Density – Review Questions

Name: _____   Date: _____

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

1. A chef fills a 50 mL container with 43.5 g of cooking oil. Calculate the density of the oil?

2. Calculate the mass of a liquid with a density of 2.5 g/mL and a volume of 15 mL.

3. Calculate the volume of a liquid with a density of 5.45 g/mL and a mass of 65 g.

4. You find a ring with a mass of 107 g. You fill a graduated cylinder up with 10 mL of water and put the ring into the cylinder. The water rises up to the 15 mL mark. What is the ring made of?

   Copper (8.92 g/cm^3)   Gold (19.32 g/cm^3)   Platinum (21.4 g/cm^3)

5. A student performs an experiment with three unknown fluids and obtains the following
    measurements:

    Fluid A: m = 2060 g, V = 2000 mL
    Fluid B: m = 672 g, V = 850 mL
    Fluid C: m = 990 g, V = 1100 mL

    Draw how the fluids would be layered if they were combined in a bea

6. There is a block on your desk that acts as a paperweight. Its measurements are 3 cm by 4 cm by 6
    cm. The block has a mass of 184.32 g.

    Copper (2.56 g/cm^3)   Quartz (2.64 g/cm^3)   Diamond (3.52 g/cm^3)