**Density Review Sheet**

Vocabulary Words:

•  Density: The mass per unit volume of an object or a substance. (measured in g/mL, g/cm3, g/cc)

•  Mass: The amount of matter in an object or a substance (usually ‘g’).

•  Volume: The amount of space an object or a substance takes up (usually mL or cm3).

Key Concepts:

•  D=M/V which means that the density of an object or a substance can be found by dividing its mass by its volume.

•  So basically the formula D=M/V shows how much matter is crammed in a given space.

•  If an object has a density of less than the liquid it is in, it will float. •  If an object has a density of more than the liquid it is in, it will sink. •  If an object has a density that is the same as the liquid it is in, it will remain suspended in the liquid.

Important to Know:

* The most frequently used units for density are g/mL, g/cm3 or g/cc
* The density of fresh water is 1.0 g/ml
* Know how to calculate the density of an object given its mass and volume.
  + *Ex: a 100mL sample of maple syrup has a mass of 139g.*
  + *Calculate the maple syrup’s density:*

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* Be able to predict whether an object will sink or float in a liquid if you know its density and the density of the liquid.
  + *Ex: Vegetable oil is measured to have a density of 0.85g/mL. An object has a density of 0.92g/mL.*
  + *Will the object sink or float when placed in the oil? \_\_\_\_\_\_\_\_\_\_*
  + *Why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*