

**Key Vocabulary**

<b>light</b>	A form of energy that travels in a wave from a source.
<b>light source</b>	An object that makes its own <b>light</b> .
<b>dark</b>	<b>Dark</b> is the absence of <b>light</b> .
<b>reflection</b>	The process where <b>light</b> hits the surface of an object and bounces back into our eyes.
<b>reflect</b>	To bounce off.
<b>reflective</b>	A word to describe something which <b>reflects light</b> well.
<b>ray</b>	Waves of <b>light</b> are called <b>light rays</b> . They can also be called beams.

**Key Knowledge**

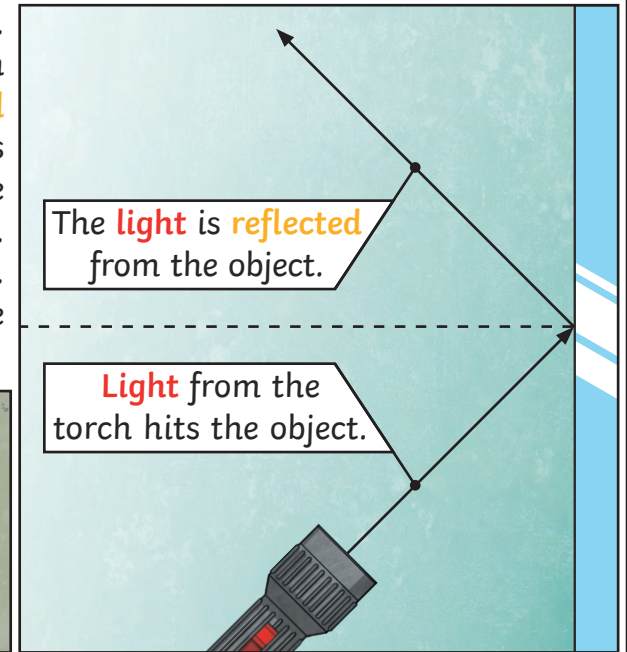
We need **light** to be able to see things. **Light** travels in a straight line. When **light** hits an object, it is **reflected** (bounces off). If the **reflected light** hits our eyes, we can see the object. Some surfaces and materials **reflect light** well. Other materials do not **reflect light** well. **Reflective** surfaces and materials can be very useful...



hi-vis jacket



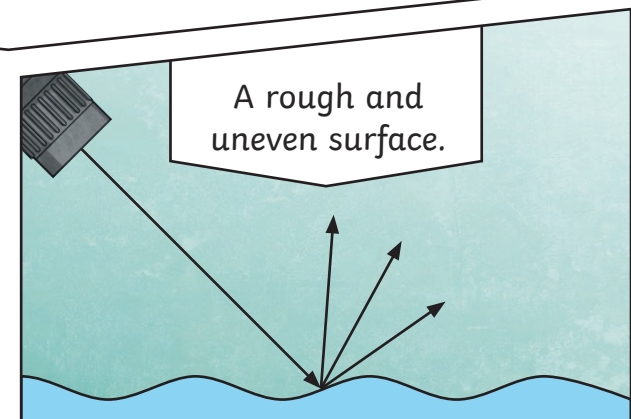
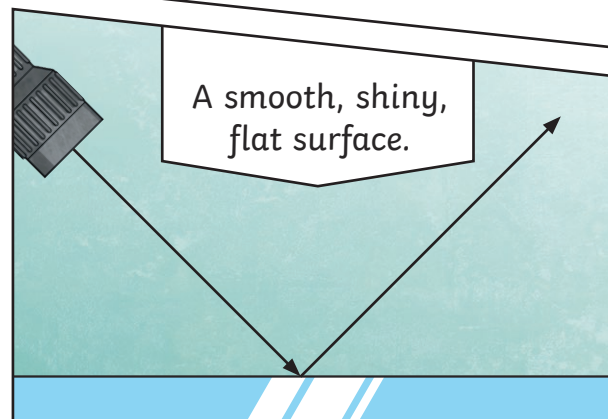
cat's eyes



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.

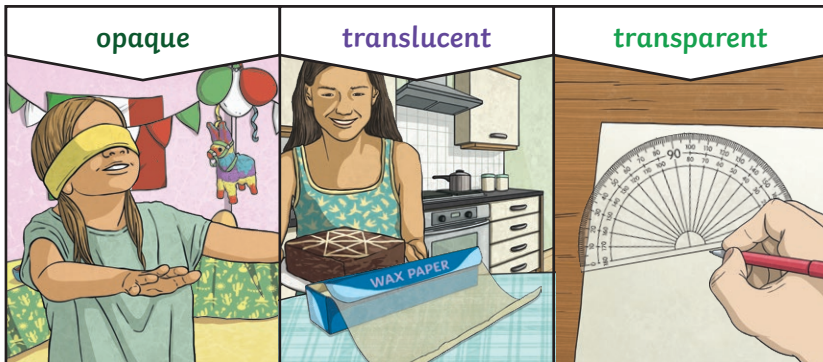
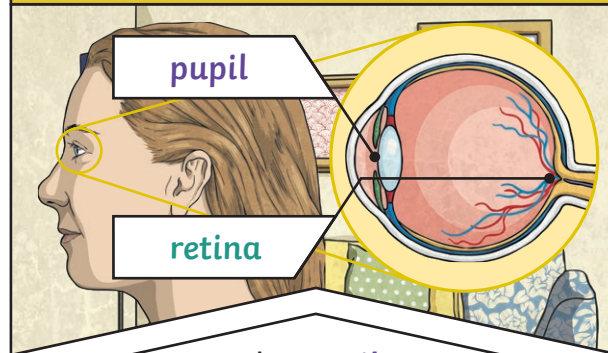


The surfaces that reflect **light** best are smooth, shiny and flat.



**Key Vocabulary**

<b>pupil</b>	The black part of the eye which lets <b>light</b> in.
<b>retina</b>	A layer at the very back of the eye. The <b>retina</b> takes the <b>light</b> the eye receives. It then changes it into nerve signals to send to the brain.
<b>shadow</b>	An area of darkness where <b>light</b> has been blocked.
<b>opaque</b>	Describes objects that do not let any <b>light</b> pass through them.
<b>translucent</b>	Describes objects that let some <b>light</b> through, but scatter the <b>light</b> so we can't see through them properly.
<b>transparent</b>	Describes objects that let <b>light</b> travel through them easily, meaning that you can see through the object.


**Key Knowledge**


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.

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**.

