

Year 3



Light and Shadow

Key Vocabulary			



Pre existing knowledge

- Certain things produce light, usually by burning (e.g. the Sun) or electricity (e.g. street lights).
- Shiny materials do not make light but do reflect it.
- Shadows are caused when certain materials block 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.
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.

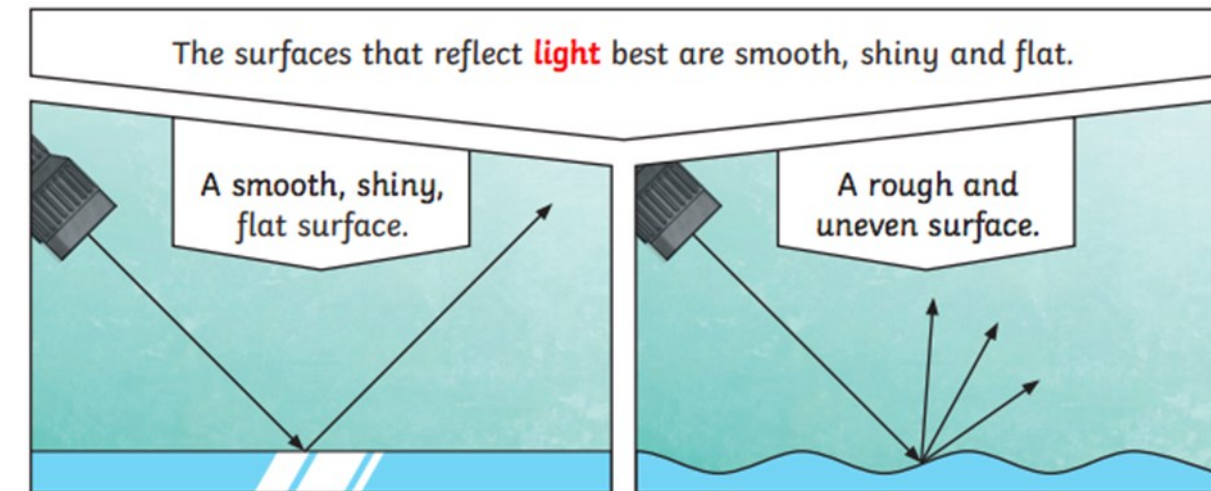
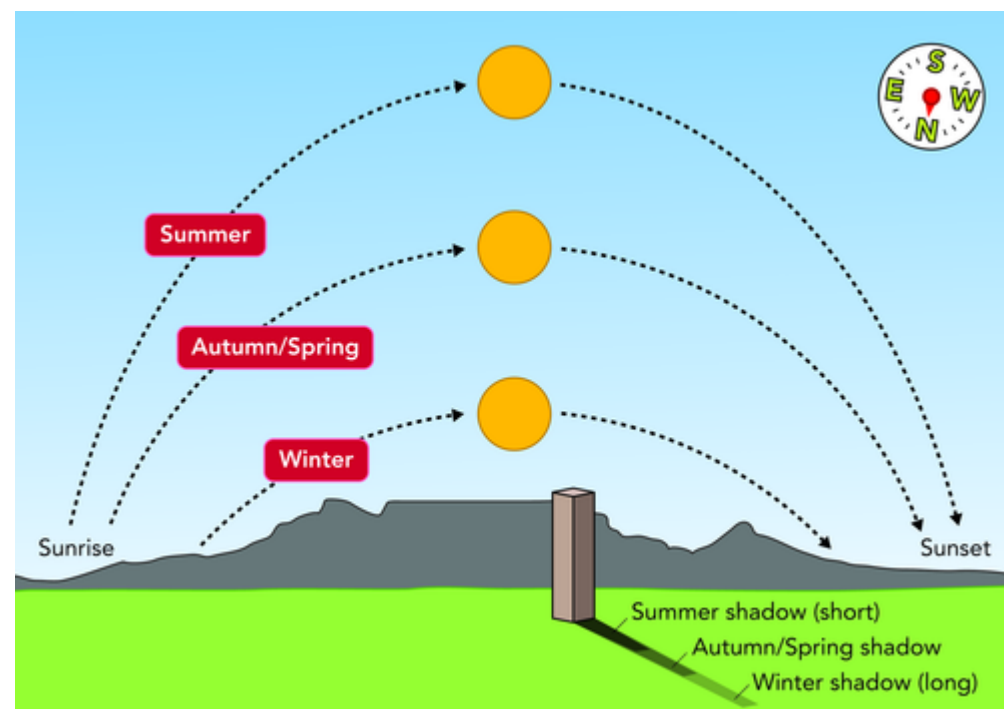
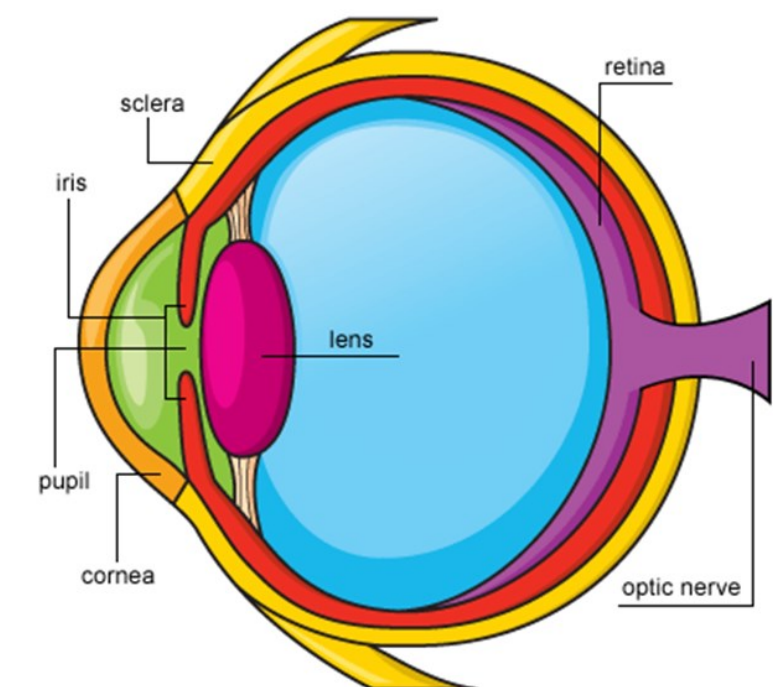
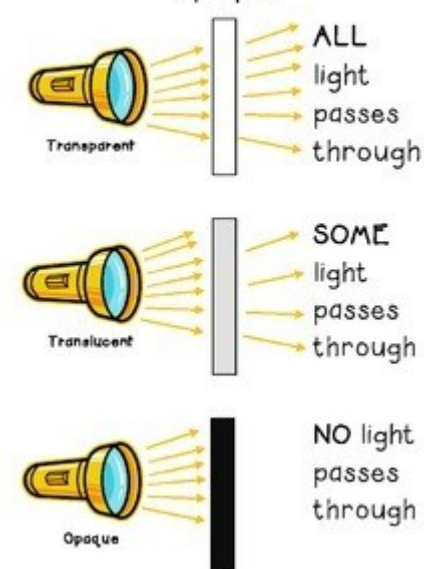


DIAGRAM OF THE EYE

Translucent, Transparent & Opaque



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.