

Metric System Notes

In science class, we will be using the **Metric System**. The metric system is a system of measurement that is used by scientists all over the world. Most countries only use the metric system. In the United States, we use the **English System**.

In the metric system, we will be using the following terms: **Grams, Liters, Meters, Seconds, and Celsius**. Can you guess which one is used for:

Liquid _____

Mass _____

Length _____

Temperature _____

Time _____

You can also use the following prefixes: Circle the smallest unit

Kilo – 1,000

Centi – 1/100th

Milli – 1/1000th

Example: 1,000 millimeters = 1 meter

100 centimeters = 1 meter

10,000 centimeters = 1 kilometer

1,000 meters = 1 kilometer

10 millimeters = 1 centimeter

Measure the following in **centimeters**:

My hand span is _____ cm. (measure outstretched hand between tip of thumb and tip of little finger)

The width of my index fingernail is _____ cm.

The width of the back my hand is _____ cm.

My foot is _____ cm

Name _____

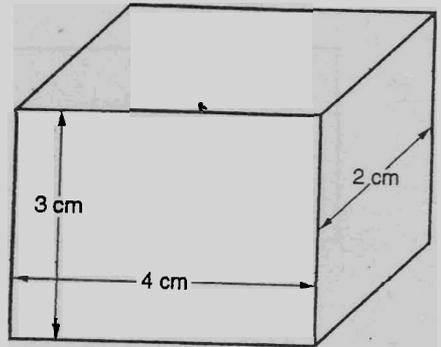
Period _____

Volume

Volume is the amount of space an object occupies.

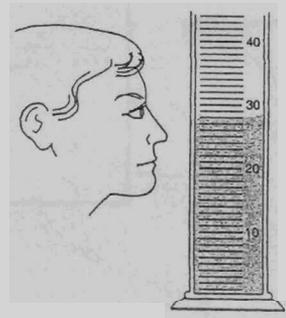
The volume of a rectangular object is found by multiplying the measurement of its length times width times height. (**Volume = length X width X height**)

Volume of rectangle _____ cm^3



To measure the volume of a liquid, you pour the liquid into a container called a *graduated cylinder*. Lines on the graduated cylinder are called *graduations*. You take the measurement by lining up your eyes with the liquid's surface. Read the line at the bottom of the curved surface called the *meniscus*.

Volume of liquid placed in graduated cylinder _____ cm^3



A graduated cylinder can also be used to measure the volume of irregularly shaped objects. When an object such as a marble is placed into the water inside the cylinder, the water level rises. The change in the volume of the water is equal to the volume of the object.

Volume of water + marble:

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Volume of water:

= Volume of marble:

