



UNDERSTANDING THE WORLD

Working scientifically LKS2

- **sc31** During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:
- **sc32** asking relevant questions and using different types of scientific enquiries to answer them
- **sc33** setting up simple practical enquiries, comparative and fair tests
- **sc34** making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- **sc35** gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- **sc36** recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- **sc37** reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

- **sc38** using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- **sc39** identifying differences, similarities or changes related to simple scientific ideas and processes
- **sc40** using straightforward scientific evidence to answer questions or to support their findings.

Light LKS2

- **sc50** recognise that they need light in order to see things and that dark is the absence of light
- **sc51** notice that light is reflected from surfaces
- **sc52** recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- **sc53** recognise that shadows are formed when the light from a light source is blocked by a solid object
- **sc54** find patterns in the way that the size of shadows change.

Investigate light, reflections and shadows. We will learn about different sources of light, and that we need light to see.

The children will work scientifically and collaboratively to investigate reflective materials, in the context of designing a new book bag. They will work in a hands on way to play a range of mirror games, finding out more about reflective surfaces.

Furthermore, they will learn that the sun's light can be dangerous, and will create an advert for a pair of sunglasses or a sun hat that they have designed. The children will have chance to test which objects are opaque in an exciting investigation to design the most effective curtains, and will find out how shadows change when the distance between the object and light source changes.

Along the way they will develop their scientific enquiry skills, making observations, predictions and conclusions.

Let
There Be
Light!

Let There Be Light! - Stage Coverage

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