

HOW TO MAKE A LAVA LAMP USING DENSITY!!!

With Alpha Chi Sigma!

INTRODUCTIONS!

WHAT IS DENSITY???

Density is a measure of how heavy an object is for its size, or how “compact” it is.

$$\text{Density} = \text{Mass}/\text{Volume}$$

Name two objects. Which one has the larger density?

MATERIALS!

- Vegetable/Baby Oil
- Water
- Food coloring
- Alka Seltzer tablets
- Clear glass/container

METHODS!

1. Fill container about $\frac{3}{4}$ full of baby oil
2. Fill the rest of the way up with water, and add a few drops of food coloring

Why does the water stay on top and the oil stay on the bottom? Why don't water and oil mix?

3. Break up alka seltzer tablets and drop into container

What happens to the water and the oil? What do you think is happening in our lamp?

DISCUSSION AND RESULTS!

What is more dense—water or oil?

What is more dense—liquid or gas?

If we dropped a rock in our lava lamp, would it float?

What if we used pancake syrup instead of oil? Would we have the same results?

What other liquids could we use to make a lava lamp?