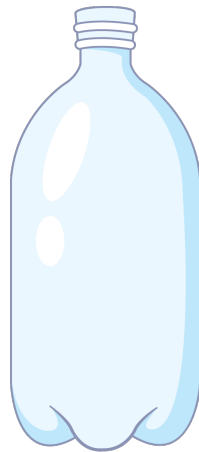


Fun with Science



Lava Lamp



Things you will need:

- Clear see through container
- Vegetable oil
- Water
- Food colouring
- Alka-Seltzer

Instructions:

Fill your container with oil to about $\frac{3}{4}$ full. Then put some water in, watch the water sink to the bottom. Add some food colouring (just to make it pretty). Break your Alka-Seltzer tablet into pieces and drop them in one at a time. Then watch!

The science behind it:

Similar to a magnet, water has a polar charge. This means that water molecules have a positive charge at one end and a negative charge at the other and so they stick to each other, just like magnets. Oil molecules do not have this. Because of this the oil molecules are only attracted to other oil molecules and the water molecules are only attracted to other water molecules.

When we added an Alka-Seltzer this powered up our lava lamp. The Alka-Seltzer reacts with the water and creates carbon dioxide bubbles which stick to the water droplets. This then rises up to the top of the bottle. When they reach the top the gas bubbles burst and then the water sinks back to the bottom.