

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 ($1 \text{ g/mL} = 1 \text{ g/cm}^3$): _____

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/cm^3 ; 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/cm^3 ; 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?