
Start off a Summer of Fun
with Groovy Lava Lamps
by Tammy

Materials Needed

1) 1 clean glass or plastic jar
2) Water
3) Vegetable oil
4) Fizzing tablets (such as Alka Seltzer)
5) Food coloring

Instructions:

- Pour vegetable oil into bottle ¾ full.
- Pour the remaining ¼ with water. You may have to wait a few minutes for the oil & water to separate.
- Add a few drops of your favorite food coloring. Watch as the color sinks through the oil. Did your drops of color mix with the water immediately or float in between for a few minutes?
- Break your fizzy tablet in half and drop part of it into the bottle & be amazed :)

The Science:

The oil floats on top of the water because it is less dense or lighter than water. The food coloring has the same density as the water so it sinks through the oil and mixes with the water.

When you add the tablet, it sinks to the bottom then starts to dissolve. As it dissolves it makes gas, carbon dioxide. Gas or air, is lighter than water so it floats to the top. The air bubbles bring some colored water with them to the top. When the air comes out of the colored water blob, the water gets heavy again and sinks. It does this over and over again until the tablet is completely dissolved.

Extra Experiments

- What happens if you put the cap on after dropping the fizzy tablet in?
- Turn off the lights and drop in another half tablet. This time shine a flashlight through the lava lamp while the blobs are bubbling!
- What if you drop a whole tablet in?
- When it stops bubbling, try sprinkling some salt into your lava lamp. What happens?