


Density Lab: Liquids

Name: _____

Block: _____

Date: _____

Procedure	Measurement
Density is loosely defined as “how much stuff you have per unit volume”. What is the formula we use to calculate density?	$D =$
We have done several labs now dealing with density. While we have used the same mass units (grams) for each density measurement, we have used different volume units. What are the two different volume units we have used?	1. 2.
Measure and record the mass of a DRY graduated cylinder (you choose the size).	<i>Be sure to include correct units.</i>
What is the calibration of the graduated cylinder you chose?	<i>Be sure to include correct units</i>
To what place will you record your answer for volume? <i>(Use a decimal fraction to indicate the place – like 1 or .1 or .01)</i>	
Choose the first liquid. Mark the letter here in the box  Pour some liquid (you choose the amount) into the graduated cylinder. Measure the volume.	<i>Be sure to include correct units.</i>
Measure the mass of the liquid plus the graduated cylinder.	<i>Be sure to include correct units.</i>
What the mass of the liquid alone?	<i>Be sure to include correct units.</i>
Calculate the density of the liquid.	SHOW YOUR MATH SETUP. <i>Be sure to include correct units.</i>

(Continue on back side)

You will now REPEAT the steps above with the other two liquids. You will calculate the density of each of the liquids. Record your measurements in the proper locations below.

Measure and record the mass of a DRY graduated cylinder (you choose the size).

Be sure to include correct units.

Choose the second liquid. Mark the letter here in the box

Be sure to include correct units.



Pour some liquid (you choose the amount) into the graduated cylinder. Measure the volume.

Measure the mass of the liquid plus the graduated cylinder.

Be sure to include correct units.

What the mass of the liquid alone?

Be sure to include correct units.

Calculate the density of the second liquid.

SHOW YOUR MATH SETUP.
Be sure to include correct units.

Measure and record the mass of a DRY graduated cylinder (you choose the size).

Be sure to include correct units.

Choose the third liquid. Mark the letter here in the box

Be sure to include correct units.



Pour some liquid (you choose the amount) into the graduated cylinder. Measure the volume.

Measure the mass of the liquid plus the graduated cylinder.

Be sure to include correct units.

What the mass of the liquid alone?

Be sure to include correct units.

Calculate the density of the third liquid.

SHOW YOUR MATH SETUP.
Be sure to include correct units.

Now, compare the densities of your three liquids. If you would pour these same three liquids into a long tube, which would float on top, which would be in the middle and which would be the bottom layer? Indicate that in an example drawing below. Be sure to label each layer with the correct letter based on the data you gathered in this lab.

