

Light

Key Vocabulary	
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.

Key Knowledge	
<p>We need light to be able to see things. Light travels in a straight line. 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...</p>	
<p>hi-vis jacket</p>	<p>cat's eyes</p>

Mirrors **reflect light** very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.

The surfaces that reflect **light** best are smooth, shiny and flat.

<p>A smooth, shiny, flat surface.</p>	<p>A rough and uneven surface.</p>
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To look at all the planning resources linked to the Light unit, [click here](#).

Key Vocabulary	
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.

Key Knowledge	
	<p>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.</p>

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**.

<p>opaque</p>	<p>translucent</p>	<p>transparent</p>
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When the **light** source is directly above the object, the **shadow** will be directly underneath.

midday

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.

sunset