

Year 6 - light (Physics) Working Scientifically Focus: Making Predictions and Analysis



Prior learning:

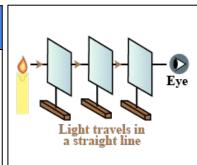
Year 3:

- Recognise that they need light in order to see things, and that dark is the absence of light.
- Notice that light is reflected from surfaces.
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
- Recognise that shadows are formed when the light from a light source is blocked by an opaque object.
- Find patterns in the way that the size of shadows change.

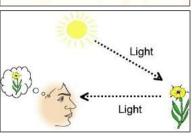
In this topic, we are learning to:

- 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
- 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.

from light sources to our eyes or from light sources







Key Vocabulary:

Liaht source An object that creates light.

Absence of light

An area that light can not reach. The movement of light away from its Light rays

source.

Matt

Matt surfaces reflect less light than shiny ones. An area on a surface that light can Shadow

not reach.

Reflect

How Light rebounds off a surface.

Surface

Opaque Light cannot pass through an opaque object.

Transparent Translucent

Light can pass through a transparent object.

Some light can pass through a

translucent object.

The outer layer of an object.

Questions you will know the answers to...

How does light travel? How do we see objects with our eyes?

How are shadows formed?

What happens to light when it hits different objects?

How can we change the direction light travels?



Working Scientifically Assessment Focus:

Making Predictions

- Using test results to make predictions to set up further comparative and fair tests.
- use the scientific knowledge gained from enquiry work to make predictions that can be investigated using comparative and fair tests.

Analysis

- Identifying scientific evidence that has been used to support or refute ideas or arguments.
- answer own and others' questions based on observations made, measurements taken or information gained from secondary sources. When doing this, discuss whether other evidence e.g. from other groups, secondary sources and their scientific understanding, supports or refutes answers.
- talk about how their scientific ideas change due to new evidence gathered.
- talk about how new discoveries change scientific understanding.