

Summer Packet Grade 5 going to Grade 6 (Week 1) 2018/2019

Name _____

Date _____

1. The following equations involve different quantities and use different operations, yet produce the same result. Use a place value chart and words to explain why this is true.

 $4.13 \times 10^3 = 4130$ $413,000 \div 10^2 = 4130$

2. Use an area model to explain the product of 4.6 and 3. Write the product in standard form, word form, and expanded form.



- 4. Dr. Mann mixed 10.357 g of chemical A, 12.062 g of chemical B, and 7.506 g of chemical C to make 5 doses of medicine.
 - a. About how much medicine did he make in grams? Estimate the amount of each chemical by rounding to the nearest tenth of a gram before finding the sum. Show all your thinking.

b. Find the actual amount of medicine mixed by Dr. Mann. What is the difference between your estimate and the actual amount?

c. How many grams are in one dose of medicine? Explain your strategy for solving this problem.

d. Round the weight of one dose to the nearest gram.

5. Express the missing divisor using a power of 10. Explain your reasoning using a place value model.
a. 5.2 ÷ _____ = 0.052 b. 7,650 ÷ _____ = 7.65

- 6. Estimate the quotient by rounding the expression to relate to a one-digit fact. Explain your thinking in the space below.
 - a. 432 ÷ 73 ≈ _____

b. 1,275 ÷ 588 ≈ _____

7. Generate and solve another division problem with the same quotient and remainder as the two problems below. Explain your strategy for creating the new problem.

			3	_					3
1	7	6	3		4	2	1	3	8
	-	5	1	_		_	1	2	6
		1	2					1	2

8. Sarah says that 26 ÷ 8 equals 14 ÷ 4 because both are "3 R2." Show her mistake using decimal division.

9. A rectangular playground has an area of 3,392 square meters. If the width of the rectangle is 32 meters, find the length.

10. A baker uses 5.5 pounds of flour daily.

- a. How many ounces of flour will he use in two weeks? Use words, numbers, or pictures to explain your thinking. (1 lb = 16 oz)
- b. The baker's recipe for a loaf of bread calls for 12 ounces of flour. If he uses all of his flour to make loaves of bread, how many full loaves can he bake in two weeks?

c. The baker sends all his bread to one store. If he can pack up to 15 loaves of bread in a box for shipping, what is the minimum number of boxes required to ship all the loaves baked in two weeks? Explain your reasoning.

d. The baker pays \$0.80 per pound for sugar and \$1.25 per pound for butter. Write an expression that shows how much the baker will spend if he buys 6 pounds of butter and 20 pounds of sugar.

e. Chocolate sprinkles cost as much per pound as sugar. Find $\frac{1}{10}$ the baker's total cost for 100 pounds of chocolate sprinkles. Explain the number of zeros and the placement of the decimal in your answer using a place value chart.