Date _____

Topic: Measurement and Graphing
Aim:

| 1. What is the definition of density? | Density – the amount of mass in a given volume

Units: g/cm^3 or g/mL

(how packed the molecules are in a substance – more packed = more dense) |

2. How is the density formula used?

a.   Density Formula:

Density = mass / volume

D = m / V

b. Density Calculation for **PLASTIC**:	c. Density Calculation for **ALUMINUM**:
Mass = _____	Mass = _____
Volume = _____	Volume = _____
Substitutions:	Substitutions:
Density = _____	Density = _____

d. Manipulating the Density Formula and/or using the Density Triangle

Example 1:
The mass of a piece of oak is determined to be 5g. If the density of oak is known to be .75 g/cm^3, what would the volume of that piece of oak be?

Example 2:
The density of a chunk of iron is 7.9 g/mL. The chunk of iron was found to have a volume of 3mL. What would the mass of that chunk of iron be?

| 3. How can the relative densities of different substances be compared without doing any calculations? | When substances of two different densities are mixed

together, the more dense substance sinks to the bottom

while the less dense substance rises to the top. |