

How to make a Lava Lamp

Equipment

Vegetable Oil
Vinegar
Food Colouring
Long bottle or tall glass
Small cup
Spoon
Bicarbonate of soda



Watch each stage of the experiment carefully. Write down what happens and if possible, take photos to record your observations.

Instructions

1. Start by getting an empty bottle or a tall glass. The taller your bottle or glass, the easier it is to watch the bubbles move. Add three teaspoons of bicarbonate of soda.



2. Fill your tall container two thirds full with oil (any kind of cooking oil is fine). The bicarbonate of soda will stay on the bottom of the container. Do not try to mix it with the oil.



3. In the small cup mix 3 tablespoons vinegar with three drops of food colouring.

4. Add drops of the coloured vinegar to your tall container and start watching your homemade lava lamp. Do not empty the coloured vinegar all at once, instead do it progressively to make the effect last.



5. For a glowing effect, you can turn off the light and use a torch to light up your container.



For more information and ideas as well as a video of this lava lamp use this link:

<https://curiousandgeeks.com/how-make-lava-lamp-without-alka-seltzer/>

Take photos as you perform your experiment and we can share them during lesson time and also post some on the school's website.

Now that you've had a go, trying experimenting:

What happens if you add more bicarbonate of soda?

What happens if you use 2 colours of vinegar?

Can you use other ingredients instead of bicarbonate of soda?

Now for the science:

Read through what you wrote down at each stage and look at your photos.

When do you think a reaction starts?

What do you think is happening to cause the reaction?

What do you think causes the bubbles to form?