**Density Cubes Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Directions: Follow the directions for determining the density of water. Then, use the space below to document your observations for each cube. Answer the questions at the end when you’re done.

Mass of graduated cylinder (g):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Measure 10. mL of water into the graduated cylinder.

Mass of water and graduated cylinder (g):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mass of just water (g):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Density of water (**1 g/mL = 1 g/cm3**):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the same about all of the cubes?
2. What is different about the cubes?
3. What do those differences mean?
4. What is the main conclusion you draw from exploring mass and volume of the cubes?
5. What is the relationship between the density of water and the density of the cubes that sink and float?