Name:

Teacher:

Grade Seven Math Snapshot

Assessment Summary

Competency / Content	Proficiency Marker		
Number Sense	**Emerging**	**Developing**	**Proficient**
Place Value (1-5)			
Number Concepts (6-10)			
Proportional Reasoning			
Fractions & Decimals (1-5)			
Mixed Numbers (6-7)			
Percent (8-11)			
Ratio (12)			
Linear Relations, Geometry & Data Analysis			
Linear Relations (1-4)			
Geometry (5-6)			
Data Analysis (7)			
Computational Fluency			
Modelling (1-2)			
Addition (3-4)			
Subtraction (5-6)			
Multiplication (7-10)			
Division (11-14)			
Order of Operations (15-16)			

Grade Seven

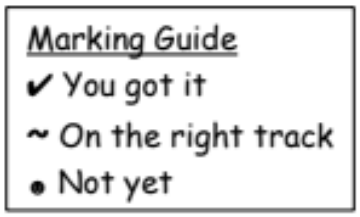
This grade seven Math Snapshot has been designed as a formative assessment and universal screener for students entering grade seven. The assessment is based on foundational skills from prior years and is designed to allow educators to identify the learning needs of students.

The information gained from this tool will serve as a universal screener and will inform individual, small group, and class instruction. It will also help identify patterns of instructional needs in a class as we work to ensure students master these foundational math skills.

Teachers are encouraged to administer the assessment in *small sections* during the first weeks of the year. A small team of teachers will come together to mark the assessments and heat map the results by class.

This snapshot is an inventory of skills and does not represent the full, complex set of skills necessary for proficiency in mathematics. It can provide information to inform our Inclusive Education team about planning and support for student success.

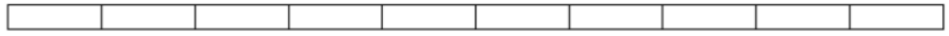
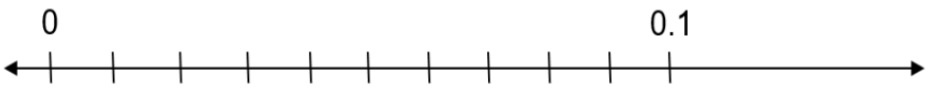
Use the column to the right of each question to indicate student understanding using the following marking guide. Scoring of the assessment will not be calculated numerically, but rather will be looked at holistically to help inform instruction:

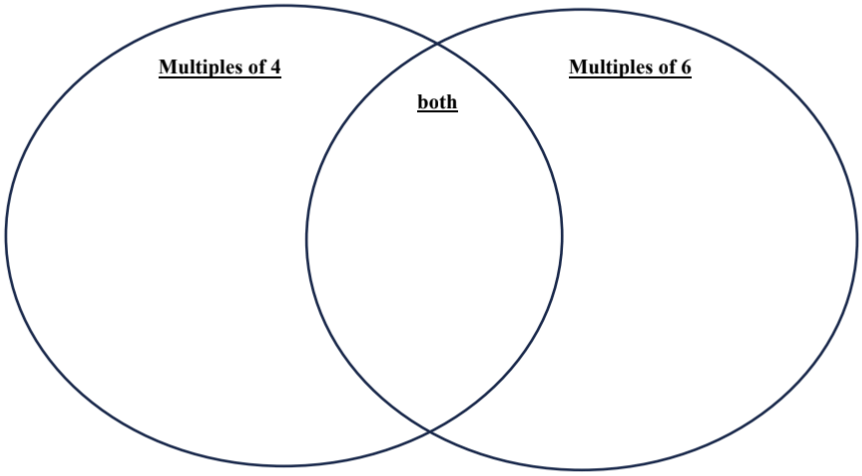
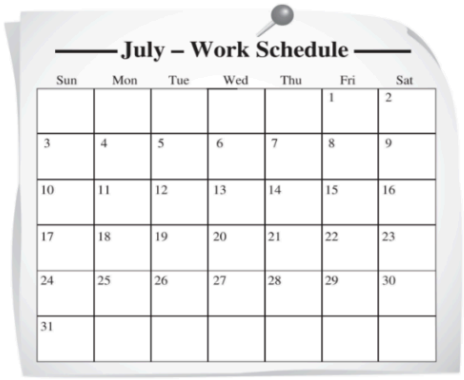


Students will also complete a self-reflection following each section of the snapshot:

This was (circle one):	Easy for me	I need some review	Difficult

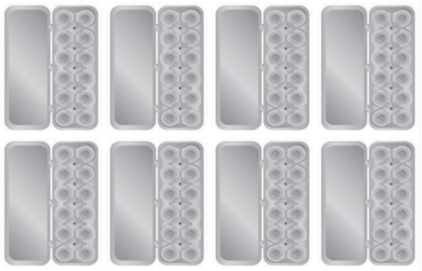
Number Sense

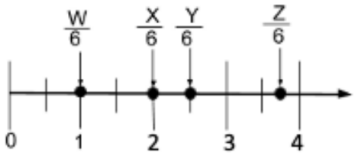
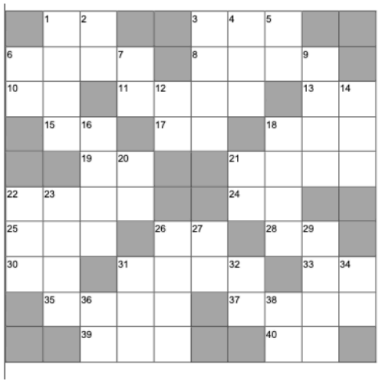
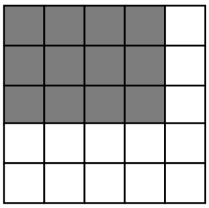
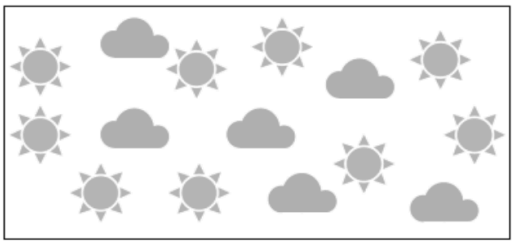
	Place Value	
1.	Write the number for seven billion fourteen million three hundred sixty thousand two hundred ten. _____	
2.	What is 3.016 written in words? _____	
3.	321 479 658 Which number represents each place value? ten millions ___ hundred thousands ___ hundreds ___ tens ___	
4.	If the meter stick represents one billion, where would the one million be located on the stick? METRE STICK Zero (0) one billion 	
5.	Where would you place the following values on the number line below? 0.09 0.02 0.005 0 0.1 	
	Number Concepts	
6.	List all the factors of 84	

7.	Using the numbers listed below, place the numbers where they best fit in the Venn diagram  8 12 13 16 18 32 46 54 72 200 210	
8.	What is the greatest common factor of 24 and 60? GCF: _____	
9.	Heather works every 4th day and Sam works every 3rd day. If they both work on July 5th, which other dates in July will they work together?  	
10.	List the Prime Numbers between 0 and 50.	

This was (circle one):	Easy for me	I need some review	Difficult

Proportional Reasoning

Fractions, Decimals, Percent, Ratio		
1.	Write the following fractions in order from least to greatest. $\frac{1}{2}$ $\frac{5}{8}$ $\frac{2}{6}$ $\frac{3}{4}$	
2.	Write the numbers below in order from least to greatest. 0.37 0.080 0.842 0.361 0.8	
3.	Write $\frac{7}{100}$ as a decimal.	
4.	Write 0.337 as a fraction.	
5.	Use numbers, pictures or words to show that 0.25 has the same **value** as **(equivalent to)** $\frac{2}{8}$	
6.	A farmer fills $3\frac{5}{12}$ of the egg cartons shown below with eggs.  How many eggs in total does the farmer have? _____	

7.	Using the number line, determine what the value of W, X, Y, and Z could be for each dot on the number line below.  W= X= Y= Z=	
8.	Find 10% 0f $85	
9.	What percentage of the crossword grid shown below is shaded grey? 	
10.	What percent is shaded? 	
11.	Represent 25% in **three** different ways.	
12.	What is the ratio of  to  below? 	

This was (circle one):	Easy for me	I need some review	Difficult

Linear Relations, Geometry & Data Analysis

Linear Relations

1. Write the missing number.

   $17 + 23 = 20 + \square$

2. What is the value of n?

   $4 + n = 7$ n=_____

3. What is the value of n?

   $3n = 12$

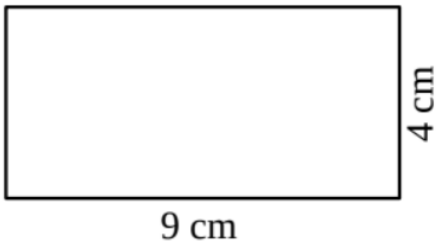
   n = _____

4. Fill in the table for $y = 2x + 3$

x	y
1	
2	
3	
4	

Geometry

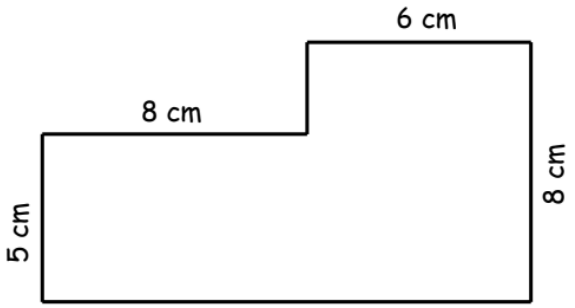
5. Find the area and perimeter of the figure below.



Area: _____

Perimeter: _____

6. Find the area and perimeter of the figure below.

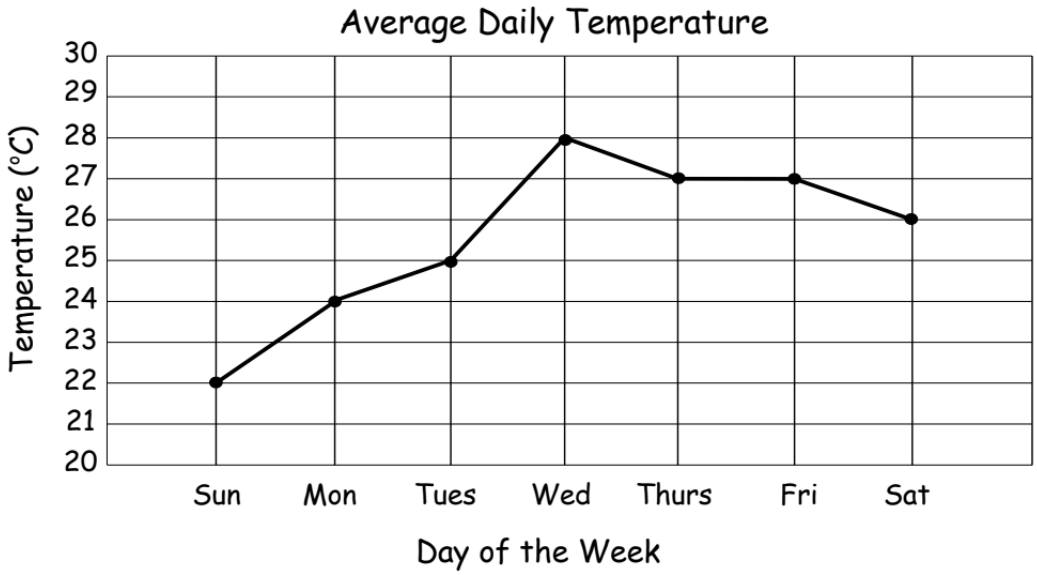


perimeter: _____

area: _____

Data Analysis

7.



On which day was the temperature the highest? _____

How much warmer was it on Friday than Tuesday? _____

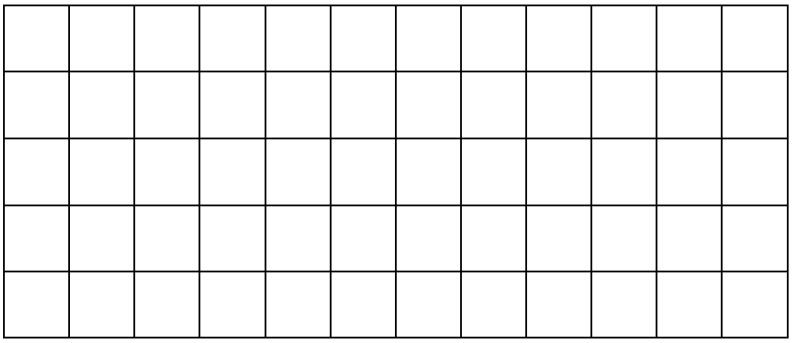
On which two days was the temperature the same?_____

This was (circle one):	Easy for me	I need some review	Difficult

Computational Fluency

Modeling

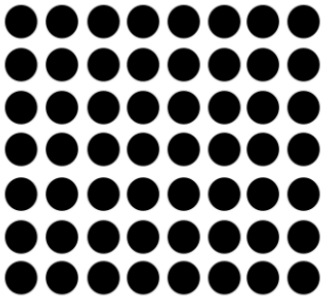
1. Write 2 multiplication equations that match this array.



_____

_____

2. Write 2 division equations that match this array.



_____

_____

Addition

3. 25 905 + 37 358

4. 16.475 + 5.08

Subtraction

5. 97 052 - 36 471

6. 24.07 - 17.346

Multiplication				
7.	5 x 73	8.	86 x 28	
9.	4.25 x 3	10.	23.8 x 0.4	
Division				
11.	252 ÷ 7	12.	363 ÷ 24	
13.	5.4 ÷ 6	14.	11.3 ÷ 0.4	
Order of Operations				
15.	Solve the following expressions: 4 + 6 x 3 ÷ 2 - 1			
16.	18 - 2 x (5 + 3) ÷ 2			

<u>This was (circle one)</u>: Easy for me I need some review Difficult

Answer Key

Number Sense		
Place Value	**1.**	7 014 360 210
	2.	Three and sixteen thousandths
	3.	Ten millions - 2 Hundred thousands - 4 Hundreds - 6 Tens - 5
	4.	Just past 0
	5.	
Number concepts	**6.**	1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84
	7.	Multiples of 4: 8, 16, 32, 200 Multiples of 6: 18, 54, 210 Both: 12, 72 Neither: 13, 46
	8.	GCF: 12
	9.	17th and 29th
	10.	2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47
Proportional Reasoning		
Fractions & Decimals	**1.**	2/6 1/2 5/8 3/4
	2.	0.080, 0.361, 0.37, 0.84, 0.842
	3.	0.07
	4.	337/100
	5.	Answers will vary
Mixed Numbers	**6.**	41 eggs
	7.	w = 6 x = 12 y = 15 z = 22 or 22.5 or 23
Percent	**8.**	$8.50
	9.	32%
	10.	Answers may vary e.g. 25/100 ¼ 0.25

	10.	48%
Ratio	**11.**	9:6 9 to 6 3:2 3 to 2 (not 6:9 or 2:3 or a fraction)
Linear Relations, Geometry, Data Analysis		
Linear Relations	**1.**	20
	2.	n = 3
	3.	n = 4
	4.	5, 7, 9, 11
Measurement	**7.**	Area = 36 cm^2 Perimeter = 26 cm
	8.	Area = 88 cm^2 Perimeter = 44 cm
Data Analysis	**9.**	Highest = Wed. 2° Thurs/Fri
Computational Fluency		
Modeling	**1.**	5 x 12 = 60 12 x 5 = 60
	2.	56 ÷ 8 = 7 56 ÷ 7 = 8
Addition	**3.**	63 263
	4.	21.555
Subtraction	**5.**	60 581
	6.	6.724
Multiplication	**7.**	365
	8.	2 408
	9.	12.75
	10.	9.52
Division	**11.**	36
	12.	15.125 (or 15 R3)
	13.	0.9
	14.	28.25
Order of Operations	**15.**	63 263
	16.	10