps for Healthy Living (2006)	Polio – PBS (2006)
In The Mix–Fit For Life–Eat Smart and Exercise (2005)	Influenza – PBS (2006)
Virus (2006)	The Blame Game (2006)
Bacteria (2006)	Meth (2006)
Steroids (2006)	The Science of HIV (2007)
Heart Attack (2007)	The Age of AIDS (2007)
Ecstasy – The Facts (2001)	Natural High (2008)
Drug Uses and Abuses (2007)	Drug Education for Teens – Steroids (2004)
The Truth About Hallucinogens (2003)	Club Drugs – The Real Deal (2002)
Heroin: A Dose of Reality (2005)	Life or Meth (2008)
Medicinal Marijuana (2007)	Drug Use and Abuse – Stimulants (2001)
AIDS Update (2004)	Facts on STDs (2002)
The Dark Side of the Sun (2005)	Natural High Series (2007)
DUI – Dead in 5 Seconds (2000)	

New Jersey Legislative Statutes Summary

- **Accident and Fire Prevention (N.J.S.A. 18A:6-2) requires instruction in accident and fire prevention.**
  Regular courses of instruction in accident prevention and fire prevention shall be given in every public and private school in this state. Instruction shall be adapted to the understanding of students at different grade levels.

- **Breast Self-Examination (N.J.S.A. 18A:35-5.4) requires instruction on breast self-examination.**
  Each board of education which operates an educational program for students in grades 7 through 12 shall offer instruction in breast self-examination. The instruction shall take place as part of the district's implementation of the Core Curriculum Content Standards in Comprehensive Health and Physical Education, and the comprehensive health and physical education curriculum framework shall provide school districts with sample activities that may be used to support implementation of the instructional requirement.

- **Bullying Prevention Programs (N.J.S.A. 18A:37- 17) requires the establishment of bullying prevention programs.**
  Schools and school districts are encouraged to establish bullying prevention programs and other initiatives involving school staff, students, administrators, volunteers, parents, law enforcement, and community members. To the extent funds are appropriated for these purposes, a school district shall: (1) provide training on the school district's harassment, intimidation, or bullying policies to school employees and volunteers who have significant contact with students; and (2) develop a process for discussing the district's harassment, intimidation, or bullying policy with students. Information regarding the school district policy against harassment, intimidation, or bullying shall be incorporated into a school's employee training program.

- **Cancer Awareness (N.J.S.A. 18A:40-33) requires the development of a school program on cancer awareness.**
  The Commissioner of Education, in consultation with the State school boards, shall develop a cancer awareness program appropriate for school-aged children.

- **Domestic Violence Education (N.J.S.A. 18A:35-4.23) allows instruction on problems related to domestic violence and child abuse.**
  A board of education may include instruction on the problems of domestic violence and child abuse in an appropriate place in the curriculum of elementary school, middle school, and high school pupils. The instruction shall enable pupils to understand the psychology and dynamics of family violence, dating violence, and child abuse; the relationship of alcohol and drug use to such violence and abuse; and the relationship of animal cruelty to such violence and abuse; and to learn methods of nonviolent problem-solving.

- **Gang Violence Prevention (18A:35-4.26) requires instruction in gang violence prevention for elementary school students.**
  Each board of education that operates an educational program for elementary school students shall offer instruction in gang violence prevention and in ways to avoid membership in gangs. The instruction shall take place as part of the district's implementation of the Core Curriculum Content Standards in Comprehensive Health and Physical Education, and the comprehensive health and physical education curriculum framework shall provide school districts with sample materials that may be used to support implementation of the instructional requirement.

- **Health, Safety, and Physical Education (N.J.S.A.18A:35) requires that all students in grades 1 through 12 participate in at least two and one-half hours of health, safety, and physical education in each school week.**
  Every pupil, except kindergarten pupils, attending the public schools, insofar as he or she is physically fit and capable of doing so, as determined by the medical inspector, shall take such courses, which shall be a part of the curriculum prescribed for the several grades, and the conduct and attainment of the pupils shall be marked as in other courses or subjects, and the standing of the pupil in connection therewith shall form a part of the requirements for promotion or graduation. The time devoted to such courses shall aggregate at least two and one-half hours in each school week, or proportionately less when holidays fall within the week.

- **Drugs, Alcohol, Tobacco, Controlled Dangerous Substances, and Anabolic Steroids (N.J.S.A. 18A:40A-1) requires instructional programs on drugs, alcohol, anabolic steroids, tobacco, and controlled dangerous substances and the development of curriculum guidelines.**
  Instructional programs on the nature of drugs, alcohol, anabolic steroids, tobacco, and controlled dangerous substances, as defined in section 2 of P.L.1970, c.226 (C.24:21-2), and their physiological, psychological, sociological, and legal effects on the individual, the family, and society shall be taught in each public school and in each grade from kindergarten through 12 in a manner adapted to the age and understanding of the pupils. The programs shall be based upon the curriculum guidelines established by the Commissioner of Education and shall be included in the curriculum for each grade in such a manner as to provide a thorough and comprehensive treatment of the subject.

- **Lyme Disease Prevention (N.J.S.A. 18A:35-5.1) requires the development of Lyme disease curriculum guidelines.**
  The guidelines shall emphasize disease prevention and sensitivity for victims of the disease. The Commissioner of Education shall periodically review and update the guidelines to insure that the curriculum reflects the most current information available.

- **Sexual Assault Prevention (N.J.S.A. 18A:35-4.3) requires the development of a sexual assault prevention education program**.
  The Department of Education in consultation with the advisory committee shall develop and establish guidelines for the teaching of sexual assault prevention techniques for utilization by local school districts in the establishment of a sexual assault prevention education program. Such program shall be adapted to the age and understanding of the pupils and shall be emphasized in appropriate places of the curriculum sufficiently for a full and adequate treatment of the subject.

- **Stress Abstinence (N.J.S.A. 18A:35-4.19-20), also known as the "AIDS Prevention Act of 1999," requires sex education programs to stress abstinence.**
  Any sex education that is given as part of any planned course, curriculum, or other instructional program and that is intended to impart information or promote discussion or understanding in regard to human sexual behavior, sexual feelings and sexual values, human sexuality and reproduction, pregnancy avoidance or termination, HIV infection or sexually transmitted diseases, regardless of whether such instruction is described as, or incorporated into, a description of "sex education," "family life education," "family health education," "health education," "family living," "health," "self esteem," or any other course, curriculum program, or goal of education, and any materials including, but not limited, to handouts, speakers, notes, or audiovisuals presented on school property concerning methods for the prevention of acquired immune deficiency syndrome (HIV/AIDS), other sexually transmitted diseases, and of avoiding pregnancy, shall stress that abstinence from sexual activity is the only completely reliable means of eliminating the sexual transmission of HIV/AIDS and other sexually transmitted diseases and of avoiding pregnancy.

- **Suicide Prevention (N.J.S.A. 18A: 6-111) requires instruction in suicide prevention in public schools.**
  Instruction in suicide prevention shall be provided as part of any continuing education that public school teaching staff members must complete to maintain their certification; and inclusion of suicide prevention awareness shall be included in the Core Curriculum Content Standards in Comprehensive Health and Physical Education.

Public Schools of Edison Township
Divisions of Curriculum and Instruction

Draft 14

Essential Instructional Behaviors

Edison's Essential Instructional Behaviors are a collaboratively developed statement of effective teaching from pre-school through Grade 12. This statement of instructional expectations is intended as a framework and overall guide for teachers, supervisors, and administrators; its use as an observation checklist is inappropriate.

1. Planning which Sets the Stage for Learning and Assessment

Does the planning show evidence of:

a. units and lessons directly related to learner needs, the written curriculum, the New Jersey Core Content Curriculum Standards (NJCCCS), and the Cumulative Progress Indicators (CPI)?
b. measurable objectives that are based on diagnosis of learner needs and readiness levels and reflective of the written curriculum, the NJCCCS, and the CPI?
c. lesson design sequenced to make meaningful connections to overarching concepts and essential questions?
d. provision for effective use of available materials, technology and outside resources?
e. accurate knowledge of subject matter?
f. multiple means of formative and summative assessment, including performance assessment, that are authentic in nature and realistically measure learner understanding?
g. differentiation of instructional content, processes and/or products reflecting differences in learner interests, readiness levels, and learning styles?
h. provision for classroom furniture and physical resources to be arranged in a way that supports student interaction, lesson objectives, and learning activities?

2. Observed Learner Behavior that Leads to Student Achievement

Does the lesson show evidence of:

a. learners actively engaged throughout the lesson in on-task learning activities?
b. learners engaged in authentic learning activities that support reading such as read alouds, guided reading, and independent reading utilizing active reading strategies to deepen comprehension (for example inferencing, predicting, analyzing, and critiquing)?
c. learners engaged in authentic learning activities that promote writing such as journals, learning logs, creative pieces, letters, charts, notes, graphic organizers and research reports that connect to and extend learning in the content area?
d. learners engaged in authentic learning activities that promote listening, speaking, viewing skills and strategies to understand and interpret audio and visual media?
e. learners engaged in a variety of grouping strategies including individual conferences with the teacher, learning partners, cooperative learning structures, and whole-class discussion?
f. learners actively processing the lesson content through closure activities throughout the lesson?
g. learners connecting lesson content to their prior knowledge, interests, and personal lives?
h. learners demonstrating increasingly complex levels of understanding as evidenced through their growing perspective, empathy, and self-knowledge as they relate to the academic content?
i. learners developing their own voice and increasing independence and responsibility for their learning?
j. learners receiving appropriate modifications and accommodations to support their learning?

Reflective Teaching which Informs Instruction and Lesson Design

Does the instruction show evidence of:
a.   differentiation to meet the needs of all learners, including those with Individualized Education Plans?
b.   modification of content, strategies, materials and assessment based on the interest and immediate needs of students during the lesson?
c.   formative assessment of the learning before, during, and after the lesson, to provide timely feedback to learners and adjust instruction accordingly?
d.   the use of formative assessment by both teacher and student to make decisions about what actions to take to promote further learning?
e.   use of strategies for concept building including inductive learning, discovery-learning and inquiry activities?
f.   use of prior knowledge to build background information through such strategies as anticipatory set, K-W-L, and prediction brainstorms?
g.   deliberate teacher modeling of effective thinking and learning strategies during the lesson?
h.   understanding of current research on how the brain takes in and processes information and how that information can be used to enhance instruction?
i.   awareness of the preferred informational processing strategies of learners who are technologically sophisticated and the use of appropriate strategies to engage them and assist their learning?
j.   activities that address the visual, auditory, and kinesthetic learning modalities of learners?
k.   use of questioning strategies that promote discussion, problem solving, and higher levels of thinking?
l.   use of graphic organizers and hands-on manipulatives?
m.   creation of an environment which is learner-centered, content rich, and reflective of learner efforts in which children feel free to take risks and learn by trial and error?
n.   development of a climate of mutual respect in the classroom, one that is considerate of and addresses differences in culture, race, gender, and readiness levels?
o.   transmission of proactive rules and routines which students have internalized and effective use of relationship-preserving desists when students break rules or fail to follow procedures?

3. Responsibilities and Characteristics which Help Define the Profession

Does the teacher show evidence of:
a.   continuing the pursuit of knowledge of subject matter and current research on effective practices in teaching and learning, particularly as they tie into changes in culture and technology?
b.   maintaining accurate records and completing forms/reports in a timely manner?
c.   communicating with parents about their child's progress and the instructional process?
d.   treating learners with care, fairness, and respect?
e.   working collaboratively and cooperatively with colleagues and other school personnel?
f.   presenting a professional demeanor?