

Chapter 1 Vocabulary  
Must be copied in Notebook

**Scientific Method**- A systematic approach to problem solving.

**Technology**- Use of knowledge, tools or materials to solve problems and accomplish tasks.

**Observation**- Use of the senses to gather data.

**Hypothesis**- A possible explanation or an educated guess.

**Data**- pieces of information.

**Theory**- An explanation of observations supported by testing.

**Law**- Experimental FACTS tested many times and ALWAYS found to be true.

**Model**- A representation of a system or object.

**Meter**- Basic unit for measuring length in the SI (metric system)

**Volume**- Space occupied: Rectangular solid=  $L \times W \times H$  ( $\text{cm}^3$ )  
Liquid: Use graduated Cylinder (mL)  
Water Displacement  $\text{mL} = \text{cm}^3$

**Mass**-measure of how much matter something contains in grams.

**Temperature**-The measure of the average kinetic energy (speed) of particles.

**Area**-Space covered, found by  $A=L*W$

**Density**-How much mass per unit volume  $D=M/V$ . ( $\text{g/mL}$  (liquid) or  $\text{g/cm}^3$  (solid))

**Matter**-Anything that has mass and takes up space. (volume)

**Meniscus**- Curve of a liquids surface. Accurate volume measured here.

**Gravity**-Force of attraction between objects. Depends on the mass of the objects and the distance between the objects.

**Weight**-Measure of the force of gravity acting on an object. Measured in Newtons.

**Newton**- SI unit of force (weight) needed to accelerate 1 kg @ 1m/s for each second.  
(about ¼ lb.)

**Inertia**- Resistance to changes in the state of motion. Depends on mass.

**Physical Property**- A characteristic that is observed or measured w/out changing the identity of the matter.

**Physical Change**- Change that effects the physical properties but does not change the the substance.

**Chemical Property**- How a substance reacts with other substances to change into a new substance.

**Chemical Change**- When a substance changes into a new substance with new properties.

**Gram**- Unit of mass in SI (metric system).

**Liter**- Unit of volume (liquid) in SI (metric system).