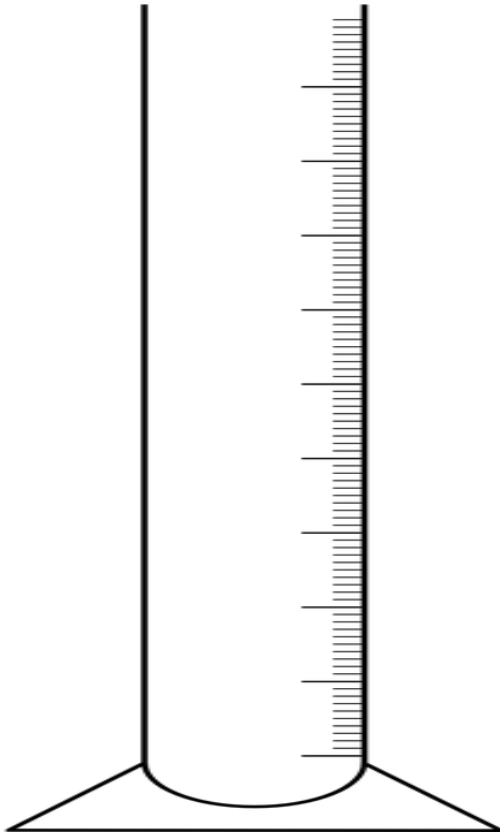


Density Tower

Objective: To estimate the densities of liquids and objects by comparing them to known densities.

Based on the picture on the board, color in your own graduated cylinder. Each liquid should be the correct color, and labeled.



Here are the liquids that are used:

- Vegetable oil (yellow)
- Water (red)
- Dishwashing soap (green)
- Corn syrup (brown)
- Honey (orange)

Here are the densities of the liquids in random order:

- 1.42 g/mL
- 1.33 g/mL
- 1.06 g/mL
- 1.00 g/mL
- 0.92 g/mL

After your graduated cylinder is completely colored in, match the type of liquid with its density.

Color of Liquid	Type of Liquid	Density

Can you guess which layer these solids will end up in the graduated cylinder?

Object	Guess	Actual
Rubber Stopper – 1.29 g/mL		
Cork – 0.24 g/mL		
Marble – 2.6 g/mL		

Density Practice Problems

**Remember: Volume can
be found using
Volume = length x
width x height
OR
Water displacement**

How to solve a word problem:

1. Read the word problem carefully.
2. Determine what is being asked for.
3. Write the formula and plug in the known values.
4. Calculate and solve for the unknown value.
5. Write the answer and corresponding unit.

1. A wooden block has a mass of 562 g and a volume of 72 cm³. What is the density?
2. A foam square has a mass of 62 g and a volume of 72 cm³. What is the density?
3. A brick has a mass of 562 g and a volume of 43 cm³. What is the density?
4. A bottle of water has a volume of 560 mL and a mass of 1250 g. What is the density?
5. A soda has a volume of 560 mL and a density of 3.2 g/mL. What is the mass?
6. A wooden block has a volume of 176 cm³ and a density of 18.2 g/cm³. What is the mass?
7. A soda has a mass of 1500 g and a density of 2.9 g/mL. What is the volume?
8. A wooden block has a mass of 986 g and a density of 16 g/cm³. What is the volume?