**Density Calculations Sheet**

1. What is the volume of a liquid with a density of 1.5 g/mL and a mass of 78 g?
2. What is the density of an object with a mass of 34 g and a volume of 13 cm3?
3. When an irregular shaped object is placed in water, the water level rises from 28.2 mL to 76.2 mL. What is the **mass** of the object if the density is equal to 5.7 g/mL?
4. When an irregular shaped object is placed in water, the water level rises from 18.6 mL to 34.2 mL. What is the **density** of the object if the mass is equal to 6.5 g?
5. An object has a length of 4.5 cm, height of 2.3 cm, and a width of 1.9 cm. It has a mass of 15.4 g. What is the density of the object?
6. Identify whether the objects/liquids listed below will **sink** or **float** in water. Explain using density.

 a. Ice cube (density = 0.94 g/mL)

 b. Paper clip (density = 7.8 g/mL)

 c. Rubber band (density = 1.2 g/mL)

 d. Vinegar (density = 0.96 g/mL)

1. A gold‐colored ring has a mass of 18.9 grams and a volume of 1.12 mL. Is the ring pure gold? How do you know? (The density of gold is 19.3 g/mL.)