

At Swalecliffe, we pursue a broad and balanced Science curriculum that aims to foster a love of Science through practical exploration, problem-solving and experimental activities, which sparks curiosity and excites the children to better understand and question the world they live in now and that of their future.

Do you have a budding scientist living in the house with you?

Here are two simple but exciting experiments that can be done at home with 'everyday' items. We would love for you to send us pictures of your completed experiments – please email any pictures to.... and mark FOA: Mrs Webb

Key Stage 1 Challenge: Can you blow up a balloon without blowing into it?

https://www.littlehouseofscience.com/blow_up_a_balloon_using_just_bicarbonate_of_soda_and_vinegar

You will need:

- Clear bottle
- Vinegar
- Balloon
- Bicarbonate of soda
- Funnel



The Experiment

1. Pour 4 tablespoons of vinegar into the bottle. 2. Use the funnel to add 1 tablespoon of bicarbonate of soda into the balloon. 3. Pull the neck of the balloon over the neck of the bottle without releasing any bicarbonate of soda. 4. Lift the balloon so that the bicarbonate of soda falls from the balloon into the bottle and mixes with the vinegar. 5. Watch the balloon inflate on its own.

Key Stage 2 Challenge: Can you make a natural lava lamp?

<https://www.sciencefun.org/kidszone/experiments/lava-lamp/>

You will need:

- A clean plastic bottle, try to use one with smooth sides
- water
- Vegetable Oil (or you could use Mineral or Baby Oil instead)
- Fizzing tablets (such as Alka Seltzer)
- Food Colouring



Instructions:

1. Fill the bottle up about 1/4th (1 quarter) with water.
2. Pour the vegetable oil in the bottle until it is almost full. You may want to use a measuring cup with a spout or a funnel. You may have to wait a couple of minutes for the oil and water to separate.
3. Add a few drops of your favourite food colouring. Watch as the colour sinks through the oil. Did your drops of colour mix with the water immediately or float in between for a few minutes?
4. Break your fizzy tablet in half and drop part of it into the bottle. Get ready ... here come the bubbly blobs!
5. You can even get a flashlight, turn off the lights and drop in another half tablet. This time shine the flashlight through the lava lamp while the blobs are bubbling!