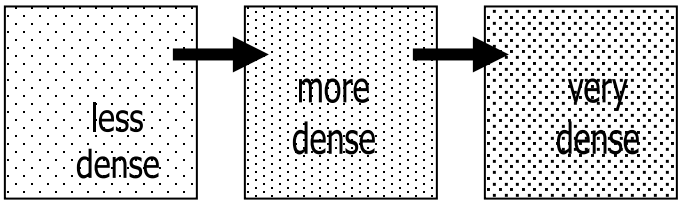

DENSITY CALCULATION LAB /37

Name_____ Hour _____

SCIENTIFIC QUESTION: How does density affect sinking and floating?

BACKGROUND KNOWLEDGE:
Density is a measurement that is derived from (comes from) two other measurements—volume and mass. Density can be thought of as **how tightly packed** an object's molecules are. If an object is very dense, the matter in it is very compressed (pressed together). For example, if you have a piece of metal and a marshmallow that are the exact same volume, the marshmallow will be less dense because its molecules are not tightly packed, and the metal will be more dense.

HYPOTHESIS: I think _____

_____

INSTRUCTIONS
In this lab, you will be calculating the density of the objects you massed in the previous lab. First enter the masses in g and volumes in cm3 in the chart below. Then, use the formula to fill in the density column on the chart. When you fill in the data chart, be sure to label your numbers with g for mass, cm^3 for volume, and g/cm^3 for density.

$$\text{DENSITY} = \frac{\text{MASS}}{\text{VOLUME}} \qquad \text{OR} \quad D=M/V$$

	OBJECT	MASS	VOLUME	DENSITY	Sink or Float?
1	Aluminum				
2	Steel				
3	Brass				
4	Copper				
5	Acrylic				
6	Oak				
7	Nylon				
8	Pine				
9	Poplar				
10	Pvc				

32. Look at all the blocks that sunk. What do their densities have in common?

33. Look at all the blocks that floated. What do their densities have in common?

34-35. Describe what density IS in your own words. DO NOT tell me how to calculate it… tell me what density MEANS.

36-37 ARGUMENT/CLAIM (support with evidence from the experiment)

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