

## How to Make Some Lava!

Ok, so it's not the 'real' lava from volcanoes but it's still pretty awesome, completely safe and I bet that you've already got everything that you need! Let's get cracking!



**WARNING:** Parents, this may remind you of the lava lamps of days gone by and make you feel very nostalgic!

### What do I need?

- Vegetable oil
- A glass or transparent cup
- Food colouring
- Salt

### How do I do it?

**STEP1** – Fill your glass just over half full with water and add a good few drops of food colouring.



**STEP2** – Pour just less than 1 quarter cup of vegetable oil into the cup. It will soon settle out to form a layer on top!



**STEP3** – Sprinkle a good dollop of salt on into your cup to start making your lava!

When you add a dollop of salt it's heavier (more dense) so it sinks through the oil and water pulling some of the vegetable oil down with it.

Next, the salt will start to dissolve into the water. This will free up the oil and as it's lighter (less dense) it will rise back up to float back on top of the water.



Oil and water don't mix (scientists like to say that oil is hydrophobic – almost meaning scared of water!) and so the oil stays together as a blob as it rises through the water – giving you your very own cup full of lava!

### More Fun Please! - Experiment like a real scientist!

Try different types of oil, olive, sunflower etc and see how it changes the lava

How long will the lamp work for? Can you just keep adding salt forever?

What's the best shaped container to make the perfect lava lamp? Tall and thin? Short and fat? Experiment and find out!