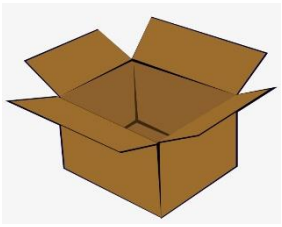
Science Activity

Lava lamp

Time to prepare: 5-10 minutes



 Please stay safe and ask a grown up to supervise you

Resources/ things you need

- Water
- A clear plastic bottle
- Vegetable oil
- Food colouring (any colour)
- Alka-Seltzer (or a fizzy vitamin tablet like Berocca)

What to do

1. Pour water into a plastic bottle until it is about one quarter full.
2. Pour in vegetable oil until the bottle is nearly full.
3. Wait until the oil and water have separated.
4. Add a few drops of food colouring to the bottle.
5. Watch as the food colouring falls through the oil and mixes with the water.
6. Cut an Alka-Seltzer/ fizzy tablet into smaller pieces (between 4 and 6) and drop one of them into the bottle.
7. Watch as things start getting a little crazy, just like a real lava lamp!
8. When the bubbling stops, add another piece of your fizzy tablet and enjoy the show!

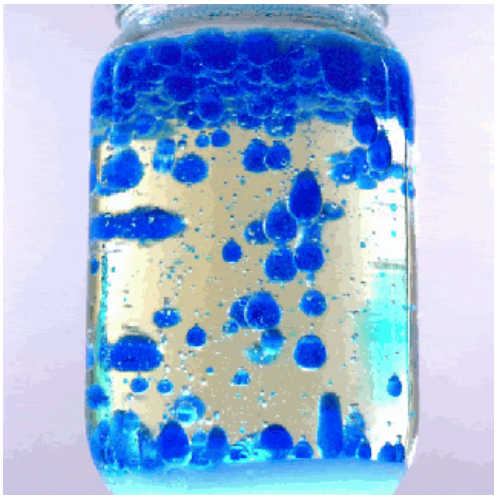
Background and the link to learning

Questions to think about:

What do you think will happen when we pour the oil into the glass of water?
What do you think is in the bubbles that are rising up in the lava lamp?
Why do you think they sink back down again?

The lava lamp works because the fizzy tablet reacts with the water to produce bubbles of gas. These are less dense than the water and oil so they float to the top of both liquids, taking some water with them. When they reach the top of the oil, the bubbles burst, releasing the gas so that the water sinks back down through the oil.

Pictures



Link to other similar activities – Please see giant bubbles, invisible ink and rainbow walking water