

## Practical, Inspiring and Engaging Primary Workshops

### Enjoy the science curriculum - stimulate curiosity and have fun

All our workshops support the overall aim of the Curriculum to “*develop understanding of the nature, processes and methods of science ... to answer scientific questions about the world around*” and cover the statutory requirements to teach “*practical scientific methods, processes and skills through the teaching of the programme of study content*”.

These workshops are designed, mainly for specific age groups, to develop scientific skills. See our website ([www.spherescience.co.uk](http://www.spherescience.co.uk)) for pictures, teachers’ comments and more information.

#### Air

This is a set of contrasting investigations about how things move through the air and how their movement can be altered. It includes making gyrocopters, hoopsters and kites.

Space: hall Time: 1½ hours Age: Y5/Y6

#### Boats

A sequence of short investigations, using different materials to make and test boats and rafts, about how things float and sink.

Space: classroom with access to a tap Time: 1½ hours Age: Y3/Y4, Y5/Y6

#### Buggies

How does the energy from the release of air in a balloon power a model car? As the pupils make buggies, they investigate the variables affecting how they work. The class keeps the buggies.

Space: hall or very large classroom Time: 1½ hours Age: Y3/Y4, Y5/Y6

#### Candles

An exciting interactive discussion, easily differentiated to focus on specific topics, about the origins and properties of waxes, changes of state and non-reversible changes.

Time and content vary with age group.

Space: classroom or hall with electrical point Time: 1¼ hours Age: N/R, Y1/Y2, Y3/Y4, Y5/Y6

#### Carousel

Five short investigations into materials and forces based around the theme of a circus.

Space: hall or classroom Time: 1¼ hours Age: Y1/Y2

#### Citrus

Can pupils test accurately, fairly and process results? An investigation into how much Vitamin C (relatively) is found in different citrus fruits.

Space: classroom with sink Time: 1½ hours Age: Y5/Y6

#### Electricity

A sequence of engaging electrical investigations to discover more about circuits and their components. This is easily differentiated for different ages and experiences. Solar cells are used with the older children.

Space: classroom and outdoors Time: 1½ hours Age group: Y3/Y4, Y5/Y6

#### Fizz!

Pupils use litmus to identify acids, and design a fair test to investigate how temperature affects an acid/carbonate reaction.

Space: classroom with sink Time: 1½ minutes Age: Y5/Y6

### Light

Five short investigations about reflection, casting shadows, how shadows change during the day and light being an energy source.

Space: hall or large classroom      Time: 1¼ minutes      Age: Y3/Y4

### Paper-making

Pupils think about recycling in general and then use old sugar paper to produce small pieces of new paper, and examine different combinations of new fibres.

Space: classroom with sink      Time: 1½ hours      Age group: Y3/Y4, Y5/Y6

### Rollers

How the energy from an elastic band power a small toy? How does friction impede it? Pupils make and keep their own rollers, investigating the variables affecting how and how fast they go.

Space: hall or classroom      Time: 1¼ hours      Age group: Y3/Y4, Y5/Y6

### Separating

This is about combining and separating mixtures of solids, liquids and gases. The workshop ends with an explosive finalé.

Space: classroom with sink      Time: 1¼ minutes      Age: Y5/Y6

### Space

Simple investigations into phases of the moon, the solar system, stars, the night sky, and shadows.

Space: hall      Time: 1½ hours      Age group: Y5/Y6

### Story

A series of accessible investigations, linked to a picture book, including making trucks, using scientific snow and sand, and investigating rafts.

For N/R parents and carers can be invited to take part.

Space: classroom      Time: 1 hour      Age group: N/R/Y1 and Y5/Y6

### Studying Substances

Pupils try ten different experiments to test their ability to follow instructions, observe carefully and record accurately.

Space: hall or large classroom      Time: 1½ hours      Age group: Y5/Y6

### Wind

Pupils design a model wind turbine and investigate variables to improve its efficiency.

Space: hall or large classroom      Time: 1½ hours      Age group: Y5/Y6