

4th Grade

**At Home
Learning-Math**

For the week of:

April 6-April 10

Name _____

Lesson 4

Convert Customary Units of Capacity

ESSENTIAL QUESTION ?

Why do we convert measurements?

You can use multiplication to convert units. To change from a larger unit to a smaller unit, multiply.

Customary Units of Capacity

1 cup (c) = 8 fluid ounces (fl oz)

2 pints (pt) = 1 quart (qt)

2 cups (c) = 1 pint (pt)

4 quarts (qt) = 1 gallon (gal)



Math in My World

Watch



Tutor



Example 1

Marcus has a 2-gallon container of laundry detergent. How many quarts of laundry detergent does he have? How many pints of laundry detergent does he have?



Find the number of quarts that are in 2 gallons.

Since quarts are smaller than gallons, multiply. Multiply by 4 because there are 4 quarts in each gallon.

$$2 \times 4 = \dots\dots\dots$$

So, there are $\dots\dots\dots$ quarts in 2 gallons.



Find the number of pints that are in 8 quarts.

Multiply 8 by 2 because there are 2 pints in each quart.

$$8 \times 2 = \dots\dots\dots$$

So, there are $\dots\dots\dots$ pints in 8 quarts.

Marcus has $\dots\dots\dots$ quarts, or $\dots\dots\dots$ pints, of laundry detergent.



Example 2

Complete. $4\frac{1}{2}$ quarts = pints



Convert the whole number.

There are 2 pints in one quart.

Since pints are smaller than quarts, multiply. $4 \times 2 =$ _____



Convert the fraction.

Multiply. $\frac{1}{2} \times 2 =$ _____

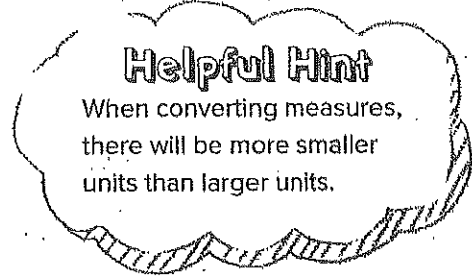
← Half of 2 pints is 1 pint.



Add the parts.

$8 + 1 =$ _____

So, $4\frac{1}{2}$ quarts = _____ pints.



Helpful Hint

When converting measures, there will be more smaller units than larger units.



Guided Practice

Complete.

1. 10 qt = _____ pt 2. $3\frac{1}{2}$ c = _____ fl oz 3. 5 qt = _____ pt

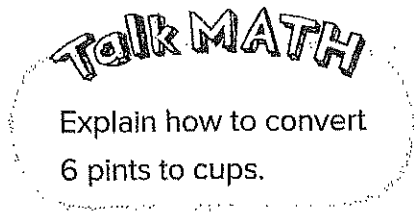
Complete each conversion table.

4.

pints (pt)	cups (c)	(pt, c)
1		(1, 2)
2		
3		
4		

5.

gallons (gal)	quarts (qt)	(gal, qt)
2		
4		
6		
8		



Explain how to convert 6 pints to cups.

Name _____

Independent Practice

Complete each conversion table.

6.

quarts (qt)	pints (pt)	(qt, pt)
1		
2		
3		
4		

7.

pints (pt)	cups (c)	(pt, c)
5		
7		
9		
11		

Algebra Find each unknown number.

8. $8 \text{ c} = \square \text{ fl oz}$

$\square = \dots\dots\dots$

9. $6\frac{1}{2} \text{ gal} = \square \text{ qt}$

$\square = \dots\dots\dots$

10. $\square \text{ qt} = 5 \text{ gal}$

$\square = \dots\dots\dots$

11. $5\frac{1}{2} \text{ c} = \square \text{ fl oz}$

$\square = \dots\dots\dots$

12. $\square \text{ c} = 15 \text{ pt}$

$\square = \dots\dots\dots$

13. $16 \text{ c} = \square \text{ fl oz}$

$\square = \dots\dots\dots$

Compare. Use $>$, $<$, or $=$.

14. $4 \text{ qt} \bigcirc 10 \text{ pt}$

15. $10 \text{ gal} \bigcirc 1,280 \text{ fl oz}$

16. $1 \text{ qt} \bigcirc 2 \text{ c}$

17. $1 \text{ gal} \bigcirc 16 \text{ c}$

18. $5 \text{ qt} \bigcirc 25 \text{ c}$

19. $12 \text{ fl oz} \bigcirc 2 \text{ c}$


20. How many times greater is the capacity of one gallon than one quart?

21. How many times greater is the capacity of one cup than one fluid ounce?



Problem Solving

22. Lucia is making 2 gallons of soup. How many cups of soup is Lucia making?
-


- Processes & Practices**  **Use Math Tools** Tomas is buying a 2-cup container of liquid dish soap. How many fluid ounces of dish soap is he buying?
-

24. Danielle is using 2 quarts of water in a recipe. How many cups of water is she using?
-



Brain Builders

25. Karen is buying 4 gallons of orange juice and 4 pints of apple juice. How many total quarts of juice is she buying?
-

- Processes & Practices**  **Which One Doesn't Belong?** Circle the measurement that does not belong with the other three. Explain your reasoning and include a measurement that would belong.

4 pints

2 quarts

8 cups

1 gallon

.....

27.  **Building on the Essential Question** How are gallons and fluid ounces related?
-
-
-

Check My Progress

Vocabulary Check



Circle the word(s) that completes each sentence.

1. Foot, cup, and gallon are all units in the (**customary system** capacity).
2. There are 2 (**quarts** cups) in a pint.
3. In order to (**convert** pint) yards to feet, multiply the number of yards by 3.
4. Quart and gallon are units of (**capacity** yards).
5. There are 5,280 feet in 1 (**yard** mile).

Draw lines to match the measurements that are equal.

- | | |
|--------------------|-------------|
| 6. 1 foot | • 16 quarts |
| 7. 32 fluid ounces | • 12 inches |
| 8. 4 gallons | • 2 pints |

Concept Check

Complete each conversion table.

9.

yards (yd)	feet (ft)	(yd, ft)
1		
3		
5		
7		

10.

quarts (qt)	cups (c)	(qt, c)
2		
3		
4		
5		



Problem Solving

11. Mateo is making 2 gallons of fruit punch. How many pints of fruit punch is he making?

.....

12. Gwenith has 3 gallons of milk. How many quarts of milk does she have?

.....

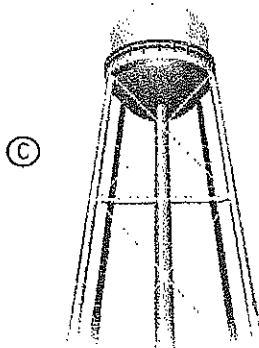
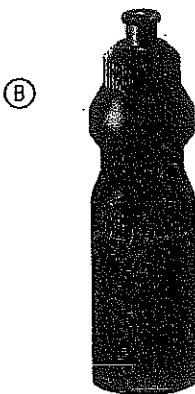
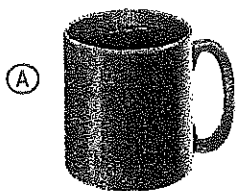


Brain Builders

13. One male boa constrictor is 10 feet long. A female boa constrictor is 4 yards long. Which boa constrictor is longer? Explain.

.....

14. **Test Practice** Which of the following holds about 2 pints of water?



Name _____

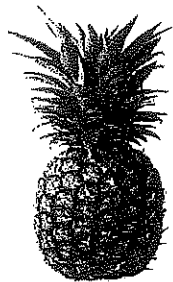
Lesson 5 Customary Units of Weight

ESSENTIAL QUESTION ?
Why do we convert
measurements?

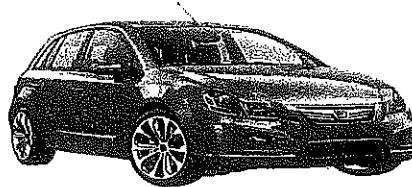
The **weight** of an object is how heavy it is.
The customary units of weight are ounce (oz),
pound (lb), and ton (T).



1 ounce (oz)



1 pound (lb)



1 ton (T)



Math in My World



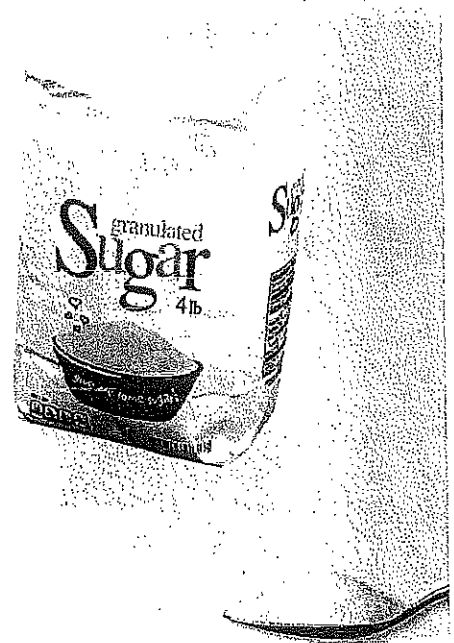
Example 1

Suzie's father bought some sugar for their favorite recipe. Which is a more reasonable unit to use for the weight of a bag of sugar, ounces or pounds?

A small packet of sugar would be weighed in ounces.

A bag of sugar is much larger and would be weighed in pounds.

So, _____ is a reasonable unit to use for the weight of a bag of sugar.





Example 2

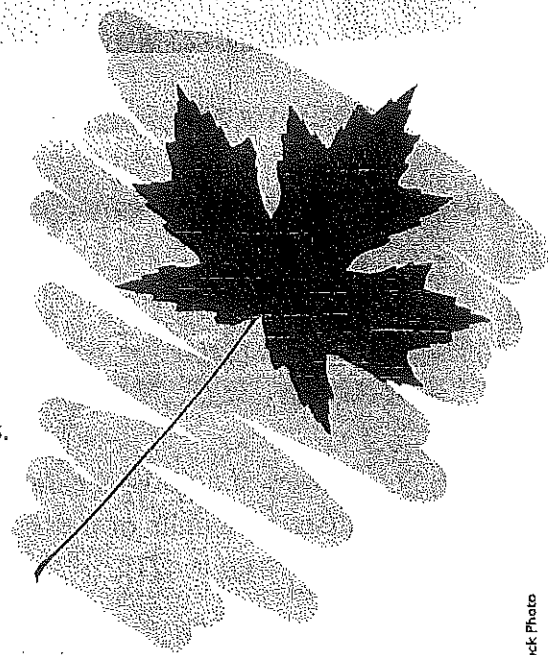
Which is the most reasonable estimate for the weight of a leaf: 1 ounce, 1 pound, 1 ton, or 10 tons?

Compare the weight of a leaf to the weight of objects that you know.

A leaf weighs less than a pineapple, or 1 pound.

Objects that weigh less than 1 pound are weighed in ounces. The only option that contains ounces is 1 ounce.

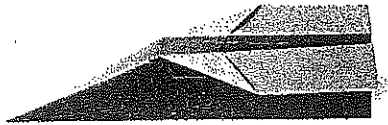
So, a leaf weighs about _____.



Guided Practice

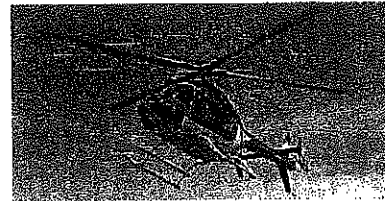
Choose the best estimate for the weight of each object.

1. paper airplane



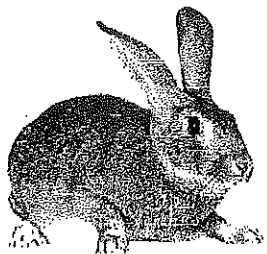
- (A) 4 ounces
- (B) 40 ounces
- (C) 4 pounds
- (D) 4 tons

2. helicopter



- (F) 5 ounces
- (G) 500 ounces
- (H) 5 tons
- (I) 500 tons

3. rabbit



- (A) 4 ounces
- (B) 4 pounds
- (C) 40 pounds
- (D) 4 tons

Talk MATH

Does an object that is small always weigh less than an object that is large? Explain.

Name

Independent Practice

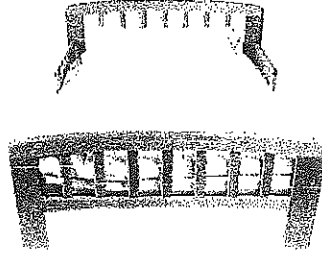
Choose the best estimate for the weight of each object.

4.



- (A) 1 ounce
- (B) 11 ounces
- (C) 1 pound
- (D) 1 ton

5.



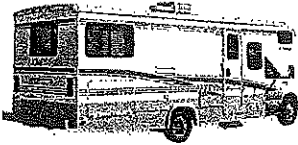
- (F) 10 ounces
- (G) 10 pounds
- (H) 100 pounds
- (I) 10 tons

6.



- (A) 4 ounces
- (B) 4 pounds
- (C) 400 pounds
- (D) 4 tons

7.



- (F) 3 ounces
- (G) 3 pounds
- (H) 300 pounds
- (I) 3 tons

8.



- (A) 2 ounces
- (B) 2 pounds
- (C) 20 pounds
- (D) 2 tons

9.



- (F) 18 ounces
- (G) 18 pounds
- (H) 180 pounds
- (I) 1 ton

10. Is it more reasonable to say that a pair of shoes weighs 1 ounce, 1 pound, or 1 ton?

.....

11. Is it more reasonable to say that a pencil weighs 2 ounces, 2 pounds, or 2 tons?

.....



Problem Solving

12. **Processes & Practices**



Be Precise Which is most reasonable for the weight of two thoroughbred horses: 1 ounce, 1 pound, or 1 ton? Explain.

.....

.....

13. Using your answer from Exercise 12, what is a reasonable estimate for the weight of four thoroughbred horses? Explain.

.....

.....



Brain Builders

14. Estimate the weight of 4 books. Explain how you chose your unit of weight.

.....

.....


15. **Processes & Practices**



Use Math Tools Estimate the weight of three objects in your desk. Order the objects from greatest to least weight.

.....

.....

16.  **Building on the Essential Question** How do you estimate weight? Give an example using each customary unit of weight.

.....

.....

.....

Proper Fractions

Slide 1

What You Will Learn

You will learn how to tell which symbols, words, or models show a given fraction.

Slide 2

Key Words

Fraction - a number written in the form of a ratio where the top number is called the numerator and the bottom number is called the denominator

Proper fraction - a fraction whose numerator is smaller than its denominator

Numerator - the number of equal parts of a total number of parts in a fraction; it is found above the fraction bar (e.g., 3 in the fraction $\frac{3}{4}$)

Denominator - the bottom part of a fraction that shows the number of equal parts into which the whole is divided (e.g., 4 in the fraction $\frac{3}{4}$)

Model - an object, drawing, graph, or equation that shows a given problem

Slide 3

Hands-On Instructional Activities

Choose one or more activities from the resource list.

Resources



[Interactive Fraction Model](#)



[Identify Fractions: Activity](#)



[Who Wants Pizza? Learning Fractions](#)

Proper Fractions

Slide 4

Which fraction does the picture show?



A) $\frac{1}{2}$

B) $\frac{1}{3}$

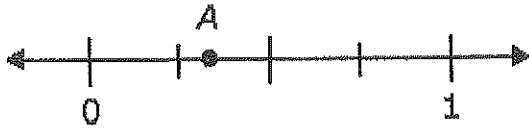
C) $\frac{1}{4}$

D) $\frac{1}{5}$

Proper Fractions

Slide 5

Which is closest to point A on the number line below?



- A) 0
 - B) $\frac{1}{4}$
 - C) $\frac{1}{3}$
 - D) $\frac{2}{3}$
-

Proper Fractions

Slide 6

Which equals $\frac{2}{3}$?

A) $3 + \frac{1}{2}$

B) $2 + \frac{1}{3}$

C) $\frac{1}{3} + \frac{1}{3}$

D) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$

Slide 7

What You Learned

You learned how to tell which symbols, words, or models show a given fraction.

Proper Fractions Test

- 1) Which is closest to point A on the number line below?



A) $\frac{1}{4}$

B) $\frac{1}{3}$

C) $\frac{1}{2}$

D) $\frac{3}{4}$

- 2) Which equals $\frac{4}{7}$?

A) $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

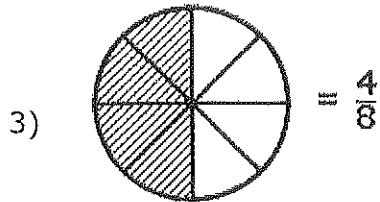
B) $\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7}$

C) $\frac{1}{4} + 7$

D) $\frac{1}{7} + 4$

Proper Fractions Test

The circle shows $\frac{4}{8}$ shaded.



Which fractional part of a circle below
is equal to $\frac{4}{8}$?

