**CHEMISTRY WORKSHEET - DENSITY**

**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PERIOD\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Calculate the density of a body that has a mass of 350.0 g and has a volume of 70.5 ml.

2. A powder has a mass of 40.0 g. When the powder is added to 30.0 ml of water, the total volume is 45.0 ml. What is the density of the powder?

3. A container has a mass of 100.0 g when empty, 250.0 g when filled with water and 200.0mL when filled with an alcohol solution. Calculate the density of the alcohol solution.

4. The density of concentrated sulfuric acid solution is 1.86 g/ml. Calculate

A) the mass of 500.0 ml of solution.

B) the volume occupied by 500.0 g of the solution.

5. The density of sodium hydroxide solution is 1.40 g/ml. Calculate

A) the mass of 50.0 ml of solution

B) the volume of solution which contains 800.0 g of the solution

6. What is the volume in milliliters of a sample of helium that has a mass of 1.73 x 10-3 grams.

7. Gold has a density of 19.3 g/cm^3. What is the density in kilograms per cubic meter?

8 . A student finds a shiny piece of metal that she thinks is aluminum.  In the lab, she determines that the metal has a volume of 245 cm^3 and a mass of 612g.  Calculate the density.  Is the metal aluminum?

9. There are 7.0 x 10^6 red blood cells (RBC) in 1.0 mm^3 of blood.  How many red blood cells are in 1.0 L of blood?

10.  ? cm3 = 1 hm3

12. ? mm3 = 1 dm3

13. ? m3 = 1 hm3

14. ? dcm3 = 1 km3

15. ? L = 1 cm3