

Chemistry 1094
Density Layers

Name: _____ **Lab Section:** _____

OBJECTIVE: To determine the density of some solid objects by dropping them into a series of unmixed liquids.

PROCEDURE: As in the chemistry 1094 lab manual pp 93-94.

OBSERVATIONS:

Step 5:

	Molasses	Corn Syrup	Tide Detergent	Downey Fabric Softener	Mineral Oil	Isopropyl Alcohol
Mass of graduated cylinder before adding liquid to cylinder (g)						
Mass of cylinder after adding liquid to cylinder (g)						
Volume of liquid in cylinder before adding household liquid to cylinder (mL)						
Volume of cylinder and contents after adding liquid (mL)						
Calculated mass of liquid (g)						
Calculated volume of liquid (mL)						
Calculated density of liquid (g/mL) <i>Show your calculations for every case</i>						

Step 6: Determining the Approximate Density of Solid Objects

Object	Metal Paper Clip	Eraser	Plastic Clip	Paraffin wax	Small Cork
Layer Where it Came to Rest (Or Layers in between which it came to rest)					
Calculated Density of that Layer (or of the two layers in between which it came to rest, if applicable)					
Therefore Approximate Density of Solid Object (g/mL) (State as greater than, less than, or equal to, density of layer where it came to rest)					

Questions:

1. Can you think of other liquids that could be used to widen the range of your density-determining device?

2.
 - a) List the household liquids in order of increasing density.

 - b) List the solid objects in order of increasing density.