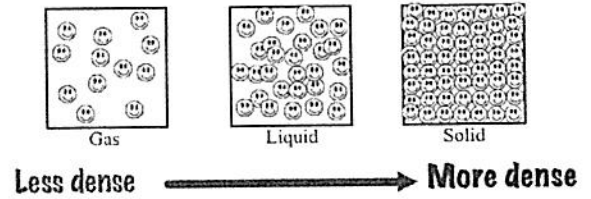


Name: _____ Date: 1-30-20 Period: _____

Density:

- Amount of mass in a specific amount of Volume
- How tightly packed the particles of an object are



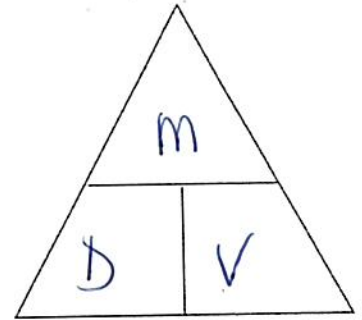
- Calculated using the following formula:

$$\text{Density} = \frac{\text{mass}}{\text{Volume}}$$

D =

m = grams

v = cm^3 or mL



- Mass is measured in g
- Volume is measured in mL or cm^3

Why do some things float and others sink?

- Density of water = 1.0 g/cm^3 or 1.0 g/mL or 1.0 kg/mL
- Object with density $> 1 \text{ g/cm}^3$ will sink in water
- Object with density $< 1.0 \text{ g/cm}^3$ will float in water
- Changing an objects size WILL NOT change its density!!!

Cubes in Water:

- A. 100 % under & on bottom ... $> 1 \text{ g/cm}^3$
- B. 90 % under ... 0.9 g/cm^3
- C. 40 % under ... 0.4 g/cm^3
- D. 50 % under... 0.5 g/cm^3
- E. 30 % under... 0.3 g/cm^3
- F. Suspended ... 1.0 g/cm^3

