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

Directions: Follow the directions for finding the density of water. For each cube, fill out each measurement and calculation blank. 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**):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Cube color: | Does it sink or float?: |
| Cube dimensions (cm):Height:Width:Depth: | Mass of Cube (g): |
| Volume of Cube (height x width x depth): | Density of Cube (g/cm3; mass/volume): |

|  |  |
| --- | --- |
| Cube color: | Does it sink or float?: |
| Cube dimensions (cm):Height:Width:Depth: | Mass of Cube (g): |
| Volume of Cube (height x width x depth): | Density of Cube (g/cm3; mass/volume): |

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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, volume, and density of the cubes?
5. What is the relationship between the density of water and the density of the cubes that sink and float?