Light - Year 6: Scientific Enquiry Overview

Lesson:	Objectves:	Scientific Enquiry:	Equipment:
Lesson 1 How does light travel?	• Know how light travels. • Explain why light is important. • Design and conduct an investigation	Comparative test. Involves changing hole alignment and observing light.	Flashlight, cardboard sheets/ index cards with holes, pencil, scissors
Lesson 2. How does reflection help us see?	• Know light is reflected when it bounces off an object. • Describe how light is reflected off different surfaces. • Design and conduct an investigation.	Comparative test. Compares the reflectivity of different materials.	Flashlight, mirror, foil, paper, cardboard, paper plate, scissors
Lesson 3. Can we increase reflection?	• Know that light travels in a straight line. • Explain that reflection helps us see objects. • Design and conduct an investigation.	Observation. Create a periscope that bends light and allows the viewer to see around corners and obstacles.	Cardboard tube, small mirrors, tape, scissors
Lesson 4. What shapes our shadows?	• Recall that light travels in straight lines. • Explain why shadows form. • Interpret a secondary data source.	Research using secondary data. Pupils are provided shadow length data from an investigation and must interpret the data to identify patterns and relationships.	Sample data sheet
Lesson 5. What causes rainbows?	• Recall the states of matter. • Describe how the speed of light can be changed. • Design and conduct an investigation.	Observation. Pupils make rainbows by passing light through water.	Water, jar, wall, light source
Lesson 6. Can we make a red apple blue?	• Understand that white light is a mixture of colours. • Observe that some colours are reflected and some are absorbed. • Design and conduct an investigatioN.	Comparative test. Pupils observe the colour of a variety of objects through different coloured filters.	Red, green blue objects. Red, green and blue filters.