



Lava Lamps

Supplies:

1. Water Bottle
2. Oil
3. Water
4. Food Coloring
5. Alka-Seltzer Tabs

Directions:

1. Fill each bottle a little more than half with oil.
2. Then fill the rest of the way with water. Leave about an inch at the top.
3. Now add 10 drops of food coloring. (this will help see the blobs)
4. Break your Alka-Seltzer into 4 pieces.
5. Drop them in one piece at a time. Wait until the first piece stops bubbling before you drop in the next. If too many go in, your solution gets all cloudy.



Why does it work?

The Alka-Seltzer releases carbon dioxide when it is put in water. The CO₂ bubbles get temporarily trapped at the oil/water barrier and then when enough gas build up to overcome the difference in fluid densities the bubbles carry a water droplet through the oil to the surface with them. You can see the tiny bubbles in each drop. When the bubbles reach the top of the oil they will eventually escape into the air and the water droplet falls back down to the bottom since water is denser than oil.