Name:_____
Blk:_____Date:_____

Density Layering Lab

Objective:

In this investigation you will make accurate measurements to determine the density of different fluids and predict how they would layer in a beaker

Materials:

- 4 assigned fluids
- 25.0 mL graduated cylinder
- Quadruple Beam Balance
- Medicine dropper

Procedure:

Step 1: Make sure the balance is ZEROED
Step 2: Weigh the EMPTY graduated cylinder and record its mass
Step 3: Fill the graduated cylinder to 20.0 mL mark with your assigned fluid
Step 3: Weigh the FILLED graduated cylinder and record its mass
Step 4: At a sink use the soap and test tube brush to clean out the graduated cylinder
Step 5: Use a rolled up piece of paper towel to dry out the graduated cylinder
Step 6: Use the appropriate data to calculate the density of your assigned fluid (record)
Step 7: repeat the above with your next 3 fluids

Data and Observations:

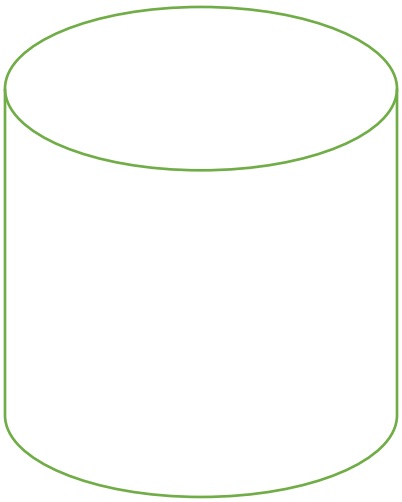
Fluid	Mass of Graduated cylinder (g)	Mass of Cylinder + fluid (g)	Mass of fluid (g)	Volume of material (mL)	Density Of fluid (g/mL)
				20.0 mL	
				20.0 mL	
				20.0 mL	
				20.0 mL	

Analysis:

1. Use the three step method discussed in class to **show the calculated densities** of your four assigned fluids

Fluid 1:	Fluid 2:
Fluid 3:	Fluid 4:

2. Illustrate how the above four fluids would layer when placed into a transparent beaker:



Conclusion and Application:

1. Write a short paragraph that describes how you can determine the density of a fluid.

2. Write a short paragraph to describe how you would determine the density of an ***irregularly shaped solid.***