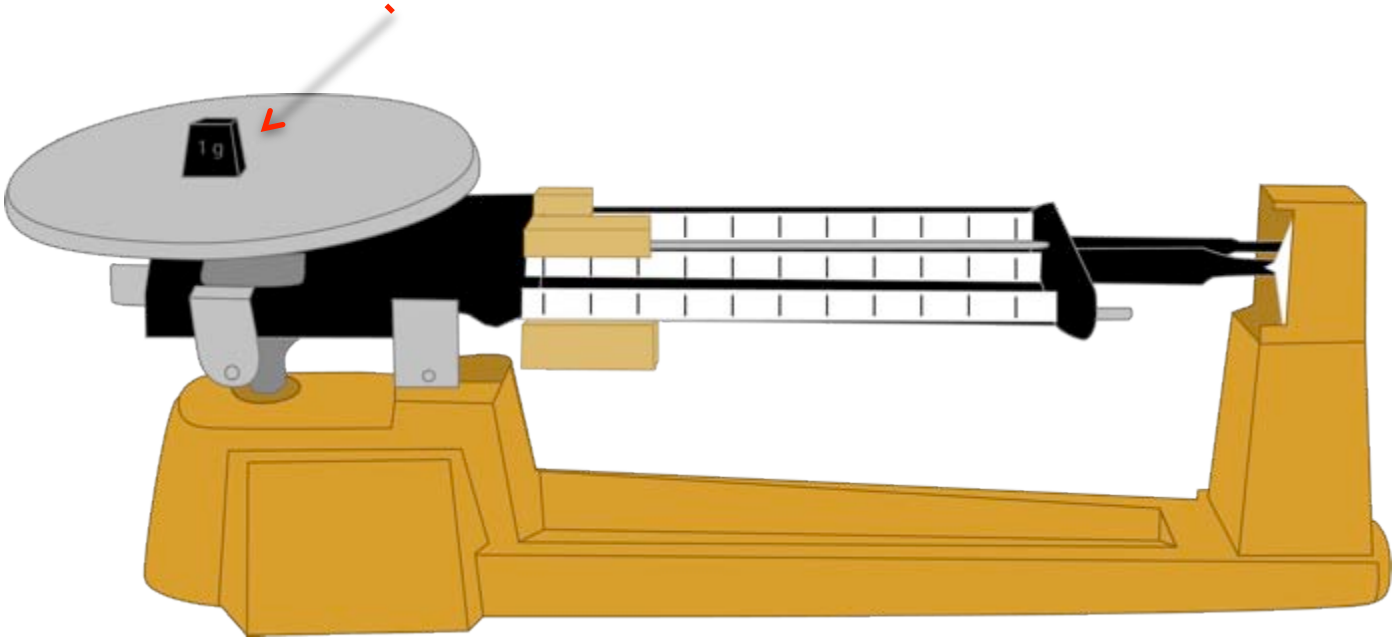
6.6B
Density

Picture Vocabulary

Mass

Measures how much matter is present in a substance.

Gram, g

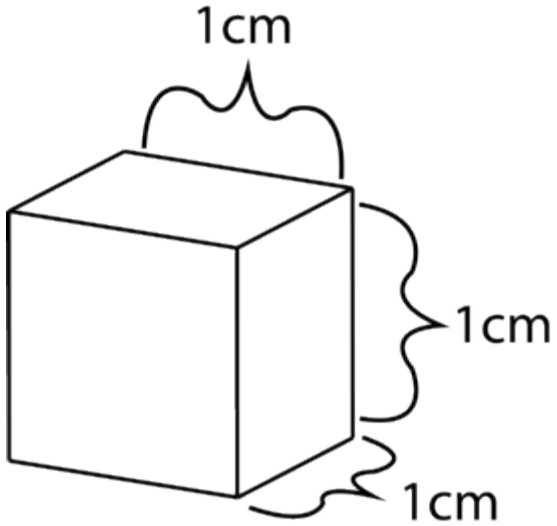


A metric unit of measurement used to measure small amounts of mass.

Volume

Measures how much space the matter occupies.

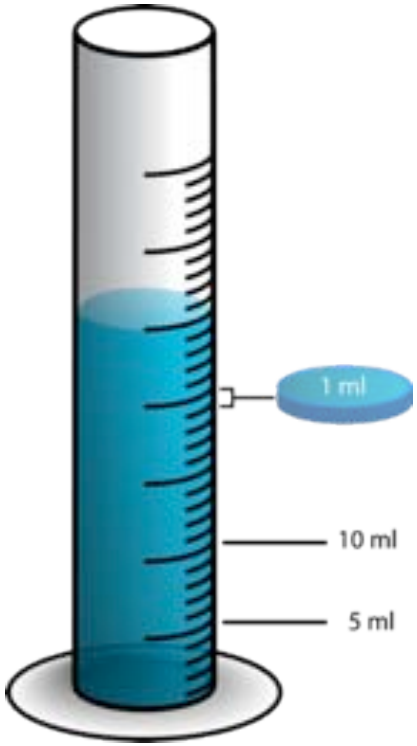
Cubic centimeter, cm^3



1 cm^3

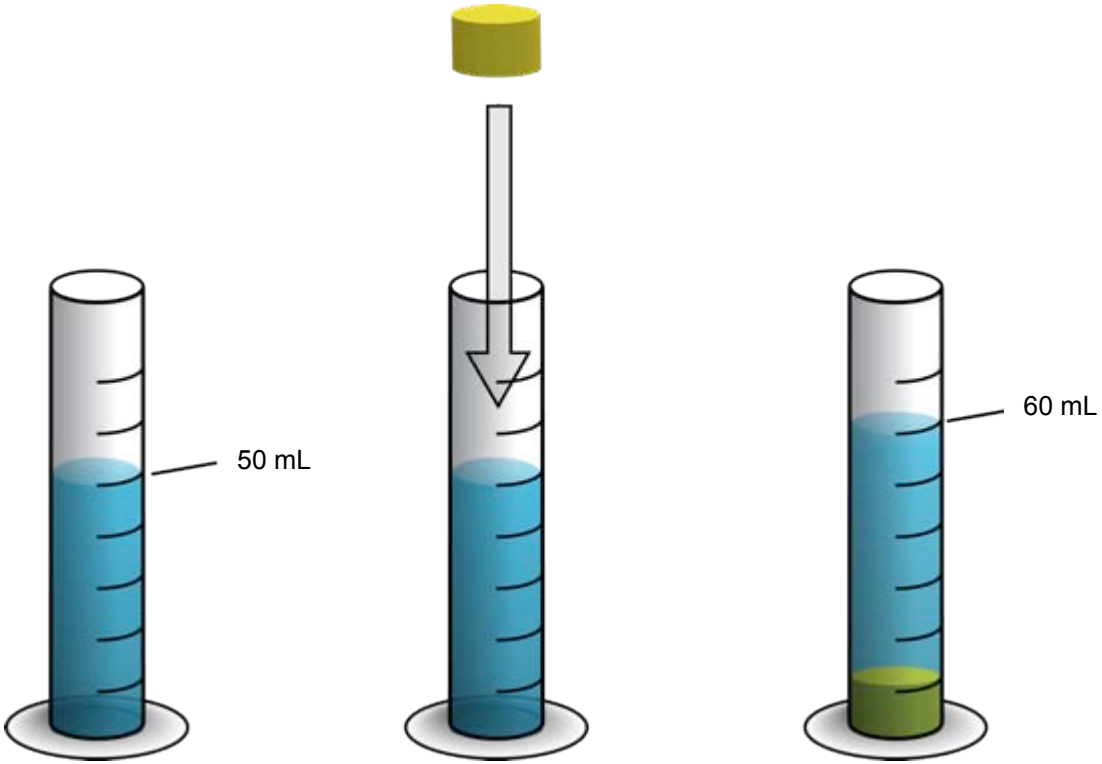
A metric unit of measurement used to measure small volumes of solid substances.

Milliliter, mL



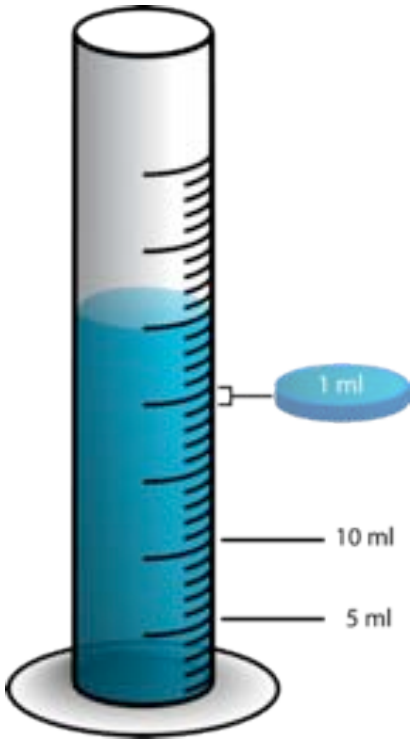
A metric unit of measurement used to measure small volumes of liquid.

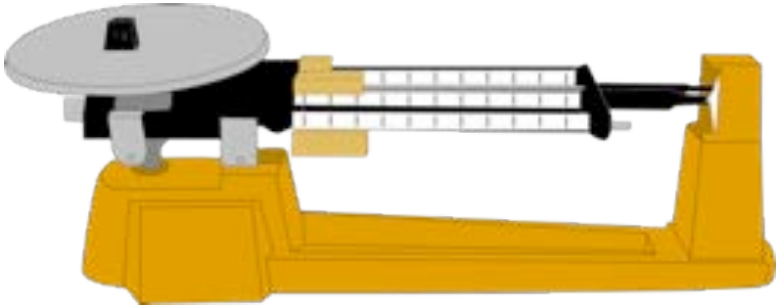
Displacement



A procedure used to measure volume of a solid object by placing it in a known amount of liquid.

Matter





Has mass and takes up space. Matter occurs as elements, compounds and mixtures.

Substance

Water

Helium Gas

Gold

Any form of matter that is uniform throughout and has consistent properties.

Physical Property

Characteristic that can be observed or measured without changing the substance, for example color, melting point, or conductivity.

Density

Comparing Densities

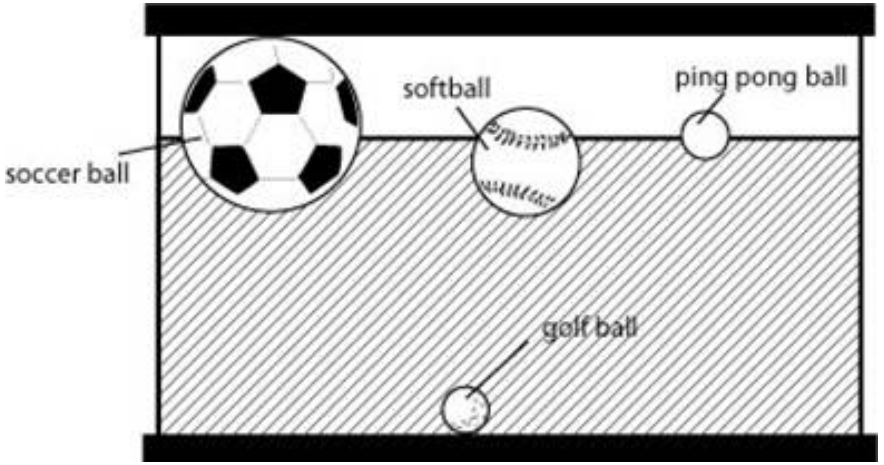
Substance	Density
Water, Liquid	1.0
Glass	2.6
Gold	19.3
Mercury	13.56

Computing Density

Substance	Mass	Volume	Density
Gold	19300 Kg	1 m^3	19.3
Styrofoam	100 Kg	1 m^3	0 .1
Water	1000 Kg	1 m^3	1.0

A physical property relating the amount of matter in a substance to the volume of the substance, a property used to identify and classify substances.

Relative Density



The comparison of the density of one material as it relates to another; frequently the comparison is to the density of water (as in sinking or floating).

Density Formula

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

$$D = \frac{m}{V}$$

D=m/V

Classify/Classification

Sort or group together based on shared characteristics, physical properties or chemical properties.