

I learned a bit about
this in Year 3!

Year 6 Science Knowledge Organiser

Light



Key Knowledge

Light is a type of energy. It is the fastest type of energy and travels at 186,000 miles per hour! It travels in straight lines.

In order to see, light travels from a light source and into our eyes. It can also bounce off of a surface and **reflect** into our eyes too. Our eyes then send a signal to the brain and we can build up a picture of what we are seeing.

When light enters our eyes and travels to our **retina**, the image is upside down. Our brain flips it the right way for us!

Because too much light can damage our eyes, our **iris** changes the shape of our pupil to allow in more or less light.

Shadows are formed when light is blocked by an **opaque** object. This means that no light is able to pass through it. The shadow will always be the shape of the object blocking the light.

The size of a shadow can be altered depending on how close or far away from the light source it is.

Not all surfaces are good for reflecting light. Smooth, shiny or light coloured surfaces make the best reflectors. Dark-coloured, rough or dull surfaces are poor reflectors of light.

Key Vocabulary

Reflect	When light bounces off of a surface.
Retina	The part of the eye that detects light.
Iris	The coloured part of our eyes.
Rods and Cones	Cells in our eyes that detect light. Rods are unable to identify colour.
Optic Nerve	The nerve that sends messages to the brain.
Lens	The part of the eye used to focus.
Cornea	The clear protective layer that covers our eye.

