Dear Parent(s)/Guardian(s),

Patterns occur in the world around us. Recognizing and understanding patterns are key steps in developing a higher level of understanding/awareness and mathematical thinking. We have just about concluded our mathematics unit on patterns. In this unit, we have explored numeric and geometric patterns.

By the end of this unit, your child will be able to:

- Create, identify and extend numeric and geometric patterns, using a variety of tools (e.g. concrete materials, paper and pencil, calculators, spreadsheets)

  e.g. 4, 9, 14, 19 (Answer: This pattern starts at 4 and then add 5 each time)

  Spreadsheet

	A	B	C	D
	Garage sale items			
1	Number of items	Small	Medium	Large
2	1	$1.40	$2.60	$4.90
3	2	$2.80	$5.20	$9.80
4	3	$4.20	$7.80	$14.70
5	4	$5.60	$10.40	$19.60
6	5	$7.00	$13.00	$24.50

  The pattern rule for B is start at $1.40 and add $1.40 each time.
  The pattern rule for C is start at $2.60 and add $2.60 each time.
  The pattern rule for D is start at $4.90 and add $4.90 each time.

- Build a model to represent a number pattern presented in a table of values that show the term number and the term.

Age (weeks)	Birth	Week 1	Week 2	Week 3
Mass (g)	20g	30g	35g	45g

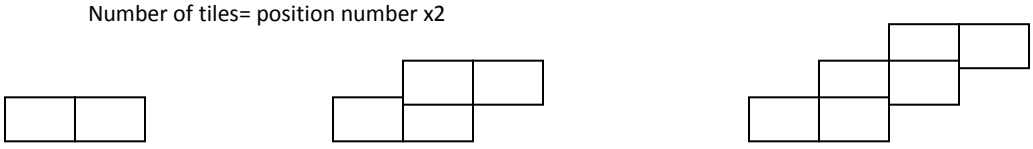
- Make a table of values for a pattern that is generated by adding, subtracting, multiplying or dividing to get the next term, when given the sequence or the pattern rule in words.

  Pattern Rule: Output number=input number x11 +6

Input Number	Output Number
6	72
8	94
1	17
5	61

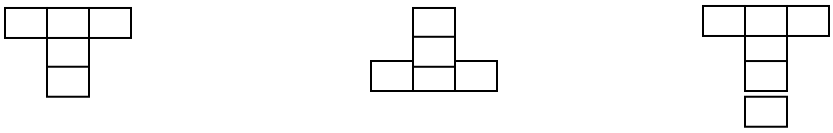
- Make predications related to growing and shrinking geometric and numeric patterns.

  Number of tiles= position number x2



1 2 3

- Extend and create repeating patterns that result from translations, through investigation using a variety of tools



Ali is a sprinter. He runs the same distance each day. On the 1st day, it takes him 5 min 36s. On the 2nd day , it takes him 5 min 30s, and on the 3rd day it takes him 5 min 24s. Assume that this trend continues,

a. How long will his run take on the 5th day? 5min 12s
b. When will his run take 5 minutes? 7th day