

**Density Column**

Name: \_\_\_\_\_

Density is a physical property of matter that can be calculated if the mass and volume are known. The formula for density is:  $D=m/v$ . In the examples on this page, mass is in grams. Liquid volume is in milliliters and the volume of the solid objects is in cubic centimeters.

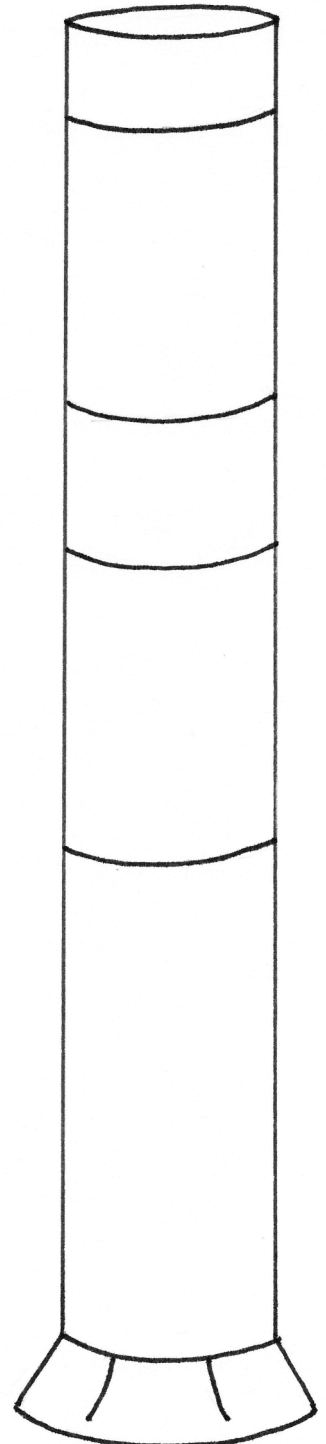
The following list contains information for four liquids and two solid objects. Complete the density table below by determining the density of each object.

- a yellow liquid with a mass of 2.8 g and a volume of 2 mL
- a green liquid with a mass of 6 g and a volume of 3 mL
- a red liquid with a mass of 1.8 g and a volume of 2 mL
- an orange liquid with a mass of 1.3 g and a volume of 1 mL
- a blue cube with a mass of .8 g and a volume of 2 cm<sup>3</sup>
- a pink star with a mass of 2.4 g and a volume of .8 cm<sup>3</sup>

Object	Mass (g)	Volume (mL or cm <sup>3</sup> )	Density (g/mL or g/cm <sup>3</sup> )
yellow liquid			
green liquid			
red liquid			
orange liquid			
blue cube			
pink star			

1. Which liquid is the most dense? \_\_\_\_\_
2. Which liquid is the least dense? \_\_\_\_\_
3. Which object will settle to the bottom? \_\_\_\_\_

*Use colored pencils to sketch the liquid layers in the container on the right. Add the two solid objects at the appropriate locations.*



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Object	Mass (g)	Volume (mL or cm <sup>3</sup> )	Density (g/mL or g/cm <sup>3</sup> )
yellow liquid	2.8	2	1.4
green liquid	6	3	2
red liquid	1.8	2	.9
orange liquid	1.3	1	1.3
blue cube	.8	2	.4
pink star	2.4	.8	3

1. Which liquid is the most dense? green liquid
2. Which liquid is the least dense? red liquid
3. Which object will settle to the bottom? pink star

*Use colored pencils to sketch the liquid layers in the container on the right. Add the two solid objects at the appropriate locations*

