## **Final Review: Properties of Matter**

## Things I Should Know:

- 1. How to diagram the atoms in a solid, liquid, and glass
- 2. Use current tools to calculate mass and volume of solids and liquids
- 3. Predict the relative density of objects
- 4. Calculate density
- 5. Describe the relationship between mass and volume (in the density equation)

## **Practice Questions:**

1. Draw what the atoms look like in a solid, liquid, and gas.

	1.	How do atoms move in a solid?
	2.	How do atoms move in a liquid?
	3.	How do atoms move in a gas?
2 Fill out the chart hole	]	

2. Fill out the chart below.

	Definition	How to Find	Units
Mass			
Volume			
Density			

3. What is formula for density?

4. What causes an object to sink or float? \_\_\_\_\_

- 5. If an unknown object has a mass of 10 g and a volume of 2 mL, what is its density?
- 6. Would this object sink or float in water?
- 7. If an unknown object floats in water, what is its relative density? \_\_\_\_\_\_
- You fill a graduated cylinder up with 20 mL of water and drop an unknown object into the water. Now the graduated cylinder says 30 mL. Then you place the unknown object on a scale and the scale says 10 g. What is the unknown object's density? \_\_\_\_\_ Will it sink or float in water? \_\_\_\_\_
- 9. In the density equation, if the volume stays the same but the mass increases, what will the density do?