Summer Packet
Grade 5 entering Grade 6
Week2
2020-2021

Week 2 G5 to G6:

Name _____   Date _____

1. On Sunday, Sheldon bought $4\frac{1}{2}$ kg of plant food. He used $1\frac{2}{3}$ kg on his strawberry plants and used $\frac{1}{4}$ kg for his tomato plants.

    a. How many kilograms of plant food did Sheldon have left? Write one or more equations to show how you reached your answer.

    b. Sheldon wants to feed his strawberry plants 2 more times and his tomato plants one more time. He will use the same amounts of plant food as before. How much plant food will he need? Does he have enough left to do so? Explain your answer using words, pictures, or numbers.

2. Sheldon harvests the strawberries and tomatoes in his garden.

   a. He picks $1\frac{2}{5}$ kg less strawberries in the morning than in the afternoon. If Sheldon picks $2\frac{1}{4}$ kg in the morning, how many kilograms of strawberries does he pick in the afternoon? Explain your answer using words, pictures, or equations.

   b. Sheldon also picks tomatoes from his garden. He picked $5\frac{3}{10}$ kg, but 1.5 kg were rotten and had to be thrown away. How many kilograms of tomatoes were not rotten? Write an equation that shows how you reached your answer.

   c. After throwing away the rotten tomatoes, did Sheldon get more kilograms of strawberries or tomatoes? How many more kilograms? Explain your answer using an equation.

3. Multiply or divide. Draw a model to explain your thinking.

a. $\frac{1}{3} \times \frac{1}{4}$

b. $\frac{3}{4}$ of $\frac{1}{3}$

c. $\frac{3}{4} \times \frac{3}{5}$

d. $4 \div \frac{1}{3}$

e. $5 \div \frac{1}{4}$

f. $\frac{1}{4} \div 5$

4. Multiply or divide using any method.

a. 1.5×32

b. 1.5×0.32

c. $12 \div 0.03$

d. $1.2 \div 0.3$

e. $12.8 \times \frac{3}{4}$

f. $102.4 \div 3.2$

5. Fill in the chart by writing an equivalent expression.

a.	One-fifth the sum of one-half and one-third	
b.	Two and one-half times the sum of nine and twelve	
c.	Twenty-four divided by the difference between $1\frac{1}{2}$ and $\frac{3}{4}$	

6. A castle has to be guarded 24 hours a day. Five knights are ordered to split each day's guard duty equally. How long will each knight spend on guard duty in one day?

a. Record your answer in hours.

b. Record your answer in hours and minutes.

c. Record your answer in minutes.

7. On the blank, write a division expression that matches the situation.

   a. _____   Mark and Jada share 5 yards of ribbon equally. How
                            much ribbon will each get?

   b. _____   It takes half of a yard of ribbon to make a bow. How many bows
                            can be made with 5 yards of ribbon?

   c. Draw a diagram for each problem and solve.

   d. Could either of the problems also be solved by using $\frac{1}{2} \times 5$? If so, which one(s)? Explain your
      thinking.

8. Jackson claims that multiplication always makes a number bigger. He gave the following
   examples:

- If I take 6, and I multiply it by 4, I get 24, which is bigger than 6.
- If I take $\frac{1}{4}$, and I multiply it by 2 (whole number), I get $\frac{2}{4}$, or $\frac{1}{2}$, which is bigger than $\frac{1}{4}$.

Jackson's reasoning is incorrect. Give an example that proves he is wrong, and explain his mistake using pictures, words, or numbers.

9. Jill collected honey from 9 different beehives and recorded the amount collected, in gallons, from each hive in the line plot shown:
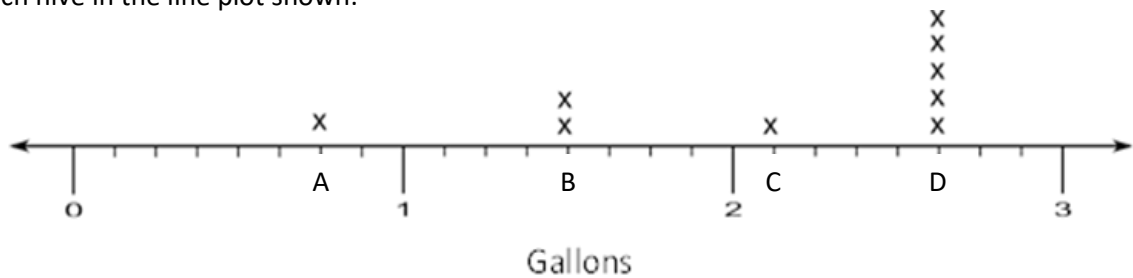
Gallons

a. She wants to write the value of each point marked on the number line above (Points A–D) in terms of the largest possible whole number of gallons, quarts, and pints. Use the line plot above to fill in the blanks with the correct conversions. (The first one is done for you.)

   a. __0__ gal __3__ qt __0__ pt

   b. _____ gal _____ qt _____ pt

   c. _____ gal _____ qt _____ pt

   d. _____ gal _____ qt _____ pt

b. Find the total amount of honey collected from the five hives that produced the most honey.

c. Jill collected a total of 19 gallons of honey. If she distributes all of the honey equally between 9 jars, how much honey will be in each jar?

d. Jill used $\frac{3}{4}$ of a jar of honey for baking. How much honey did she use baking?

e. Jill's mom used $\frac{1}{4}$ of a gallon of honey to bake 3 loaves of bread. If she used an equal amount of honey in each loaf, how much honey did she use for 1 loaf?

f. Jill's mom stored some of the honey in a container that held $\frac{3}{4}$ of a gallon. She used half of this amount to sweeten tea. How much honey, in cups, was used in the tea? Write an equation, and draw a tape diagram.

g. Jill uses some of her honey to make lotion. If each bottle of lotion requires $\frac{1}{4}$ gallon, and she uses a total of 3 gallons, how many bottles of lotion does she make?