

DETERMINING UNITS OF MEASUREMENTS



Unit Overview

In this unit you, will be choosing the correct tool to construct, measure, weigh and calculate. Both customary and metric units will be used.

We can measure many different things, but mostly we measure **Length, Area, Volume, Mass, and Time.**



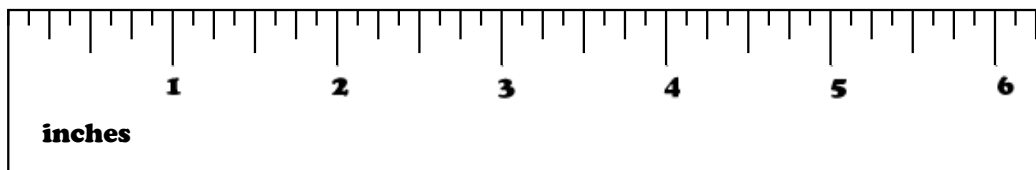
Measure the Length

The chart below shows the customary units of length.

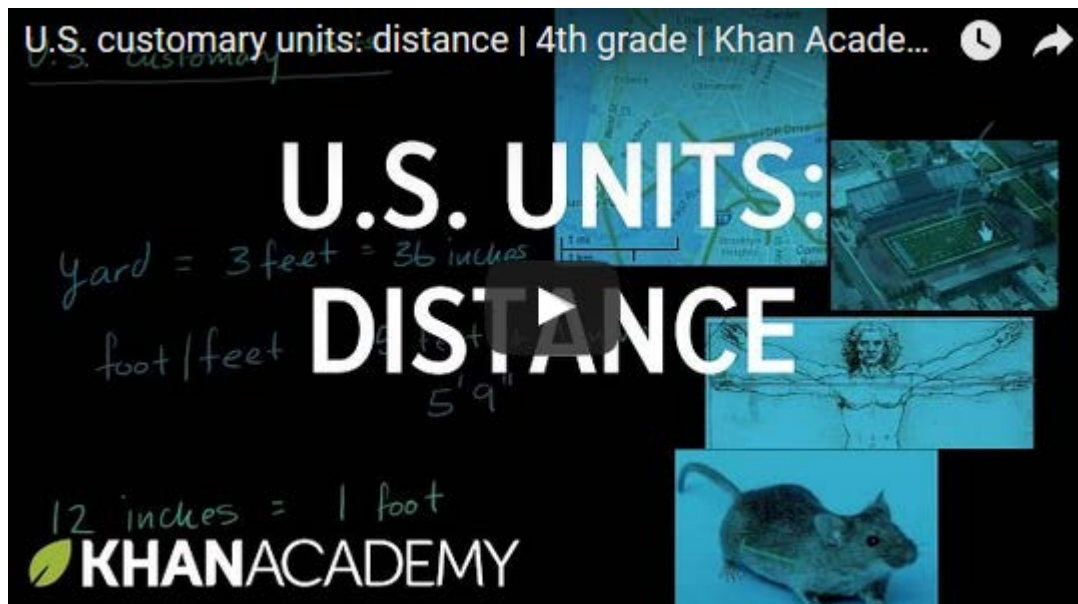
Customary Units of Length
12 inches (in) = 1 foot (ft)
3 feet (ft) = 1 yard (yd)
1,760 yards (yd) = 1 mile (mi)

When completing the questions section, you may refer to the chart for reference. It would be wise to memorize this chart because you will use measurement for the rest of your life.

An inch is the standard unit used to measure length. When measuring with a ruler, line up the end of the ruler with the end of the object you are measuring.



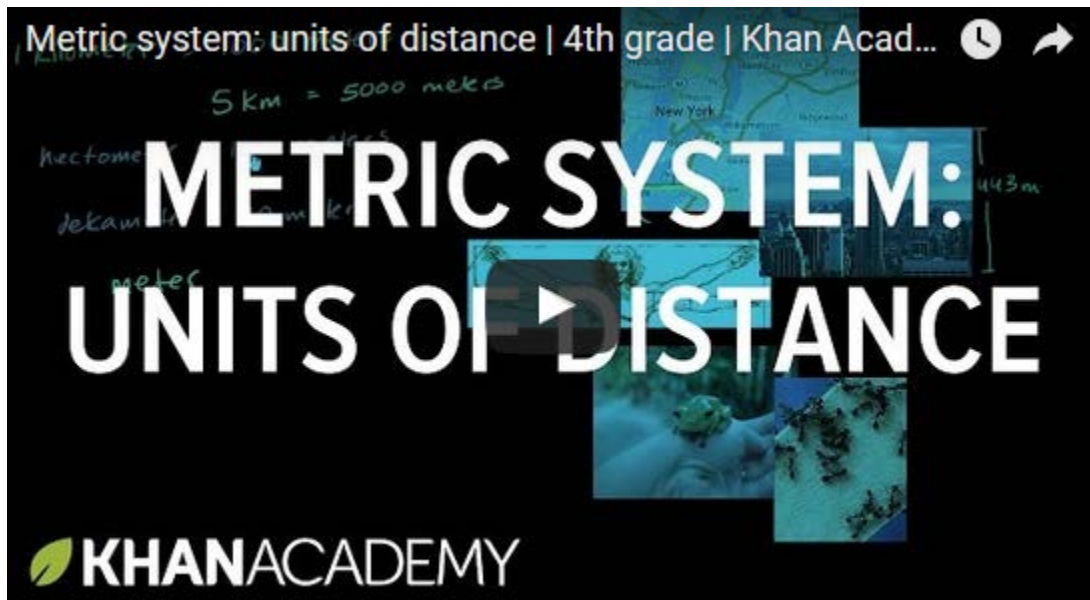
Click on the link to watch the video "[U.S. customary units: distance](#)".



The chart below shows the metric units of length.

Metric Units of Length
100 centimeters (cm) = 1 meter (m)
1,000 meters (m) = 1 kilometer (km)

Click on the link to watch the video "[Metric system: units of distance](#)".



Length

Kilometer (km)

A kilometer is a distance that is about 7 blocks long. Kilometers are used to measure long distances.

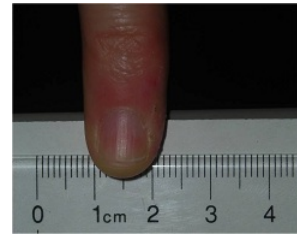


Meter (m)

A meter is about as long as a baseball bat. A meter stick could be used to measure the length of a room.

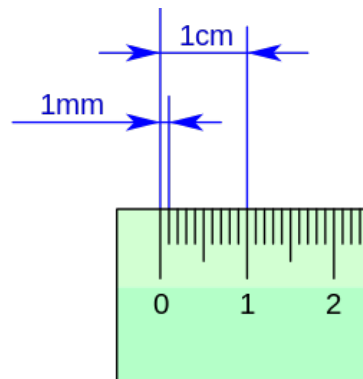
Centimeter (cm)

A centimeter is about the width of the pinky finger. A centimeter is a little less than half an inch long.



Millimeter (mm)

A millimeter is about as long as the thickness of the wire in a paper clip. The thickness of a dime is about 2 millimeters.



Measure the Weight

The charts below shows the customary units of weight.

Customary Units of Weight
$16 \text{ ounces (oz)} = 1 \text{ pound (lb)}$
$2,000 \text{ pounds (lb)} = 1 \text{ ton (T)}$

Click on the link to watch the video "[U.S. customary units of weight](#)".

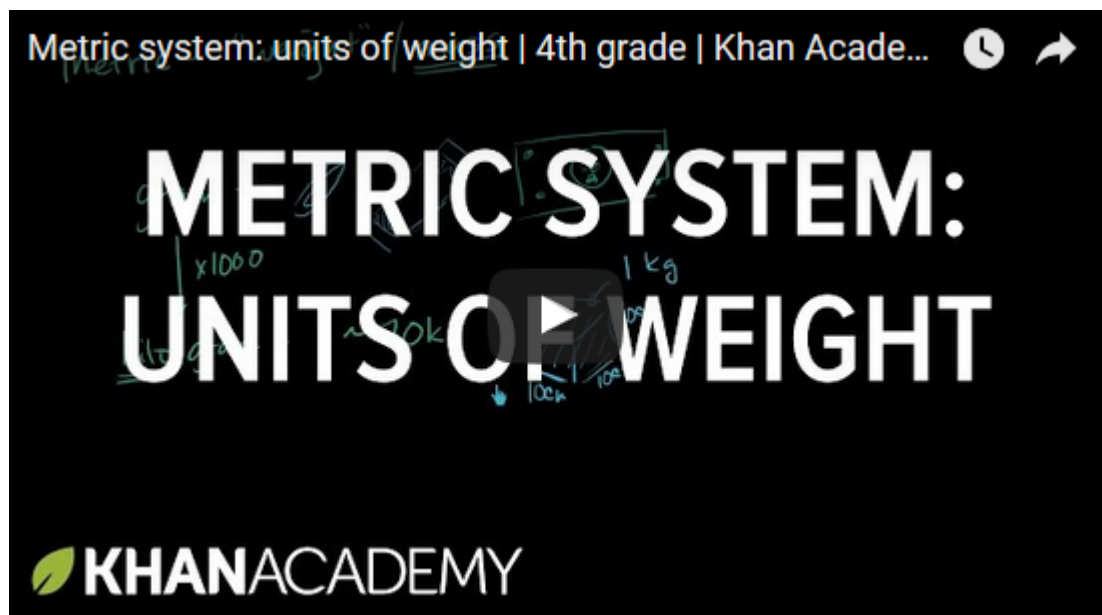


The charts below shows the metric units of weight.

Metric Units of Weight

1,000 grams (g) = 1 kilogram (kg)

Click on the link to watch the video "[Metric system: units of weight](#)".



Weight

Kilogram (kg)

A pair of shoes could weigh a kilogram.



Gram (g)

The weight of a cherry is close to a gram.

Milligram (mg)

The weight of a grain of sand is close to a milligram.

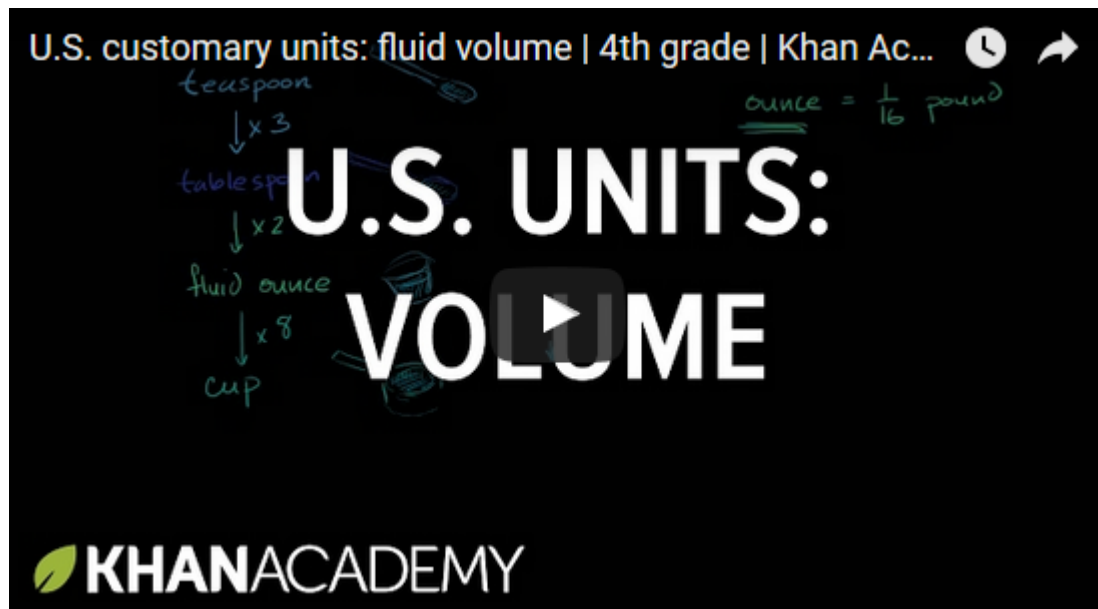


Measure the Capacity

The charts below shows the customary units of capacity.

Customary Units of Capacity
1 cup (c) = 8 fluid ounces (fl oz)
2 cups (c) = 1 pint (pt)
2 pints (pt) = 1 quart (qt)
4 quarts (qt) = 1 gallon (gal)

Click on the link to watch the video "[U.S. customary units: fluid volume](#)".



Click on the link to watch the video "[Choose pounds or ounces to measure weight](#)".

Choose pounds or ounces to measure weight | 4th grad...

Identify the most reasonable units to measure the weight each of the choices below.

a kitchen table

a pack of gum

POUNDS OR OUNCES?

a slice of bread

Answer

Drag cards to the correct category.

Check Answer

Need help?

I'd like a hint

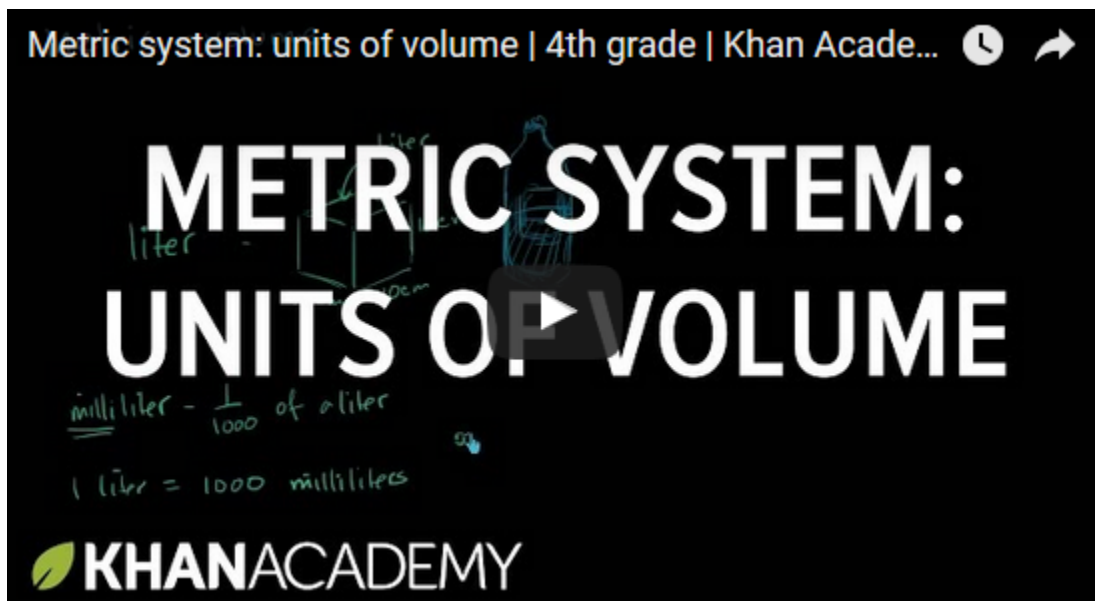
KHANACADEMY

The charts below shows the the metric units of capacity.

Metric Units of Capacity

1 liter (L) = 1,000 milliliters (ml)

Click on the link to watch the video "[Metric system: units of volume](#)".



Capacity



Liter (l)

A liter is a little more than a quart of milk.

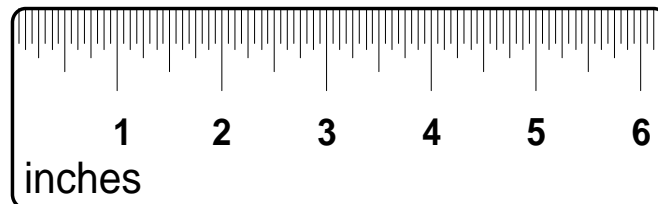
Milliliter (ml)

The amount of medicine that is held in a dropper is about one milliliter.

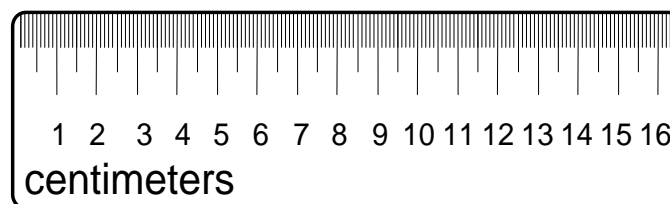


Which Should I Use?

Inch Ruler



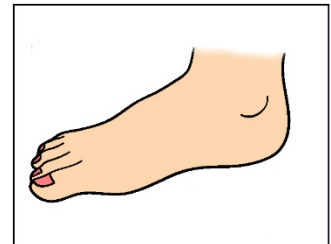
Centimeter Ruler



Examples:

Marcy wants to measure the size of her foot. Which unit would she use?

Answer: She would use the inch ruler. Her foot measured 10 inches.



Joe wants to measure the distance from his house to school. Which unit do you think he should use?

Answer: He would measure using kilometers. His distance measured 2 kilometers.



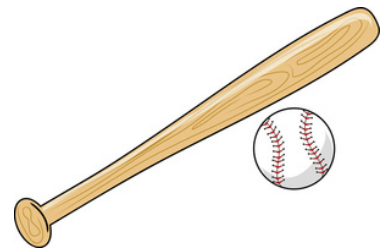
Stacy wants to measure the length of her cat. Which unit should she use to measure her cat?

Answer: She would measure using centimeters. Her cat measured 40 centimeters.



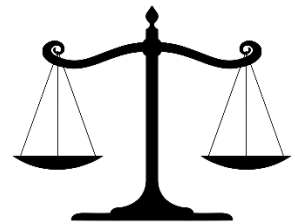
Greg wants to measure his baseball bat. Which unit do you think he should use?

Answer: He would use the meter stick. His bat measured 1 meter.



Kelsie wanted to weigh a bag of candy. Which unit should she use?

Answer: Kelsie should weigh the candy in ounces. Her candy weighed 8 ounces.



Andrew wanted to measure some flour for the recipe. Which unit should he use?

Answer: Andrew should measure the flour in cups. He measured 2 cups.

