

Ullesthorpe C of E Primary School
Science Curriculum Meeting for Parents

How we teach science

Science Curriculum

Knowledge content - understanding concepts in

- **Biology** (plants, living things, growth)
- **Chemistry** (materials, rocks, soils, liquids and gases)
- **Physics** (forces, magnet, electricity, light, sound, Space)

Working scientifically

- Asking questions, recognising there are different ways these could be answered.
- Observing over time, taking measurements
- Comparative or fair testing
- Identifying classifying
- Recording and presenting evidence
- Answering questions and drawing conclusions.

Pattern Seeking

Research

Fair Testing

Science Enquiry

Observation over Time

Identifying & Classifying

Simple ideas to try at home

Drinking straw Oboe

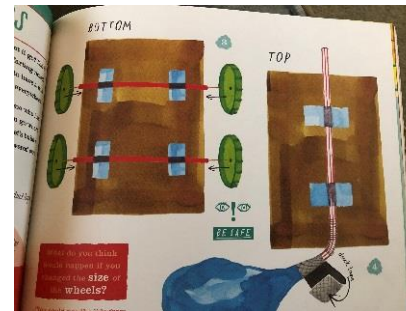
Sound vibrations. What happens if you make your straw shorter? Shorter means less time for each vibration to travel to our ear so more reach our ear per second and we hear a higher pitch.

Heavy metal hangers - helps us to understand that sound is made when objects vibrate and hit our ear drum. Usually these vibrations aren't obvious as they travel through the air.



Dancing raisins What happens if you close the lid? Why do you think this happens? The carbon dioxide gas clings to the raisins, making them buoyant. When the rain reaches the top the bubble pops, making the raisin dense (compact) again and therefore sinks. Putting the lid in prevents the carbon dioxide bubbles getting big enough to make the raisins move.

Air cars – What if you changed the shape of the cardboard for your air car? The size of the balloon? When air is let out of the balloon the force on the car becomes unbalanced. The car moves forwards and the air moves backwards. Newton's Laws of motion.

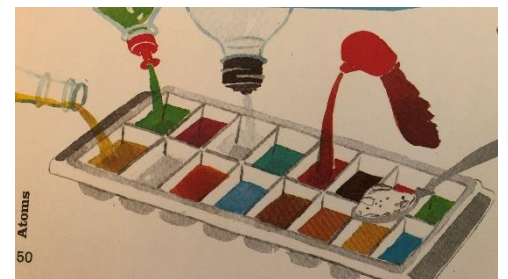


Plastic bag parachutes – Try making your parachute bigger. What happens? Demonstrate the effect of air resistance. The bigger the surface area the more air resistance is acting upon the object and slows it down.

Brilliant Bicarbonate

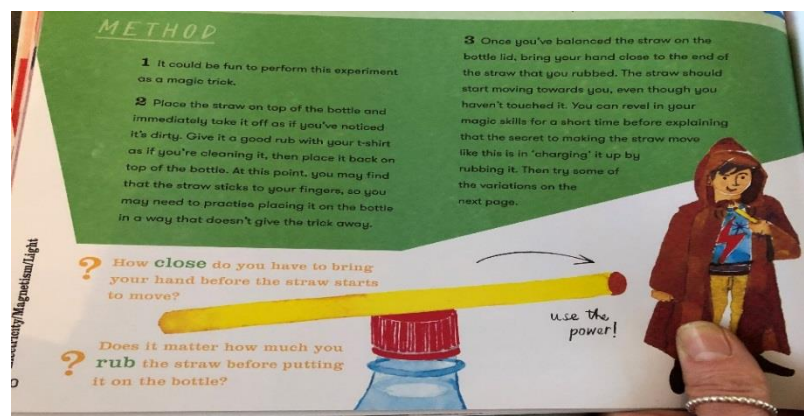
Make some chemical reactions at home. Try mixing with vinegar, lemon juice, olive oil, milk soy sauce, orange juice.

This helps children understand that sometimes when two or more substances are mixed they create a new substance. This is a chemical reaction. Sometimes a gas is produced, called carbon dioxide.



Telekinetic Straw

Everything contains electric charge, positive and negative. When rubbed the straw gains negative charge and will attract to things that are positively charged.



<https://www.reachoutreporter.com/> - Science in the News

<https://www.bbc.co.uk/cbeebies/shows/nina-and-the-neurons> - good for EYFS and Key Stage 1

<https://www.bbc.co.uk/bitesize/subjects/z6svr82> - Key Stage 2

<http://www.sciencefun.org/kidszone/experiments/ice-fishing/>

<https://sciencebob.com/category/experiments/>

<https://nustem.uk/activities/>



SPACE Year 5/6

<https://nustem.uk/activity/e3-family-space-explorers/>

Materials Year 3/4

<https://nustem.uk/activity/the-materials-scientist/>

Light

<https://nustem.uk/activity/science-families-light/>

Weather Year 1/2

<https://nustem.uk/activity/science-families-weather/>