

Name: _____

Grade 5

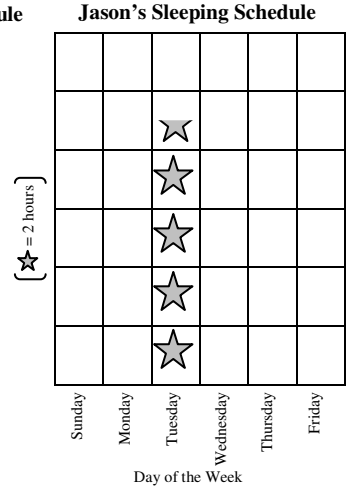
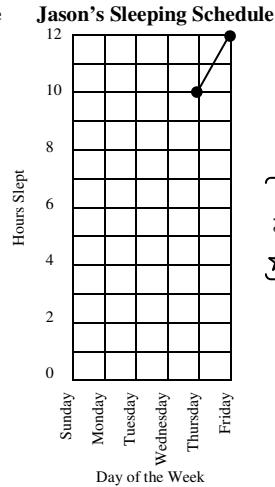
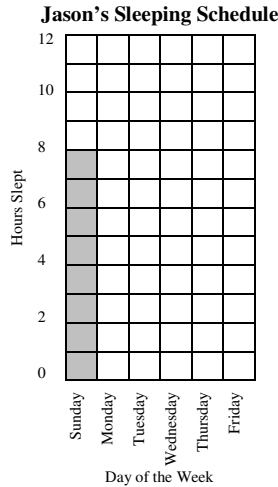
DATA MANAGEMENT & PROBABILITY: ANALYZING DATA

Don't forget to try the *Interpreting Data* activity first! Go to mathfrog.ca for the link.

1. For six days, Jason recorded the number of hours he slept.

Day	Hours of Sleep
Sunday	8
Monday	10
Tuesday	9
Wednesday	11
Thursday	10
Friday	12

- a) Use the data at the left to complete the following bar graph, line graph and pictograph.



- b) Calculate the mean number of hours that Jason slept.

- c) What is the mode?

- d) Jason became ill with the flu on Saturday and slept for 17 hours. Calculate the new:

i) mean. _____

ii) mode. _____



Mean is the average of a set of numbers.

Mode is the most frequent number in a set.

5, 7, 4, 7, 7

The mean is 6

$$\frac{5 + 7 + 4 + 7 + 7}{5} = \frac{30}{5} = 6$$

The mode is 7

2. For many years, Statistics Canada has recorded the average number of people per house.

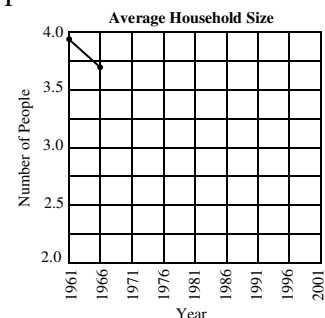
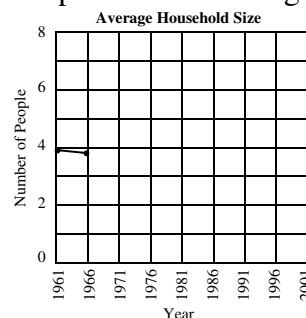
Year	Average Number of People per House
1961	3.9
1966	3.7
1971	3.5
1976	3.1
1981	2.9
1986	2.8
1991	2.7
1996	2.6
2001	2.6



- a) What is the difference between the highest and lowest average number of people per house? _____

- b) In one sentence, describe what seems to be happening to the average number of people per house.

- c) Complete the following line graphs.



- d) Do you prefer the graph on the left or on the right? Why?

Expectations: i) display data in graphs; ii) read, interpret and draw conclusions from data presented in charts, tables and graphs; iii) calculate the mean and mode for a small set of data.

3. Mrs. Chalk just finished marking twenty mathematics tests. The marks were 100, 74, 88, 93, 81, 58, 71, 98, 76, 100, 52, 64, 85, 88, 92, 88, 84, 75, 62, and 71.



a) Complete the following chart.

Mark	Tally	Frequency	Fraction	Decimal
91-100	////	5	5/20	0.25
81-90				
71-80				
61-70				
51-60				

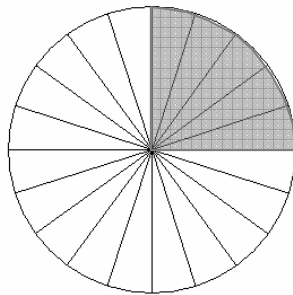
b) Calculate the mean mark.

c) What is the mode?

d) Use the data above to complete the circle graph. Don't forget to include a title and legend.



_____ (title)



Legend

- ☒ 91-100
- ☐ 81-90
- ☐ 71-80
- ☐ 61-70
- ☐ 51-60

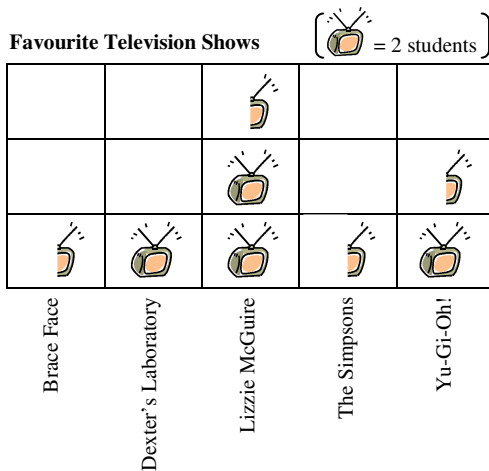
Did You Know?

The average lead pencil can draw a line 56 kilometres long or write approximately 50,000 English words.



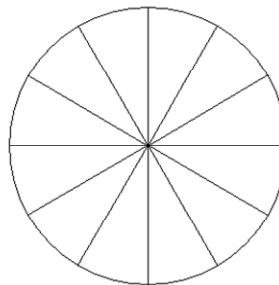
TRY THIS!

Twelve students named their favourite television show. The results are shown below in a pictograph.



a) Use the data to complete the circle graph. Don't forget a title and legend.

_____ (title)



Legend

- ☐ Brace Face
- ☐ Dexter's Laboratory
- ☐ Lizzie McGuire
- ☐ The Simpsons
- ☐ Yu-Gi-Oh!

b) Calculate the number of degrees in each section of the circle graph above. (Hint: The angle at the centre of a circle is 360° .)

Brace Face _____ $^\circ$
 Dexter's Laboratory _____ $^\circ$
 Lizzie McGuire _____ $^\circ$

The Simpsons _____ $^\circ$
 Yu-Gi-Oh! _____ $^\circ$