



Year 6



Statutory Requirements:

Recognise that light appears to travel in straight lines

Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Working Scientifically:

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Using test results to make predictions to set up further comparative and fair tests

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.

Key Knowledge:

Light appears to travel in straight lines.

We see light sources because light from them travels into our eyes.

We see objects when they reflect light, which has travelled from light sources to them, into our eyes.

Shadows are formed when an object blocks light from hitting a surface. This happens because light appears to travel in straight lines (the light cannot go around or through the object).

Key Vocabulary:

Opaque	Absorption	Colour	Light Source
Translucent	Shadow	Reflection	Sunlight
Transparent	Spectrum	Refraction	Light Wave

Key Scientists



Classic

**Thomas Young
(1773 – 1829)**

Developed the wave theory of light.



Classic

**Leon Foucault
(1819 – 1868)**

Measured the speed of light.



Contemporary

**Thomas Halfmann
(???? –)**

Traps light in crystals to store information.