**Physical Properties: Guided Notes**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

1. SI Unit stands for: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. For Mass, the SI Unit is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. For Volume, the SI Unit is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. For Length, the SI Unit is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ are physical properties that are DEPENDENT on the amount of matter of an object. This means that they *change* depending on the amount of an object there is.
3. To calculate the volume of a *regular* object, use the formula: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ X \_\_\_\_\_\_\_\_\_\_\_\_\_\_ X \_\_\_\_\_\_\_\_\_\_\_\_= Volume.
4. To calculate the volume of an *irregular* object, use the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ method. This means that if you submerge an object, it will displace a volume of liquid equal to the volume of the object. Use the formula:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = Volume of Object

* 1. The bowl-shape of water in a graduated cylinder is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When measuring the volume, measure from the \_\_\_\_\_\_\_\_\_\_\_\_\_ of the meniscus.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Boiling Point, \_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_ are physical properties that are INDEPENDENT of the amount of matter in an object. This means they stay **constant** no matter how much of an object you have.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is how closely packed particles of matter are in an object. To calculate this, use the formula:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_ ÷ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Or, D = M/V

1. The amount of a substance that will dissolve in a solvent is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the last INDEPENDENT physical property.
   1. \_\_\_\_\_\_\_\_\_\_\_ is the substance being dissolved in the solvent
   2. \_\_\_\_\_\_\_\_\_\_\_ is the liquid in which the solute is dissolved to form a solution
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the degree to which the solute is (or can be) dissolved in the solvent. This is written as a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What is the example used for solute, solvent, and solution?

Solute = \_\_\_\_\_\_\_\_\_\_

Solvent = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Solution = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_