

Lava Lamp Experiment

Supplies

- Vegetable oil
- Water
- Food colouring (Gel makes it more vibrant)
- Original Alka-Seltzer tablets

Directions

- In a cup, pour in $\frac{1}{2}$ cup of water and add food colouring.
- Fill another cup $\frac{3}{4}$ of the way full with vegetable oil. Then pour coloured water in until it is about 1-2 inches from the top of the glass. You can fill it fuller if you would like an eruption experiment.
- Break the Alka-Seltzer tablets into 2 or 3 pieces.
- Drop a piece of the Alka-Seltzer tablet into the cup. Watch what happens.

*If you are letting the children do this, ensure they DO NOT put it in their mouth.

The Science

The water and the oil do not mix. The oil also does not change colour because the food colouring is water soluble. The Alka-Seltzer reacts with the water to create bubbles of carbon dioxide. The bubbles attach themselves to the blobs of coloured water and bring them to the top of the glass. When the bubbles pop, the blobs of colour fall back down to the bottom of the glass.



Questions to Ask Before

- Do you think the colour will change the whole glass of liquid?
- What will happen once we add the colour water?

Questions to Ask After

- Why do you think the oil didn't change colour?
- What made the colour move up and down?