

$$\text{Density} = \frac{\text{mass (g)}}{\text{Volume (cm}^3\text{)}} = \boxed{\text{g/cm}^3}$$

or (mL) $\boxed{\text{g/mL}}$

Sink = > 1 greater than 1

Suspend = $= 1$ equal to 1

Float = < 1 less than 1

Name: _____

FINDING DENSITY

Density of water = 1.0g/mL

1. A block of aluminum has a mass of 21.6 grams and a volume of 8 cubic centimeters. What is the density of the aluminum?

2. A 35-gram cube has a volume of 1.8 cubic centimeters. Find the density. Will it float?

3. What is the density of 10 cubic centimeters of corn syrup that has a mass of 10.8 grams? Will it float?

4. What is the density of 25 cubic centimeters of salad oil that has a mass of 23 grams? Will it float?

5. What is the density of 30 cubic centimeters of vinegar that has a mass of 30.3 grams? Will it float?

6. A rectangular object measures 3 cm x 2 cm x 1 cm. The object has a mass of 4 grams. What is the density?

7. If 95.6 grams of gold has a volume of 5 cubic centimeters, what is the density of gold?

*BONUS: If the density of a diamond is 3.5 g/cm³, what would be the mass of a diamond whose volume is 0.5 cm³?