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## 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.
2. How do atoms move in a solid? $\qquad$
$\square$ 2. How do atoms move in a liquid? $\qquad$
3. How do atoms move in a gas? $\qquad$
4. Fill out the chart below.

Definition
How to Find
Units

## Mass

Volume
Density
3. What is formula for density? $\qquad$
4. What causes an object to sink or float? $\qquad$
5. If an unknown object has a mass of 10 g and a volume of 2 mL , what is its density? $\qquad$
6. Would this object sink or float in water? $\qquad$
7. If an unknown object floats in water, what is its relative density? $\qquad$
8. 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? $\qquad$ Will it sink or float in water? $\qquad$
9. In the density equation, if the volume stays the same but the mass increases, what will the density do?

