



Light

In Year 1 we:

- Observed changes across the four seasons.
- Observed and described weather associated with the seasons and how day length varies.

In Year 3 we will:

- Recognise that we 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 our 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.

Reflection



Shiny materials will reflect the light better than matt materials. Reflective clothing can also be worn so that walkers and cyclists can be seen by drivers.



What is light?

Light is a type of energy. It helps us to see. If there is no light, it is dark. When it is dark, we cannot see.

Sunlight

The light from the sun can be dangerous. It is capable of damaging our eyes. We must never look directly at the sun. We can protect our eyes by wearing sunglasses and sunhats .

Types of Light

There are many different types of light source. Some are natural and others are artificial.



Opaque

Opaque materials do not let any **light** pass through them. They **block the light**. Wood is an example of an **opaque material**.

Translucent

Translucent materials let some light through, but they scatter the light in all **directions** so that you cannot see clearly through them. **Tissue paper** is an example of a **translucent material**.

Transparent

Transparent materials let the light pass through them in straight lines so that you can see clearly through them. **Glass** is an example of a **transparent material**.

Shadows

A shadow is created when an opaque shape blocks the light from getting through. This creates a dark shape or outline on the surface behind the object. This is a shadow.



the following things are moved:

- Light source
- Object
- The surface where the shadow is being made.

Key Vocabulary

night	The part of the day when it is dark.
day	A period of 24 hours. Some of it is light.
opaque	Something that does not let light through and makes a shadow.
transparent	Something that does let light through and therefore you can see through it.
light	Something that we need to be able to see.
dark	The absence of light.
shadow	When an opaque object blocks the light.
absence	When something is not there.
reflect	To bounce light back without absorbing it.
reflected	The light that bounces off an object.
reflective surface	A surface that can bounce back light.
light source	Something that produces light.
translucent	Something that lets light through but that you cannot see through.
mirror	A surface which reflects a clear image.
bounce	An object that moves away quickly after hitting a surface.