Lava "Lamp" What You Need:

- 16 oz. plastic bottle (emptied and cleaned out)
- Soda bottle cap
- Vegetable oil
- Food coloring
- A large, effervescent tablet
- Water
- Flashlight (optional)

What You Do:

- 1. Fill the bottle ³/₄ full with vegetable oil. Add water to the remainder of the bottle, almost to the top but not overflowing. Add 10 drops of food coloring to make the solution appear fairly dark.
- 2. Cut the effervescent tablet into 8 pieces. Drop one of the tiny pieces into the oil and water mixture. The mixture will start to bubble.
- 3. Wait until the bubbling stops and add another piece of the tablet. Continue until no more pieces of the tablet remain, and the bubbling has completely stopped.
- 4. Screw on the cap of the bottle. Tip the bottle back and forth and watch the wave of lava appear.

This homemade lava lamp works so well because the tiny droplets of liquid join together to make one big lava-like blob. Place a flashlight with a bright beam under the bottle to illuminate the bubbles for maximum visual effect.

What Happens:

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 sink 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? What if you drop a whole tablet in? When it stops bubbling, try sprinkling some salt into your lava lamp. What happens?