Tuesday, January 21, 2019

Name: _____ Section: ____

5th Grade American Math Homework

Chapter 10 (Part 1)

Dear Family,

Throughout the next few weeks, our math class will be learning how to compare and covert measurements. The scholars will use appropriate customary and metric units and conversion tables. You can expect to see homework that includes comparing and converting length, weight/mass, capacity, and time.

	To be completed on:	✓
No School	Monday 1/20	
Lesson 10.1	Tuesday 1/21	
Lesson 10.2	Wednesday 1/22	
Lesson 10.3	Thursday 1/23	
Lesson 10.4	Friday 1/24	
*** IReady 2 lessons per week all scholars		

Vocabulary

capacity The amount a container can hold when filled

elapsed time The amount of time that passes between the start of an activity and the end of that activity

gram A metric unit of mass

mass The amount of matter in an object

pound A customary unit of weight (1 pound = 16 ounces)

weight An object's relative mass. The difference between mass and weight is that mass is the amount of matter in a material, while weight is a measure of how the force of gravity acts upon that mass. The measure of how heavy the object is.

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Name _____

Customary Length

Convert.

1. 12 yd = 36 ft

total yards → 12 × feet in 1 yard → 3 = total feet → 36

12 yards = 36 feet

2. 5 ft = _____ in.

3. 5 mi = _____ ft

4. 240 in. = _____ ft

5. 100 yd = _____ ft

6. 10 ft = _____ in.

7. 150 in. = _____ ft _____ in.

8. 7 yd 2 ft = _____ ft

9. 10 mi = _____ ft

Compare. Write <, >, or =.

10. 23 in. ◯ 2 ft

11. 25 yd ◯ 75 ft

12. 6,200 ft ◯ 1 mi 900 ft

13. 100 in. ◯ 3 yd 1 ft

14. 1,000 ft ◯ 300 yd

15. 500 in. ◯ 40 ft

Problem Solving REAL WORLD

16. Marita orders 12 yards of material to make banners. If she needs 1 foot of fabric for each banner, how many banners can she make?

17. Christy bought an 8-foot piece of lumber to trim a bookshelf. Altogether, she needs 100 inches of lumber for the trim. Did Christy buy enough lumber? Explain.

Lesson Check

1. Jenna's garden is 5 yards long. How long is her garden in feet?

   Ⓐ 60 feet

   Ⓑ 15 feet

   Ⓒ 8 feet

   Ⓓ 2 feet

2. Ellen needs to buy 180 inches of ribbon to wrap a large present. The store sells ribbon only in whole yards. How many yards does Ellen need to buy to have enough ribbon?

   Ⓐ 3 yards

   Ⓑ 4 yards

   Ⓒ 5 yards

   Ⓓ 6 yards

Spiral Review

3. McKenzie works for a catering company. She is making iced tea for an upcoming event. For each container of tea, she uses 16 tea bags and 3 cups of sugar. If McKenzie uses 64 tea bags, how many cups of sugar will she use? **(Lesson 9.6)**

   Ⓐ $\frac{3}{4}$ cup

   Ⓑ 4 cups

   Ⓒ 8 cups

   Ⓓ 12 cups

4. Javier bought 48 sports cards at a yard sale. Of the cards, $\frac{3}{8}$ were baseball cards. How many cards were baseball cards? **(Lesson 7.1)**

   Ⓐ 48

   Ⓑ 18

   Ⓒ 6

   Ⓓ 3

5. Which is the quotient of 396 divided by 12? **(Lesson 2.6)**

   Ⓐ 31

   Ⓑ 33

   Ⓒ 36

   Ⓓ 38

6. What is the unknown number in Sequence 2 in the chart? What rule can you write that relates Sequence 2 to Sequence 1? **(Lesson 9.5)**

Sequence Number	1	2	3	8	10
Sequence 1	4	8	12	32	40
Sequence 2	8	16	24	64	?

   Ⓐ 40; Multiply by 1.

   Ⓑ 60; Add 20.

   Ⓒ 80; Multiply by 2.

   Ⓓ 20; Divide by 2.

Name _____

Customary Capacity

Convert.

1. 5 gal = 40 pt
   Think: 1 gallon = 4 quarts
   1 quart = 2 pints
2. 192 fl oz = _____ pt
3. 15 pt = _____ c
4. 240 fl oz = _____ c
5. 32 qt = _____ gal
6. 10 qt = _____ c
7. 48 c = _____ qt
8. 72 pt = _____ gal
9. 128 fl oz = _____ pt

Compare. Write <, >, or =.

10. 17 qt ◯ 4 gal
11. 96 fl oz ◯ 8 pt
12. 400 pt ◯ 100 gal
13. 100 fl oz ◯ 16 pt
14. 74 fl oz ◯ 8 c
15. 12 c ◯ 3 qt

Problem Solving REAL WORLD

16. Vickie made a recipe for 144 fluid ounces of scented candle wax. How many 1-cup candle molds can she fill with the recipe?

_____

17. A recipe calls for 32 fluid ounces of heavy cream. How many 1-pint containers of heavy cream are needed to make the recipe?

_____

Lesson Check

1. Rosa made 12 gallons of lemonade to sell at a lemonade stand. How many pints of lemonade did she make?

   Ⓐ 96 pints

   Ⓑ 48 pints

   Ⓒ 3 pints

   Ⓓ $1\frac{1}{2}$ pints

2. Ebonae's fish tank holds 40 gallons. How many quarts does the fish tank hold?

   Ⓐ 4 quarts

   Ⓑ 10 quarts

   Ⓒ 80 quarts

   Ⓓ 160 quarts

Spiral Review

3. A mountain climber climbed 15,840 feet on her way to the summit of a mountain. How many miles did she climb? **(Lesson 10.1)**

   Ⓐ 1 mile

   Ⓑ 2 miles

   Ⓒ 3 miles

   Ⓓ 4 miles

4. Jamal is making pancakes. He has $6\frac{3}{4}$ cups of batter, but he needs a total of 12 cups. How much more batter does Jamal need? **(Lesson 6.6)**

   Ⓐ $5\frac{1}{4}$ cups

   Ⓑ $5\frac{3}{4}$ cups

   Ⓒ $6\frac{1}{4}$ cups

   Ⓓ $18\frac{3}{4}$ cups

5. At a building site, there are 16 pallets with sacks of cement. The total weight of all the pallets and cement is 4,856 pounds. Each pallet with cement weighs the same amount. How much does each pallet with cement weigh? **(Lesson 2.7)**

   Ⓐ 304 pounds

   Ⓑ $303\frac{1}{2}$ pounds

   Ⓒ 303 pounds

   Ⓓ 300 pounds

6. A publisher shipped 15 boxes of books to a bookstore. Each box contained 32 books. How many books in all did the publisher ship to the bookstore? **(Lesson 1.7)**

   Ⓐ 560

   Ⓑ 480

   Ⓒ 400

   Ⓓ 320

Name _____

Weight

Convert.

1. 96 oz = 6 lb

total oz ÷ oz in 1 lb = total lb

96 ÷ 16 = 6

2. 6 T = _____ lb

3. 18 lb = _____ oz

4. 3,200 oz = _____ lb

5. 12 T = _____ lb

6. 9 lb = _____ oz

7. 7 lb = _____ oz

8. 100 lb = _____ oz

9. 60,000 lb = _____ T

Compare. Write <, >, or =.

10. 40 oz ◯ 4 lb

11. 80 oz ◯ 5 lb

12. 5,000 lb ◯ 5 T

13. 18,000 lb ◯ 9 T

14. 25 lb ◯ 350 oz

15. 27 oz ◯ 2 lb

Problem Solving REAL WORLD

16. Mr. Fields ordered 3 tons of gravel for a driveway at a factory. How many pounds of gravel did he order?

_____

17. Sara can take no more than 22 pounds of luggage on a trip. Her suitcase weighs 112 ounces. How many more pounds can she pack without going over the limit?

_____

Lesson Check

1. Paolo's puppy weighed 11 pounds at the vet's office. What is this weight in ounces?

   (A) 16 ounces
   (B) 32 ounces
   (C) 166 ounces
   (D) 176 ounces

2. The weight limit on a bridge is 5 tons. What is this weight in pounds?

   (A) 80 pounds
   (B) 5,000 pounds
   (C) 10,000 pounds
   (D) 20,000 pounds

Spiral Review

3. There are 20 guests at a party. The host has 8 gallons of punch. He estimates that each guest will drink 2 cups of punch. If his estimate is correct, how much punch will be left over at the end of the party? **(Lesson 10.2)**

   (A) 16 cups
   (B) 40 cups
   (C) 88 cups
   (D) 128 cups

4. A typical lap around a track in the United States has a length of 440 yards. How many laps would need to be completed to run a mile? **(Lesson 10.1)**

   (A) 4
   (B) 12
   (C) 40
   (D) 440

5. A recipe for sweet potato pie calls for $\frac{3}{4}$ cup of milk. Martina has 6 cups of milk. How many sweet potato pies can she make with that amount of milk? **(Lesson 8.4)**

   (A) 2
   (B) 4
   (C) 8
   (D) 16

6. Which of the following is the best estimate for the total weight of these cold meats: $1\frac{7}{8}$ pounds of bologna, $1\frac{1}{2}$ pounds of ham, and $\frac{7}{8}$ pound of roast beef? **(Lesson 6.6)**

   (A) 3 pounds
   (B) $3\frac{1}{2}$ pounds
   (C) 4 pounds
   (D) $4\frac{1}{2}$ pounds

Name _____

Multistep Measurement Problems

Solve.

1. A cable company has 5 miles of cable to install. How many 100-yard lengths of cable can be cut?

   Think: 1,760 yards = 1 mile.
   So the cable company has 5 × 1,760, or 8,800 yards of cable.

   Divide. 8,800 ÷ 100 = 88

   88 lengths

2. Afton made a chicken dish for dinner. She added a 10-ounce package of vegetables and a 14-ounce package of rice to 40 ounces of chicken. What was the total weight of the chicken dish in pounds?

3. A jar contains 26 fluid ounces of spaghetti sauce. How many cups of spaghetti sauce do 4 jars contain?

4. Coach Kent brings 3 quarts of sports drink to soccer practice. He gives the same amount of the drink to each of his 16 players. How many ounces of the drink does each player get?

5. Leslie needs 324 inches of fringe to put around the edge of a tablecloth. The fringe comes in lengths of 10 yards. If Leslie buys 1 package of fringe, how many feet of fringe will she have left over?

6. Darnell rented a moving truck. The weight of the empty truck was 7,860 pounds. When Darnell filled the truck with his items, it weighed 6 tons. What was the weight in pounds of the items that Darnell placed in the truck?

Problem Solving REAL WORLD

7. A pitcher contains 40 fluid ounces of iced tea. Shelby pours 3 cups of iced tea. How many pints of iced tea are left in the pitcher?

8. Olivia ties 2.5 feet of ribbon onto one balloon. How many yards of ribbon does Olivia need for 18 balloons?

Lesson Check

1. Leah is buying curtains for her bedroom window. She wants the curtains to hang from the top of the window to the floor. The window is 4 feet high. The bottom of the window is $2\frac{1}{2}$ feet above the floor. What curtain length should Leah buy?

Ⓐ 72 inches

Ⓑ 78 inches

Ⓒ 84 inches

Ⓓ 104 inches

2. Brady buys 3 gallons of fertilizer for his lawn. After he finishes spraying the lawn, he has 1 quart of fertilizer left over. How many quarts of fertilizer did Brady spray on the lawn?

Ⓐ 3 quarts

Ⓑ 7 quarts

Ⓒ 11 quarts

Ⓓ 15 quarts

Spiral Review

3. A jump rope is 9 feet long. How long is the jump rope in yards? **(Lesson 10.1)**

Ⓐ $\frac{3}{4}$ yard

Ⓑ 3 yards

Ⓒ 27 yards

Ⓓ 108 yards

4. Which of the following measurements is NOT equal to 8 cups? **(Lesson 10.2)**

Ⓐ 1 gallon

Ⓑ 2 quarts

Ⓒ 4 pints

Ⓓ 64 fluid ounces

5. What is the unknown number in Sequence 2 in the chart? **(Lesson 9.5)**

Sequence Number	1	2	3	5	7
Sequence 1	3	6	9	15	21
Sequence 2	6	12	18	30	?

Ⓐ 32

Ⓑ 35

Ⓒ 36

Ⓓ 42

6. A farmer divides 20 acres of land into $\frac{1}{4}$-acre sections. Into how many sections does the farmer divide her land? **(Lesson 8.2)**

Ⓐ 4

Ⓑ 5

Ⓒ 16

Ⓓ 80