

Spectacular Science Activities – Week 7-8

Homemade lava lamp



You will need

- An empty jar
- Sunflower oil
- Water
- Food colouring
- Bicarbonate of Soda
- A torch

Instructions

- Open the jar and pour the sunflower oil into the jar to about halfway
- Add some drops of food colouring into the oil
- Top it up with water
- Switch on your torch and put it behind the jar
- Put in a spoonful of bicarbonate of soda and put the lid back on
- Watch your lava lamp fizz!

Alternative recipe/ instructions...

- 1) Add 3 Spoons of Bicarbonate Soda into a glass or bottle. (alka seltzer also works)
- 2) Fill two thirds of the container with oil (but do not mix!)
- 3) In a small cup add some vinegar and several drops of food colouring
- 4) Then slowly add drops of your coloured vinegar into your oil/bicarb mixture and watch it come to life!

The Science:

Oil and vinegar do not have the same density (how heavy something is for its size) Vinegar is more dense than this type of oil – that's why it sinks to the bottom of the container.

Once the vinegar touches the bottom it reacts with the bicarb. This chemical reaction creates bubbling carbon dioxide which rises – these are the bubbles you see within the container.

Kitchen Roll Art

1) Start by folding a sheet of kitchen roll in half. On the top half of your tissue sheet you use the sharpie pen to draw a large, bold picture. You will need a protection under the tissue as the felts and sharpie will go through the tissue. I used a sheet of cardboard that protected the surface just fine.

2) Open up to the inside (like the inside of a folded card) of your folded kitchen roll and add the colour to your drawing, it is the same drawing but in colour. Or the leaves on a tree if you have drawn a tree trunk on the top piece, for example.



3) Pour a small amount of water into a flat tray/dish big enough to hold your paper towel, and simply lay your folded piece of artwork into the dish

4) Watch your picture come into colour.



It is worth having several pictures premade before you add them to the water... or the activity is over quite quickly.

Why do you think the colour transfers? Is it magic or is it science? You decide...whatever it is we think it's really fun!

You will need:

Sharpie Pen

Felt Tip Pens – (any should work)

Kitchen Roll Sheets

A Plate

A Jug of Water