

Light - Year 3

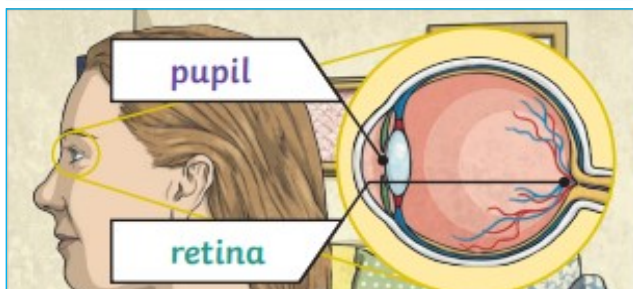
Previous learning

In Year 1, you identified and named a variety of everyday materials and described the properties of a variety of everyday materials. In Year 2, you identified and compared the suitability of a variety of everyday materials.

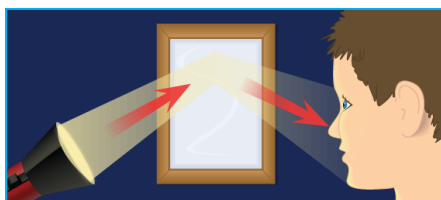
When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well. Reflective surfaces and materials can be very useful, like a hi-vis jacket and cat's eyes on the road.



The pupils control the amount of light entering the eyes. If too much light enters, then it can damage the retina. To help protect the eyes, you can wear a hat with a wide brim and sunglasses with a UV rating.



We need light to be able to see things. Light travels in a straight line.



Light from the torch hits the object.

The light is reflected from the object.

Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed.

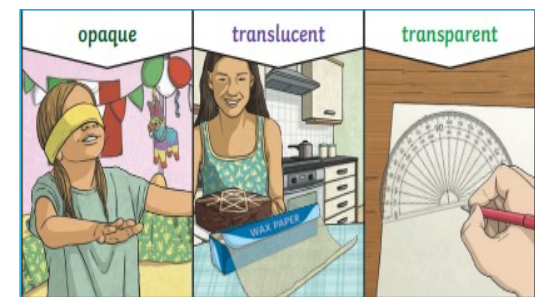


A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.



Key vocabulary	Definitions
light	A form of energy that travels in a wave from a source.
light source	An object that makes its own light.
dark	Dark is the absence of light.
reflection	The process where light hits the surface of an object and bounces back into our eyes.
reflect	To bounce off.
reflective	A word to describe something which reflects light well.
ray	Waves of light are called light rays. They can also be called beams.
pupil	The black part of the eye which lets light in.
retina	A layer at the very back of the eye. The retina takes the light the eye receives. It then changes it into nerve signals to send to the brain.
shadow	An area of darkness where light has been blocked.
opaque	Describes objects that do not let any light pass through them.
translucent	Describes objects that let some light through, but scatter the light so we can't see through them properly.
transparent	Describes objects that let light travel through them easily, meaning that you can see through the object.

When the light source is directly above the object, the shadow will be directly underneath. When a light source is to one side of an object, the shadow will appear on the opposite side. The shadow will also be longer.



Future learning: In Year 6, you will look at how white light can be split into seven colours. You will recognise the direction that light appears to travel. You will explain how shadows are the same shape as the object casting it.