



Working in partnership

LAVA LAMP

Instructions

Fill the bottle up about 1/4th (1 quarter) with water. Pour the vegetable oil in the bottle until it is almost full. You may want to use a measuring cup with a spout or a funnel. You may have to wait a couple of minutes for the oil and 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. Get ready ... here come the bubbly blobs! You can even get a flashlight, turn off the lights and drop in another half tablet. This time shine the flashlight through the lava lamp while the blobs are bubbling!

Materials

A clean plastic bottle, try to use one with smooth sides
water
Vegetable Oil (or you could use Mineral or Baby Oil instead)
Fizzing tablets (such as Alka Seltzer or bicarbonate of soda)
Food Coloring



How does it work?

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.