Name: _____

Rising 6th grade Summer Math Packet

Summer Math Activities 2017

Dear Student / Parent / Guardian:

The websites and problems are designed to allow you to practice your math skills throughout the summer in a fun way! Your assignment is to:

- Use the websites below to practice the math and record it on your Website Log sheet. Remember, you need to log AT LEAST 10 minutes once a week on at least 10 of the sites listed.
- Solve the problems in the grade level packet. You may print the packet or solve it on a sheet of paper and label each page. (packet is located on the McClintock Website www.mcclintockscots.com)

Your teacher will collect your website log and packet of problems by **September 15, 2017.**

Math Practice Sites The following websites are designed to allow you to practice your math skills throughout the summer in a fun way!

https://www.funbrain.com/math-zone : Games are listed by grade level

http://www.AAAmath.com Interactive Math Activities are listed by grade level

http://www.missmaggie.org/maggies-games/ "Around the World in 80 Seconds"

www.Brainpop.com/math Try a quiz and extra practice

http://www.arcademics.com Lots of great interactive math games

http://www.aplusmath.com Games and Flashcards

http://www.brainormous.com/ Problem solving and math games

http://www.allmath.com/flashcards.php Flash cards for all basic operations

http://www.mathplayground.com/index.html More math games

http://www.rsinnovative.com/rulergame/ Start off with 1inch

https://www.prodigygame.com/ Sign up for a free account. Role playing math game for grades 1-8

http://quizlet.com Practice vocabulary

http://www.kahnacademy.com Practice different math concepts

www.mathforum.org/dr.math Can be used to help answer a math problem

www.webmath.com Math problem solver

You can always choose a different online math game; just make sure it's a FREE game!

Name: _____

Rising 6th grade Summer Math Packet

Summer Math

Summer Math Website Activities Log:

Date	Website Name/Activity	Time Spent	Explain What You Did

Please use the WEBSITE LOG to document what sites you've visited and how long you've spent practicing your math skills and concepts. Remember, you need to log AT LEAST 10 minutes once a week on at least 10 of the sites listed.

Name: _____

Rising 6th grade Summer Math Packet

For 1-6, solve without use of a calculator.

1. $49 \times 975 =$ _____	2. 6,751 $\times 609$	3. What is the product of 9 and 740?
4. Multiply 28 and 5,555.	5. 5,087 $\times 245$	6. _____ $= 777 \times 777$

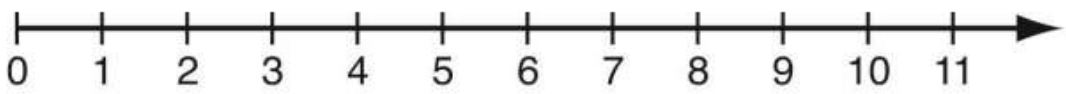
If you need a help with multiplying fractions use the following link: http://tinyurl.com/ycwso35n

7. Circle the letter for the column having a larger value.

A	B	Circle either A or B
$\frac{5}{17} \times \frac{2}{3}$	$\frac{5}{17} \times \frac{3}{2}$	**A B**
$\frac{27}{25} \times 36$	$\frac{30}{32} \times 36$	**A B**
$\frac{63}{54}$	$\frac{63}{54} \times \frac{62}{54}$	**A B**
$9 \times \frac{1}{3}$	$\frac{1}{3}$	**A B**

8. Write $11 \div 5$ as a fraction. Then, draw a point that shows this number on the number line diagram below.

Fraction:_____



Name: _____

Rising 6th grade Summer Math Packet

I have checked the work completed:_____
Parent Signature

1. Find the products. **This page should be completed in 3 minutes no more than 4 minutes. Have someone time you.** Any multiplication problem you do not know quickly, practice on flash cards.

6	4	7	5	12	3	6	3	0	7	5	6	3	8
x2	x4	x2	x4	x0	x5	x3	x8	x8	x3	x5	x4	x9	x3
6	2	3	8	7	12	8	3	11	7	9	4	4	9
x5	x12	x6	x2	x5	x1	x4	x7	x4	x6	x2	x8	x6	x3
4	5	0	5	9	5	2	9	5	11	5	9	7	7
x7	x0	x3	x8	x4	x7	x1	x5	x6	x5	x9	x8	x7	x9
8	6	8	1	9	9	8	1	9	2	1	3	12	1
x8	x6	x7	x2	x6	x9	x6	x9	x1	x5	x1	x4	x3	x3
8	8	12	8	12	5	3	4	2	7	6	2	6	12
x0	x1	x4	x9	x0	x1	x2	x0	x2	x1	x8	x6	x7	x5
8	4	2	9	12	11	2	7	0	6	1	5	3	2
x5	x1	x8	x7	x8	x6	x9	x4	x2	x9	x0	x2	x3	x4
4	12	4	4	1	2	11	6	7	5	2	1	4	11
X9	x6	x2	x3	x4	x3	x7	x1	x8	x3	x7	x8	x5	x4

Name: _____

Rising 6th grade Summer Math Packet

2. Find the quotients. **This page should be completed in 3 no more than 4 minutes. Practice any problems you do not know instantly.** Think of the multiplication fact family. The better you know your multiplication facts the easier division will be.

2)2	3)9	8)32	7)49	5)10	4)0	1)1	4)8	2)12	9)54	1)3	1)2	2)4
8)8	7)63	8)40	5)0	4)4	4)12	9)45	9)63	6)6	3)12	1)7	3)0	1)9
2)16	3)3	3)15	5)20	3)18	3)6	5)15	7)0	9)27	4)16	7)21	4)20	7)28
8)16	3)21	9)18	4)24	2)6	1)8	5)35	7)35	3)27	6)36	3)24	2)0	4)32
9)9	4)36	6)42	5)40	8)64	7)14	6)30	8)56	1)5	4)28	7)56	8)24	6)24

81 ÷ 9= _____	48 ÷ 6 = _____	18 ÷ 6 = _____	42 ÷ 7 = _____
10 ÷ 2 = _____	54 ÷ 6 =_____	36 ÷ 9 = _____	45 ÷ 5 = _____
72 ÷ 8 = _____	8 ÷ 2 =_____	72 ÷ 9 = _____	6 ÷ 1 =_____
25 ÷ 5 = _____	5 ÷ 5 = _____	18 ÷ 2 = _____	30 ÷ 5 =_____
12 ÷ 1 = _____	49 ÷ 7 = _____	21 ÷ 3 = _____	36 ÷ 6 = _____

I have checked the work completed:_____
Parent Signature

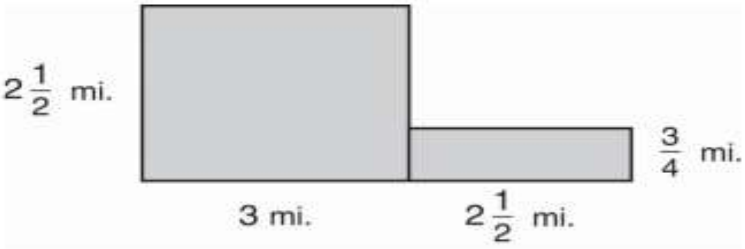
Name: _____

Rising 6th grade Summer Math Packet

Create a story or diagram to show $\frac{2}{3} \times \frac{3}{4}$.

Compute the product of $\frac{2}{3} \times \frac{3}{4}$.

One square mile is equal to 640 acres. How many acres are in the piece of land shown in the diagram below?



Area = _____ acres

15. Tina is making $\frac{1}{4}$ pound hamburgers. Write a **division** expression that shows the number of hamburgers she can make with 9 pounds of hamburger meat.

16. A store owner ordered 24 packages of candy. Each package contains 72 candies. He plans to make bags of candy with 18 candies in each bag and sell them near the cash register.

a. How many candies did the store owner order?

b. How many bags of candy can he make?

17. Below are the dimensions of four stamps, in inches. Order the stamps below from greatest area to least area.

A	B	C	D
$\frac{3}{4} \times \frac{3}{4}$	$\frac{5}{8} \times \frac{5}{8}$	$\frac{3}{4} \times 1\frac{1}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$

Least _____ **Greatest**

Name: _____

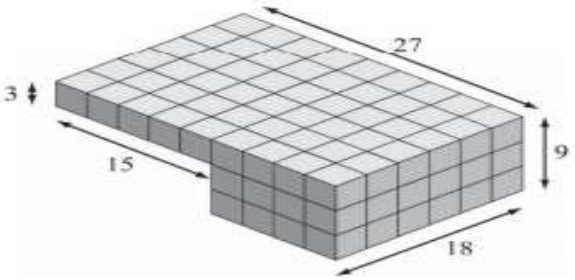
Rising 6th grade Summer Math Packet

18. Callan has $\frac{1}{3}$ of his birthday cake left. He wants to share it equally between himself and 3 other boys. How much of the original birthday cake will each of the 4 boys get?

19. Evelyn challenged the students in her grade to collect nickels for the entire school year. There are 37 students in her grade.

Each student collected 265 nickels. What is the total amount of money that the students collected?

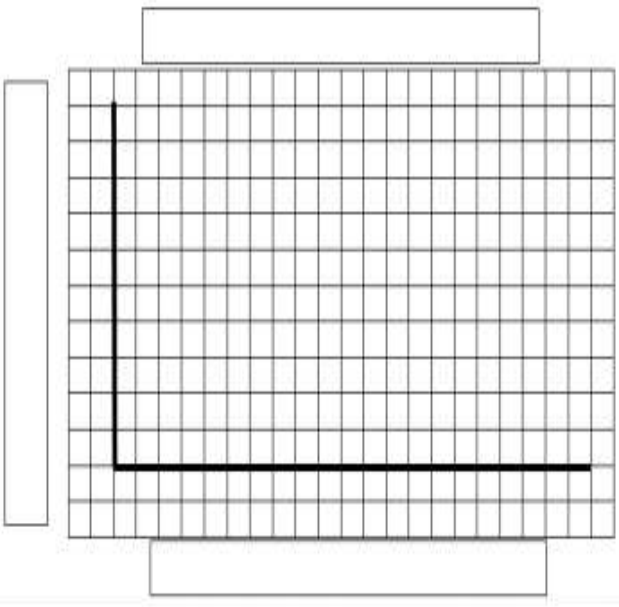
20. The diagram below represents a swimming pool with dimensions in feet. When the pool is filled with water, how many cubic feet of water are used to fill the pool all the way to the top?



21. Giant anacondas can reportedly grow up to 33 feet long. How many inches long is this?

16. The data table to the below shows the height of a typical meerkat at different times during their first 20 months of life. Graph the data on the grid below.

Month	Length (inches)
0	3
2	3
4	6
6	7
8	8
10	9
12	10
14	12
16	12
18	12
20	12



a) How many inches did the meerkat grow between month 6 and month 18?

b) How many months did it take for the meerkat to grow from 7 inches to 12 inches?

c) Did the meerkat grow more from month 0 to month 10 or from month 10 to month 20? Explain your answer.

Name: _____

Rising 6th grade Summer Math Packet

Ice Cream Challenge:

Serenity, Sam, Rose, Victor, and Julian went out for ice cream. Each ordered an ice cream cone in their favorite flavor. Use the following clues to match each child with his or her favorite flavor.

- Only one child orders ice cream that starts with the same first letter as their last name.
- Julian's favorite ice cream is the same as his favorite color.
- The name of the child who orders strawberry ice cream does not start with and "S".
- Sam orders ice cream with more than one flavor.
- Serenity does not like peppermint.
- Rose does not like fruit flavored ice cream.

	Strawberry	Vanilla	Chocolate	Mint Chocolate Chip	Peppermint
Serenity					
Sam					
Rose					
Victor					
Julian					

Jelly Beans Challenge:

Bianca and Alice bought a jar of jelly beans and told their brother, William, that he could have the jelly beans if he could tell them how many were in the bag. They gave him the following clues:

- **Clue 1:** There are more than 80 jelly beans but less than 100 jelly beans.
- **Clue 2:** You can divide the jelly beans equally into groups of 3.
- **Clue 3:** If you divide the jelly beans into groups of 5, there will be 2 left over.

How many jelly beans are there? _____

Below are steps to help you solve the problem.

1. The first clue gives you a range where the correct number is located. Write the possible numbers in that range here:

   _____

2. The second clue tells you that the number is a multiple of 3. Cross out the numbers in #1 that are not multiples of 3

   _____

3. The third clue tells you that the number is 2 more than a multiple of 5. Look at the remaining numbers. Which one of the numbers is 2 more than a multiple of 5?

   _____

Name: _____

Rising 6th grade Summer Math Packet

Toy Shop

Draw a picture for each problem and use the formula's below to help you solve.

Area of rectangle formula: length x width **Area of a triangle: base x height/2**

A. Tamya's mother owned a toy shop and was moving into a larger building. The old sore was 38 feet by 24 feet. The new store is 45 feet wide and has 2,385 square feet. How long is the new toy shop? How much larger is the new shop than the old shop?

B. Tamya's mother wants to use wallpaper over the office in the shop. The office is a 12 foot square. The walls are 8 feet tall. How many square feet of wall paper would be needed to cover two of the walls?

C. Tamya's mother wants to paint a large sailboat on one wall of the toy store. The sail of the boat is a triangle with a base of 8 feet and an area of 28 feet. What is the height of the sail?

D. On the front wall of the store, Tamya is going to paint large geometric shapes. She has already painted a circle, a square, and is now painting a triangle in bright blue. The height of the triangle is 5 feet. She wants to make the base the same as the square. The square has an area of 16 square feet. How long is the base of the triangle? What is the area of the triangle?

Name: _____

Rising 6th grade Summer Math Packet

Mean: is the average of all of the numbers. You add them all up and divide by the amount of numbers that were in the set. *For example, suppose you have the numbers 3, 7, 10 and 16. Add them up to get 36. Divide that number by 4 to get the average: 9.*

Median: is the middle number in a set of numbers when they are **arranged numerically**. *For example, if you have the numbers 1, 3, 5, 7, and 10 the middle is 5, so the median is 5. If there are two middle numbers add them and divide by 2.*

Mode: is the number that appears the most often in a set of numbers. *For example, in the group 12, 12, 16, 16, 16, 25 and 36, the number 16 is the mode. There can be more than one mode or no mode.*

Pet Vet

Use the definitions above to help you solve the problems below (you may use a calculator):

1. Amy was helping at the pet vet clinic, and she weighed the cats that had been examined that day. The cats weighed 8.2, 9.7, 12.4, 6.9, 8.2, 7.8, 9.4, 8.9, 6.5, and 11.4. What is the mean, median and mode of cat's weights?

2. Amy checked the records for last year and the veterinarian saw the following amounts of dogs each month: January, 372; February, 298; March, 446; April, 322, May, 400; June, 428; July, 403; August, 312; September, 288; October, 332, November, 397; December, 251. What was the mean, median and mode of the number of dogs that visited the clinic?

3. On Saturday Amy was asked to organize a birthday lunch for the secretary of the pet vet. Of the six employees who contributed, each gave an average (mean) of $6.75. Dr. Simon gave $10.00, Dr. Watson gave $8.00, Amy gave $3.50, and the two vet technicians gave $5.00 each. Dr. Phan made up the difference. How much did Dr. Phan pay?