

# Measurement: Customary and Metric

v.1.1

Standard 5: Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.

Students will explore equivalent measures.  
Students will solve measurement and equivalency problems involving a rule.

Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

Lesson objectives

**Subject:** Math

**Topic:** Measuring Capacity

**Grade(s):** 2nd grade

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**Lesson Notes:**

Learning Activities: Students will build a brace map (thinking map) as a large group on the smartboard. Students will solve measurement equivalency problems and create in/out boxes about equivalency problems related to capacity. Students not at the Smartboard participate in every aspect of the lesson on a wipe off board.

Assessment: I will observe student participation throughout the lesson as well as have a copy of the in/out boxes that they made and traded with a friend.

Additional Resources needed: wipe off boards, information about brace maps.

Lesson objectivesTeacher notes

# Capacity: Customary System

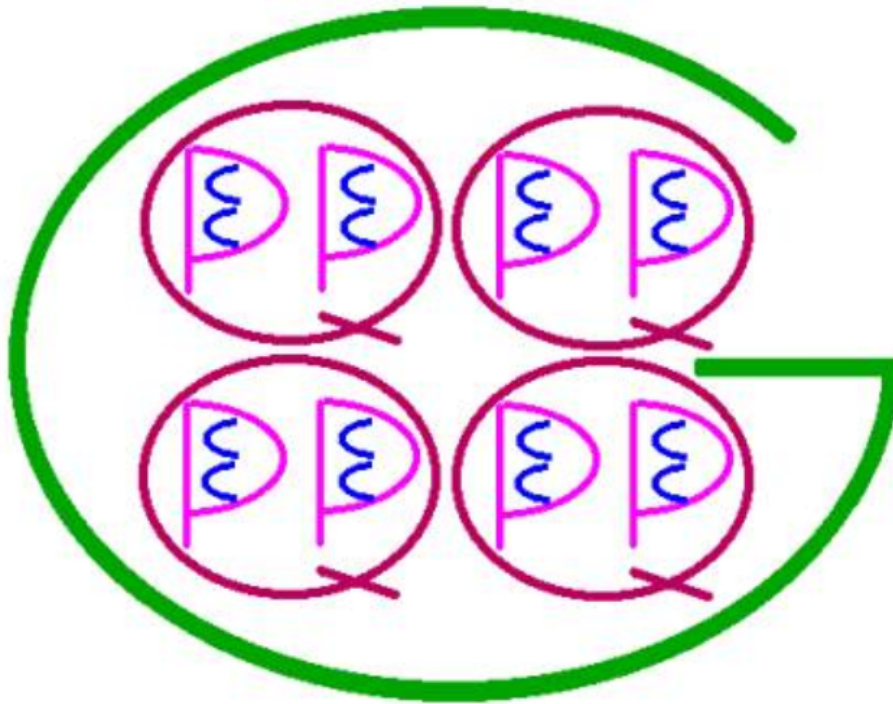
Make a brace man...

ement.

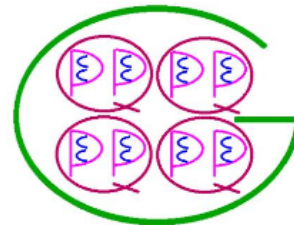


## Customary and Metric Systems Review

With a partner discuss what information this picture conveys.



Answer the questions and erase to reveal the correct answer.



How many quarts are in one gallon?

How many cups are in one quart?

How many cups are in a half-gallon?

How many cups are in one gallon?

How many pints are in a half-gallon?

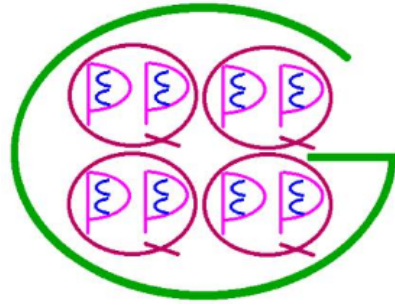
How many cups are in one pint?

How many cups are in two pints?

How many quarts are in 4 gallons?

## Customary and Metric Systems Review

Answer the questions and erase to reveal the correct answer.



     gallons = 12 quarts

         quarts = 5 pints

     pints = 8 cups

         gallons = 10 quarts

     quarts = 12 cups

     pints = 1 quart

## Weight and Capacity

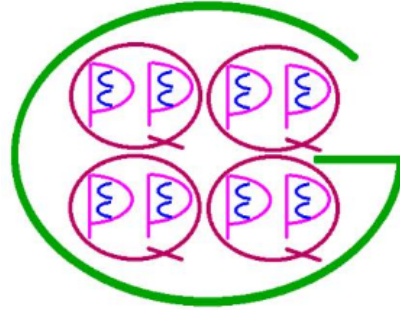
Watch a movie about weight and capacity.

## Customary and Metric Systems Review

Solve the in and out box. Erase to reveal the correct answer. Make up one of your own. Trade with a partner and solve.

Rule  
1 gal = 4 qt

gal	qt
2	
	16
6	
10	



## Weight: Customary System

Ounce (oz)

Pound (lb)

Ton (t)

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

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

## Length: Customary System

Inch (in)    Foot (ft)    Yard (yd)    Mile (mi)

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

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

1 mile = \_\_\_\_\_ yards



## Metric System

King (Kilo)

Henry (Hecto)

Died (Deka)

Unusually (Units)

(liter, meter, gram)

Drinking (deci)

Chocolate (centi)

Milk (milli)



Measurements using the  
Metric System

Capacity  $\longrightarrow$  liters (l)

Length  $\longrightarrow$  meters (m)

Weight  $\longrightarrow$  grams (g)



## Practice



50.056 cm = \_\_\_\_\_ km

8.2 mg = \_\_\_\_\_ g

400.23 L = \_\_\_\_\_ mL

24.209 dkm = \_\_\_\_\_ mm

6.2 dg = \_\_\_\_\_ kg

Move mathman  
over the blank  
to reveal the  
correct answer

