

Science – Light (Year 6)



Key Vocabulary

Light source	an object or natural phenomena that produces its own light
Straight lines	Light travels in straight lines.
Light ray	Each line of light travelling in a straight line from its place of origin.
Reflection	When light from a light source is reflected by a surface, it changes direction
Shadow	Shadows are formed when light from a source is blocked by an opaque object
Shiny surface	A surface that would reflect light and change its direction
Matt surface	a surface that is not as reflective
Prism	An object (usually glass) that is capable of scattering light into its different colour components
Refraction	The bending of light rays

Key Learning and investigation

Children will build on Year 3 learning about light and explore how light travels in straight lines.

They will learn how we see objects by light reflecting in straight lines to our eyes

They will investigate shadows and ask and answer questions about shadow shape and size.

Working practically they will explore simple optical instruments e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.

What have I learnt before?

In Year 3 I learnt that we need light in order to see things and that dark is the absence of light. I noticed that light is reflected from surfaces as well as recognising that certain materials allow light to pass through while others do not.

Where will my learning go next? :

Children will take their learning further in KS3 and explore how light travels through a vacuum as well as investigate the scattering of light, diffusion and absorption.

Important Scientist

Alhazen (Abu Ali al-Hasan) (965-1040)

Alhazan was an Iranian mathematician, astronomer and physicist. He was the pioneer of modern optics. He carried out experiments with pinhole cameras and candles and explained how the image is formed by rays of light travelling in straight lines.

