



Prior learning to reactivate

- Dark is the word used for the absence of light.
- Light is reflected off surfaces.
- Light from the sun can be dangerous and how they can protect their eyes.
- Shadows are formed when light is blocked by an opaque object.
- Shadows can change shape and size.
- Finding patterns in shapes and size of shadows.

Key learning

Light travels in straight lines.

We see because light reflects into our eyes in straight lines.

Light comes from a light source.

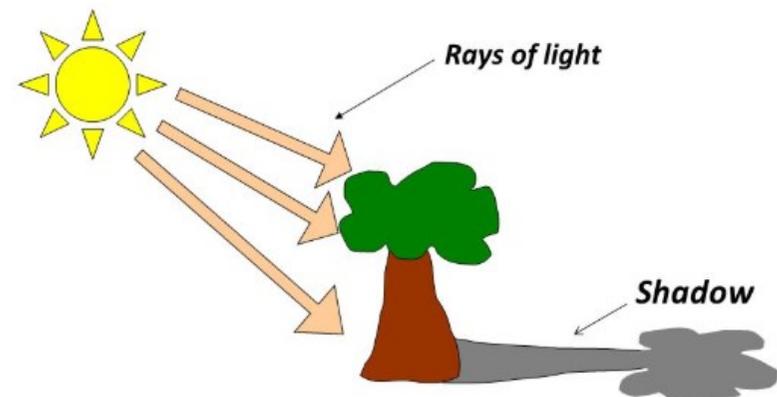
Shadows have the same shape as the objects that cast them, because light travels in straight lines.

The closer an object is to the light source the larger the shadow is cast.

The position of a shadow is determined by the position of the light source.

Key vocabulary

Light	The natural agent that stimulates sight and makes things visible.
Reflection	The throwing back by a body or surface of light, heat or sound without absorbing it
Refraction	The bending of light as it passes from one substance to another, with the bending caused by the difference in density between two substances.



SCIENTIFIC SKILLS

By the end of the year, children should be able to...

- Plan scientific enquiries to answer different questions, recognising and controlling variables where necessary
- Take measurements, using a range of scientific equipment
- Record data and results, using charts, tables, diagrams, keys and graphs
- Use test results to make predictions to set up further tests
- Report and present findings, drawing conclusions about results
- Identify scientific evidence which has been used to support or refute ideas

Opportunities for scientific enquiry within the unit:

- To investigate how materials can reflect and refract light, as well as the opacity of materials.
- Pupils will investigate moving a light source and how this affects the direction, size and position of shadows.
- Extend experience of light, looking at a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water, and coloured filters (they do not need to explain why these phenomena occur).

