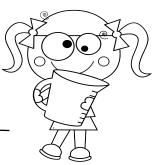


# Measurement Study Guide

Test Date:



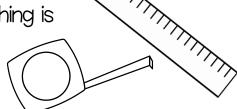


### What is length?

Length is used to measure how long or tall something is

### Tools used to measure length:

• Ruler, Tape Measure, Yard Stick, Meter Stick

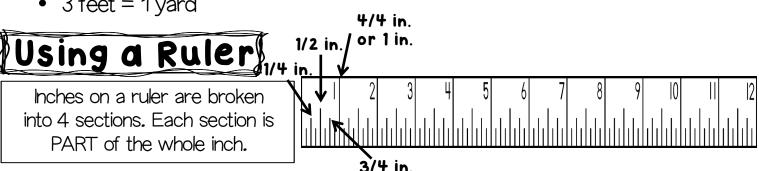


Units used to measure length:

US Customary	Metric
(in order from SMALLEST to LARGEST)	(in order from SMALLEST to LARGEST)
<ul> <li>Inch (in)—Ex: length of a paper clip</li> <li>Foot (ft)—Ex: length of a clipboard</li> <li>Yard (yd)—Ex: height of a door</li> <li>Mile—Ex: length of a road</li> </ul>	<ul> <li>millimeter (mm)—Ex: width (side) of a dime</li> <li>centimeter (cm)—Ex: width of your finger</li> <li>meter (m)—Ex: length of a guitar</li> <li>kilometer (km)— Ex: length of a road</li> </ul>

#### Important Conversions:

- 12 inches = 1 foot
- 3 feet = 1 yard



This is a metric ruler. Always make sure you line the object on the EDGE of the ruler, at the 0!





# What is capacity/volume?

- · Capacity is the amount of liquid a container can hold when filled
- Volume is the amount of space a liquid takes up

### Tools used to measure capacity/volume:

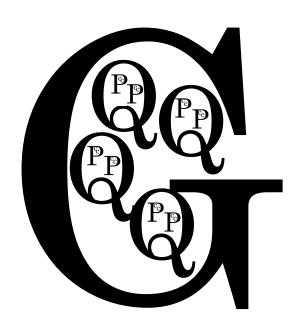
• Gallon, Quart, Beaker, Graduated Cylinder, Measuring Cup

# Units used to measure capapcity/volume:

US Customary	Metric
(in order from SMALLEST to LARGEST)	(in order from SMALLEST to LARGEST)
• Cup (c)	<ul> <li>Milliliter (mL)</li> </ul>
• Pint (pt)	• Liter (L)
• Quart (qt)	
• Gallon	

# Important Conversions:

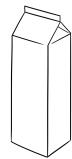
Remember the Gallon picture we drew!



G = Gallon



Q = Quart



P = Pint



C = Cup





#### What is weight/mass?

- Mass—The amount of matter something contains
- Weight—How heavy something is

#### Tools used to measure weight/mass:

• Balance, Double Pan Balance, Triple Beam Balance, Scale, Spring Scale

### Units used to measure weight/mass:

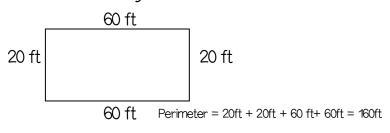
US Customary	Metric
(in order from SMALLEST to LARGEST)  • ounce (oz)—Ex: one pencil	(in order from SMALLEST to LARGEST)  • milligram (mg)—Ex: one grain of sand
<ul><li>pound (lb)—Ex: one football</li><li>ton —Ex: an elephant</li></ul>	<ul><li>gram (g)—Ex: one paperclip</li><li>kilogram (kg)—Ex: one book</li></ul>

#### Important Conversions:

- 1 pound = 16 ounces
- 1 kilogram = 1,000 grams

# Perimeter and Area

- PERIMETER is the <u>DISTANCE</u> AROUND a figure.
- To figure out the perimeter of a figure, you should <u>ADD</u> all the sides.
- Think of the perimeter as the *fence that* surrounds a yard



- AREA is the amount of space (square units) INSIDE a 2D shape.
- Measured in square units (ex: ft<sup>2</sup>, in<sup>2</sup>)
- To figure out the area of a figure, you should MULTIPLY the LENGTH x WIDTH.

7 ft
5 ft L x W

 $5 \text{ ft} \times 7 \text{ft} = 35 \text{ ft}^2$ 

<sup>\*</sup>The difference is that mass will NEVER change, but weight changes depending on gravitational pull