

Name _____ Date _____ Period _____

Density Cube Lab

Directions: Calculate the Volume for each cube. Measure the mass of each cube on the balance. Calculate the density. Then place each sample in water to test if it floats. Answer the questions below.

Note: If the cube is wet, dry it off before weighing it!

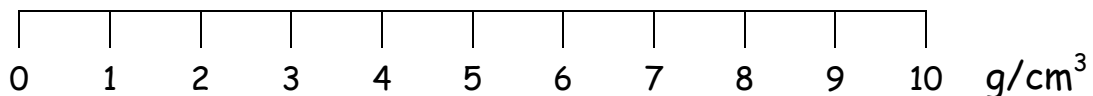
Volume = Height x Width x Depth (use a metric ruler!)

Mass = Use a scale! Density = Mass/Volume

1 inch = 2.54 cm

Cube	Mass (g)	Volume (cm ³)	Density (g/cm ³)	Did it Float?
1				yes/no
2				yes/no
3				yes/no
4				yes/no
5				yes/no
6				yes/no
7				yes/no
8				yes/no
9				yes/no
10				yes/no
11				yes/no
12				yes/no

1) Graph the density of each sample on the number line below. Mark it with an arrow and the letter S for sink or F for float.



2) The density of water is 1 g/cm^3 . Graph "Water" on the number line on the other page. Do you see a pattern between the density of water and the samples that rose or sank? If so, describe it.

3) Take a guess as to what the density of a human would be. Support your prediction with real life experiences.

4) Submarines are ships that can submerge underwater at will. How do you think they work?

5) What else (machine, animal, thing, etc.) uses the properties of density to function? Write down as many as you can think of!