

# 5<sup>th</sup> Grade Work Packet

**April 20-24**

Hi, guys! This week our target is:

I can convert between customary units of length, weight, and capacity.

Here are a few useful tips and examples!

1. If you are going from a bigger unit to a smaller unit, you MULTIPLY. So, if you have 4 yards, and you want to know how many feet that is, you would multiply 4 yards x 3 feet per yard.  $4 \times 3 = 12$ .

Another example would be going from pounds to ounces. Since pounds are larger units than ounces, you would multiply.

5 pounds = \_\_\_\_\_ ounces

5 pounds x 16 ounces per pound  $5 \times 16 = 80$  ounces.

2. If you are going from a smaller unit to a bigger unit, you would DIVIDE. So, if you have 48 inches, and you want to know how many feet, you divide 48 inches by 12 inches per foot.  $48 \div 12 = 4$ .

5<sup>th</sup> graders, we have done division in several ways this year, but I get that you might feel a little rusty. My 5<sup>th</sup> YouTube video this week covers methods to divide. Oh, and LISTEN TO YOUR PARENTS. They often have cool ways to figure things out. And parents, don't be afraid to teach your kids "the wrong way." There isn't one right way. Teach the way you know!

If you want another resource, go see these Khan Academy videos.

<https://www.khanacademy.org/math/4th-engage-ny/engage-4th-module-7/4th-module-7-topic-a/v/converting-us-fluid-volume> (This one is for liquid measures)

<https://www.khanacademy.org/math/4th-engage-ny/engage-4th-module-7/4th-module-7-topic-b/v/us-customary-weight> (this one gives examples of different weights)

<https://www.khanacademy.org/math/cc-fifth-grade-math/imp-measurement-and-data-3/imp-unit-measurement-word-problems/v/unit-conversion-with-fractions> (This one talks about converting linear measures)

[khanacademy.org/math/arithmetic-home/multiply-divide/mult-digit-div-2/v/division-2](https://www.khanacademy.org/math/arithmetic-home/multiply-divide/mult-digit-div-2/v/division-2) (This one is an overview of dividing with a one-digit divisor)

<https://www.khanacademy.org/math/arithmetic-home/multiply-divide/mult-digit-div-2/v/level-4-division> (dividing with a 2-digit divisor)

Have a great week guys! Stay healthy, stay safe, and go measure stuff!

Mrs. Johnston

Name : \_\_\_\_\_

## U.S. Customary Unit Conversion Chart

### Measuring Length

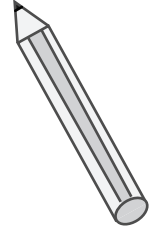
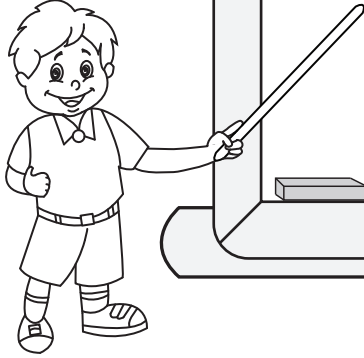
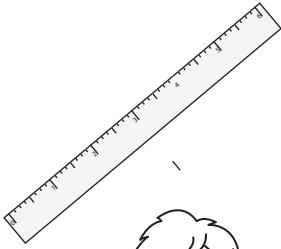
12 inches = 1 foot

36 inches = 1 yard

3 feet = 1 yard

5280 feet = 1 mile

1760 yards = 1 mile



### Measuring Weight

16 ounces

1 pound

2000 pounds

1 ton

### Measuring Capacity

3 teaspoons = 1 tablespoon

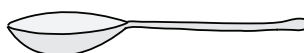
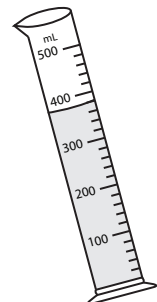
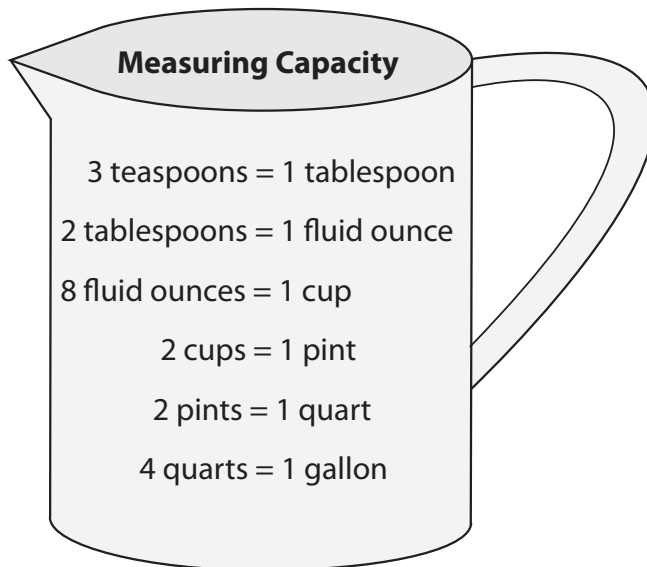
2 tablespoons = 1 fluid ounce

8 fluid ounces = 1 cup

2 cups = 1 pint

2 pints = 1 quart

4 quarts = 1 gallon



Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Liquid Volume Equivalents #2

**Liquid Volume** is the quantity of three-dimensional space that liquid occupies at rest.



This gallon chart shows smaller units of measurements that form one gallon.

Some examples:

1 gallon = 8 pints

2 quarts = 4 pints

2 pints = 4 cups

1 cup = 8 ounces

1.

2.

2 cups = \_\_\_\_\_ ounces      2 gallons = \_\_\_\_\_ quarts

3.

4.

4 quarts = \_\_\_\_\_ cups      2 quarts = \_\_\_\_\_ cups

5.

6.

1 gallon = \_\_\_\_\_ ounces      1 gallon = \_\_\_\_\_ quarts

7.

8.

$\frac{1}{2}$  quart = \_\_\_\_\_ pints      4 quarts = \_\_\_\_\_ cups

# LEMONADE STAND MATH 1



You and your friends run a lemonade stand every day during the summer. You are in charge of keeping track of the volume of lemonade sold. Given the number of cups sold each day, use division to express the number of cups sold in gallons, quarts, and cups.

Follow the example below. Refer to the **conversion box** to convert your units correctly. Show and check your work.

## Conversion Box

Gal = Gallons  
Qt = Quarts  
C = Cups

1 Gal = 16 C  
1 Qt = 4 C

Mon.

Cups sold: 38

1st: Find the number of gallons using division.

$$1 \text{ G} = 16 \text{ C} \quad \begin{array}{r} 2 \\ 16 \overline{)38} \\ \underline{-32} \\ 6 \end{array} \quad \text{R:6} \quad \underline{\quad} \text{ Gal}$$

2nd: Convert the remaining 6 cups into quarts. The remainder is the number of cups left over.

$$1 \text{ Q} = 4 \text{ C} \quad \begin{array}{r} 1 \\ 4 \overline{)6} \\ \underline{-4} \\ 2 \end{array} \quad \text{R:2} \quad \underline{\quad} \text{ Qt}$$

Tues. : Cups sold: 28

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

Wed. : Cups sold: 22

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

Thurs. : Cups sold: 40

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

Fri. : Cups sold: 54

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

Sat. : Cups sold: 142

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

Sun. : Cups sold: 108

\_\_\_ Gal \_\_\_ Qt \_\_\_ C

# Converting Pounds and Ounces



The conversion rate for pounds and ounces is  
**16 ounces (oz.) = 1 pound (lb.)**

When converting pounds to ounces, we multiply.  
When converting ounces to pounds, we divide.

EXAMPLE: 3 lbs =   ? oz  
3 lbs x 16 = 48 ounces <-> we multiply by 16 because 1 lb = 16 oz.

Read each question below and solve the problem by using multiplication or division.  
Be sure to show all of your work in the space provided.

- 1.) Lucy made 3 cakes that each weighed 32 ounces.  
How many pounds of cake did Lucy make?
  
  
  
  
  
  
  
  
  
  
- 2.) Mike's turkey burger recipe calls for 4 pounds of ground turkey. How many ounces of ground turkey should Mike purchase at the local grocery store?
  
  
  
  
  
  
  
  
  
  
- 3.) Sarah's dog weighs 64 ounces. How many pounds does Sarah's dog weigh?
  
  
  
  
  
  
  
  
  
  
- 4.) Jim's soccer bag weighs 48 ounces. He removed his cleats and shinguards that weighed a total of 1 pound. How much does his soccer bag weigh now?

Name : \_\_\_\_\_

## U.S. Customary Unit Conversion

Ounces and Pounds: 51

A) Convert between pounds and ounces.

1) 43 pounds = \_\_\_\_\_ ounces    2) 1,600 ounces = \_\_\_\_\_ pounds

3) 384 ounces = \_\_\_\_\_ pounds    4) 69 pounds = \_\_\_\_\_ ounces

5) 8 pounds = \_\_\_\_\_ ounces    6) 304 ounces = \_\_\_\_\_ pounds

B) Complete the unit conversion table.

pounds		33		62		85
ounces	96		864		1,136	

C) Compare using  $<$ ,  $>$ , or  $=$ .

1) 336 ounces  21 pounds    2) 77 pounds  1,230 ounces

3) 58 pounds  936 ounces    4) 720 ounces  45 pounds

5) 1,442 ounces  89 pounds    6) 10 pounds  170 ounces

7) 90 pounds  1,440 ounces    8) 1,219 ounces  75 pounds

D) Carlos wants to buy a new 40-pound dumbbell to boost his fitness. What is the weight of the dumbbell in ounces?

\_\_\_\_\_

Name : \_\_\_\_\_

## Answer key

Ounces and Pounds: 51

# U.S. Customary Unit Conversion

A) Convert between pounds and ounces.

1) 43 pounds = 688 ounces    2) 1,600 ounces = 100 pounds

3) 384 ounces = 24 pounds    4) 69 pounds = 1,104 ounces

5) 8 pounds = 128 ounces    6) 304 ounces = 19 pounds

B) Complete the unit conversion table.

pounds	<b>6</b>	33	<b>54</b>	62	<b>71</b>	85
ounces	96	<b>528</b>	864	<b>992</b>	1,136	<b>1,360</b>

C) Compare using  $<$ ,  $>$ , or  $=$ .

1) 336 ounces  21 pounds    2) 77 pounds  1,230 ounces

3) 58 pounds  936 ounces    4) 720 ounces  45 pounds

5) 1,442 ounces  89 pounds    6) 10 pounds  170 ounces

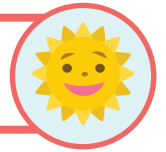
7) 90 pounds  1,440 ounces    8) 1,219 ounces  75 pounds

D) Carlos wants to buy a new 40-pound dumbbell to boost his fitness. What is the weight of the dumbbell in ounces?

640 ounces



# Yards, Feet, and Inches



Name: \_\_\_\_\_

Date: \_\_\_\_\_

Complete the table by converting inches, feet and yards.

**HINT:** 12 inches(in.) is equal to 1 foot(ft.), 3 feet is equal to 1 yard (yd.)

	<b>2 yards</b>	<b>3 yards</b>		<b>5 yards</b>
<b>3 feet</b>			<b>12 feet</b>	
	<b>72 inches</b>		<b>144 inches</b>	

Convert the following linear measurements.

- 1) 1 yard = \_\_\_\_\_ inches      2) 108 inches = \_\_\_\_\_ feet      3) 15 feet = \_\_\_\_\_ yards
- 4) 8 feet = \_\_\_\_\_ inches      5) 144 inches = \_\_\_\_\_ yards      6) 6 yards = \_\_\_\_\_ feet
- 7) 108 inches = \_\_\_\_\_ yards      8) 10 yards = \_\_\_\_\_ feet      9) 60 feet = \_\_\_\_\_ yards
- 10) 10 feet = \_\_\_\_\_ inches      11) 7 yards = \_\_\_\_\_ feet      12) 96 inches = \_\_\_\_\_ feet

Use the conversion table to solve the word problems.

13) Joey is trying out for the football team at school. He tells the coach that he can throw a ball 36 feet, but his coach reminds Joey that the field is measured in yards. How many yards can Joey throw the ball?

14) Marianne is rearranging her room. Each wall in her room is 12 feet long. Her desk measures 36 inches, her bed is 72 inches, and her bookshelf is 24 inches. If she places them all along the same wall, how much of the wall will remain uncovered, in feet?

\*Bonus Activity: Use a measuring tape or yardstick to measure things around your house. Can you find anything that is longer than 3 yards?



# LINEAR MEASUREMENTS

**1**

Convert the following linear measurements.

HINT: 12 inches(in.) is equal to 1 foot(ft.), 3 feet is equal to 1 yard (yd.)

1) 2 yd. =  in.    2) 72 in. =  ft.    3) 15 yd. =  ft.

4) 12 ft. =  yd.    5) 216 in. =  yd.    6) 21 ft. =  yd.

7) 5 ft. =  in.    8) 24 ft. =  yd.    9) 3 yd. =  in.

10) 2 yd. =  ft.    11) 6 ft. =  in.    12) 15 yd. =  ft.

**2**

Compare the following measurements using  $>$ ,  $<$  or  $=$ .

HINT: Convert to the same unit of measurement, then compare.

1) 19yd.  23 ft.    2) 4 yd.  128 in.    3) 4 ft.  45 in.

4) 17 ft.  220 in.    5) 178 in.  5 yd.    6) 235 in.  5 yd.

7) 16 ft.  5 yd.    8) 94 in.  9 ft.    9) 12 yd.  41 ft.

# LINEAR MEASUREMENTS

**1**

Complete the table by converting inches, feet and yards.

HINT) 12 inches(in.) is equal to 1 foot(ft.), 3 feet is equal to 1 yard (yd.)

1 yard	2 yards		4 yards	
	6 feet			15 feet
36 inches		108 inches		

**2**

Convert the following linear measurements.

1) 12 in. =  ft.    2) 3ft. =  in.    3) 1 yd. =  in.

4) 3 yd. =  ft.    5) 36 in. =  yd.    6) 4 yd. =  ft.

7) 24 in. =  ft.    8) 3ft. =  in.    9) 3 yd. =  in.

10) 6 yd. =  ft.    11) 36 ft. =  yd.    12) 216 in. =  ft.

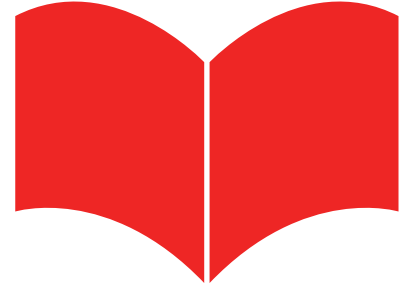
13) 10 ft. =  in.    14) 108 in. =  yd.    15) 4 ft. =  in.

16) 5 yd. =  in.    17) 60 in. =  ft.    18) 8 ft. =  in.

# Two-Digit Divisors

## Example:

Caryn's scout troop needs to sell 603 magazine subscriptions in order to win a trip to the local theme park. If there are 26 scouts in her troop, how many subscriptions will each scout need to sell to win the theme park trip?



## Answer:

The troop must sell a total of 603 subscriptions, which is about 600. Round 603 down to 600. There are 26 scouts in Caryn's troop, which is about 30. Round 26 up to 30.  $600 \div 30 = 20$ . Each scout will need to sell about 20 subscriptions.

Use estimation to solve the problems below.

1. Daniel's school band has 74 different instruments, from triangles to tubas. There are 26 kids in band. How many instruments can each student learn this year?
2. Mrs. Bennett's class is making programs for the school play. They need to make 329 programs in all. If there are 21 students in Mrs. Bennett's class, how many programs does each student need to make?
3. Kory wants to finish his book report ahead of schedule. It is due in 63 days, but he would like to finish reading the book in 45 days so he can use the rest of his time to write the report. His book is 272 pages long. How many pages will he need to read in order to finish it in 45 days?
4. Carmel is keeping track of how much exercise she gets. She wants to do 630 minutes of exercise over the next three weeks. How many minutes of exercise will she need per day to meet her goal?  
(Hint: 3 weeks = 21 days!)

# Two-Digit Divisors (Continued)

Now, find the exact answers for these problems. There will be no remainders.

1.  $117 \div 13$

2.  $136 \div 17$

3.  $105 \div 15$

4.  $208 \div 13$

5.  $61 \div 488$

6.  $31 \div 31$

7.  $1128 \div 94$

8.  $943 \div 41$

9.  $546 \div 42$

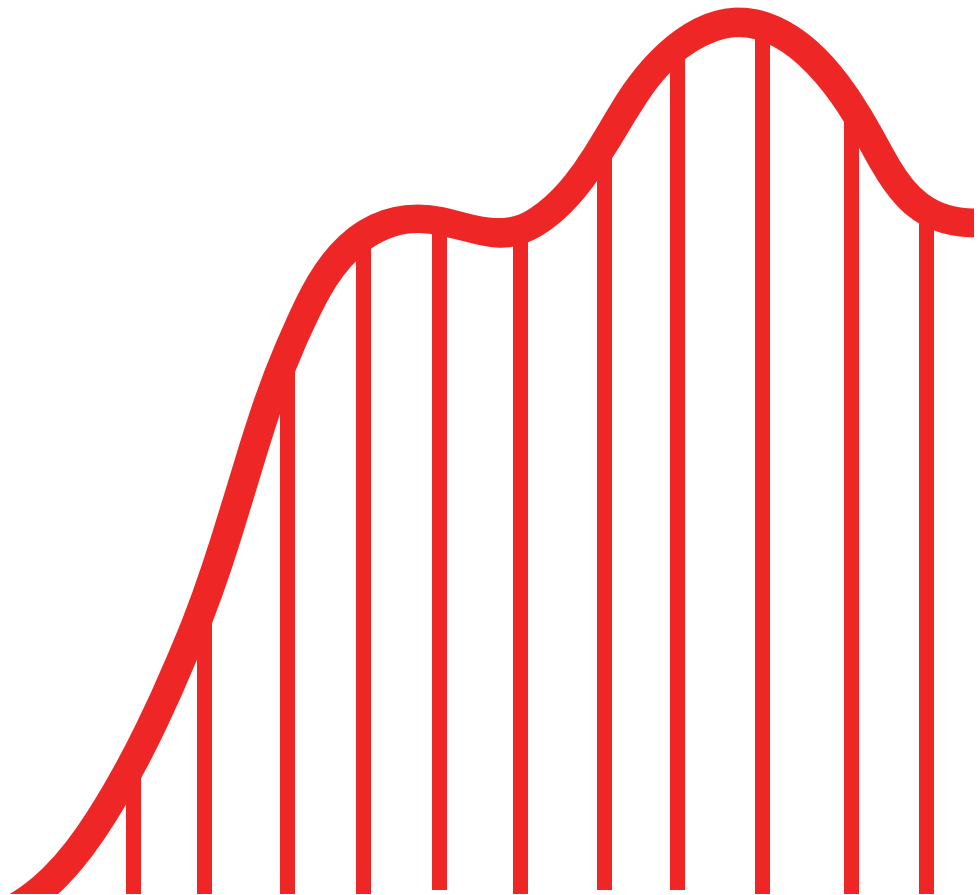
10.  $726 \div 22$

11.  $1358 \div 97$

12.  $2100 \div 84$



**Draw your own roller coaster.**



**4<sup>th</sup> Grade Assessment**  
**April 20-24 (Due May 1)**

Find each conversion:

1 foot = \_\_\_\_\_ inches

3 feet = \_\_\_\_\_ inches

60 inches = \_\_\_\_\_ feet

15 yards = \_\_\_\_\_ inches

1 yard = \_\_\_\_\_ feet

5 yards = \_\_\_\_\_ feet

72 feet = \_\_\_\_\_ yards

252 inches = \_\_\_\_\_ yards

1 pound = \_\_\_\_\_ ounces

4 pounds = \_\_\_\_\_ ounces

48 ounces = \_\_\_\_\_ pounds

288 ounces = \_\_\_\_\_ pounds

1 ton = \_\_\_\_\_ pounds

3 tons = \_\_\_\_\_ pounds

1 ton = \_\_\_\_\_ ounces

230 ounces = \_\_\_\_\_ lb \_\_\_\_\_ oz

1 gallon = \_\_\_\_\_ quarts

1 gallon = \_\_\_\_\_ cups

6 gallons = \_\_\_\_\_ cups

24 quarts = \_\_\_\_\_ gallons

1 gallon = \_\_\_\_\_ pints

1 quart = \_\_\_\_\_ pints

16 pints = \_\_\_\_\_ quarts

336 cups = \_\_\_\_\_ gallons

A cup of water weighs 8 ounces. How much would 4 gallons of water weigh?  
Please show all your work in the space below. (2 points possible)