

Science experiment: make your own lava lamp

The University of Manchester

Takes about 30 minutes
Please only do this
experiment with a grown-up!

Ingredients

Container	This can be a plastic bottle, a jar, or a clear drinking glass, but it will work better if it's quite wide (eg the bottom half of a 2 litre bottle would work well – but be careful cutting it in half)
Water	Enough to cover a couple of centimetres of the bottom of the container (about a quarter of the way up)
Food colouring	Any colour is fine and you'll only need a few drops
Vegetable oil or other cooking oil	It doesn't have to be clear oil (in the video sunflower oil was used) but you'll need enough to almost fill your container
Alka-Seltzer or Vitamin C tablet	It needs to be a tablet that will fizz when you drop it in water







Instructions

- 1. If your container has a lid, put it to one side you must NOT add a lid to the lava lamp!
- 2. Have a look at your container
- 3. Pour your water into the container. It should fill it about a quarter of the way.
- 4. Add a few drops of food colouring.
- 5. Pour in your oil slowly, holding the container at an angle so the water and oil doesn't mix if you pour too fast this won't work! Add enough oil to mostly fill the container, but leave a space at the top like in the pictures above.

 Important!
- 6. Drop in the fizzy tablet and watch what happens.

Don't put a lid on your container! Let the fizzy tablet fully dissolve.

What are we learning?

A taste of the world of a scientist! In the video we begin to understand how and why the lava lamp works, why it only works using a 'fizzy' tablet, and how any changes to this will affect how 'bubbly' the lava lamp will be. Have fun!