



#FontanaTogether

Make a Lava Lamp in a Cup

Have you ever seen a lava lamp and wondered how it works? In this experiment we will mirror the effects of a lava lamp! Using household materials you will get to make your own version of a lava lamp and learn about how oil, water, and salt use density and react with each other.

Materials:

- Clear drinking glass
- $\frac{1}{4}$ cup vegetable oil
- 1 teaspoon salt
- Water
- Food coloring (optional)

Instructions:

1. Fill the glass about $\frac{3}{4}$ full of water
2. Add about 5 drops of food coloring (red if you want to it look like lava)
3. Slowly pour vegetable oil into the glass.
 - a. Oil should float up to the top!
4. Sprinkle salt on top of the oil
 - a. Watch blobs of “lava” move up and down in your glass!
5. If you liked that you can add another teaspoon of salt and keep the effect going!

How Does It Work?

- Since the oil is less dense, or lighter than the water, it floats to the top.
- The salt is heavier, or more dense than the oil, so it sinks down into the water, and takes some of the oil into it.
- Once the salt dissolves, the oil goes back up to the top of the water!
- This creates the lava lamp effect!



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