

Year 6 Science - Light

What should I already know?

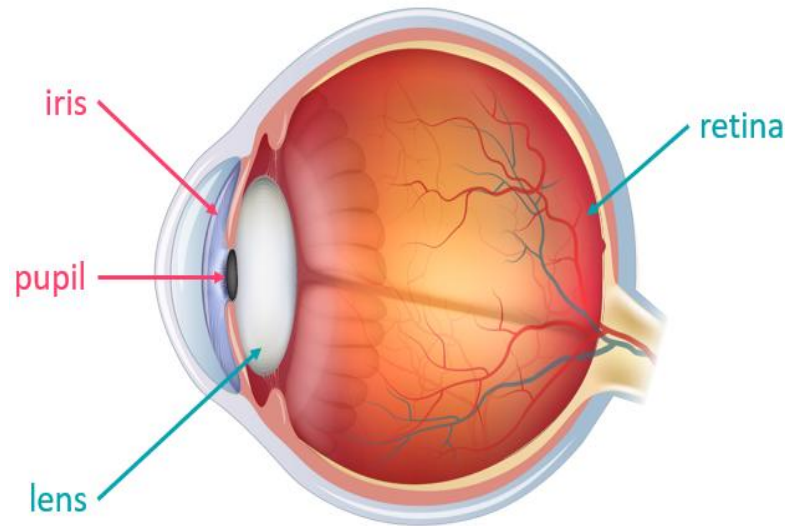
Light is needed to see things.

Dark is the absence of light.

Light is reflected from surfaces.

Light from the sun can be dangerous so there are ways to protect our eyes.

Shadows are formed when light is blocked by an opaque object.



Parts of the eye:

iris - the coloured part that controls the size of the pupil

pupil - the black part that lets light in

lens - the part that focuses light on the retina

retina - the layer at the back of the eye that is sensitive to light

Key Vocabulary and definitions:

light source - an object that emits its own light (natural or artificial)

luminous - emits light

non-luminous - does not emit light

opaque - when an object lets no light through it

periscope - an instrument that uses mirrors to make objects visible around barriers

ray - a narrow beam or line of light

reflection - when light hits a surface and bounces off

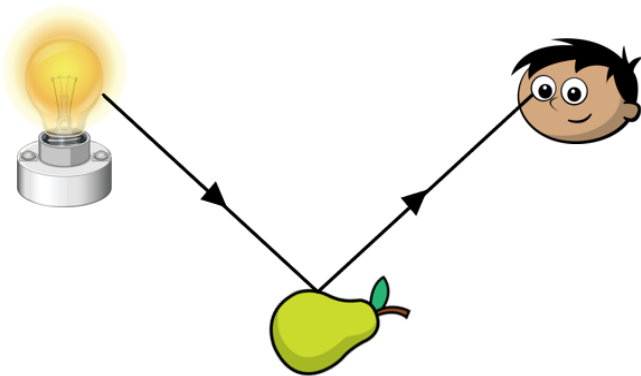
refraction - the changing of direction of light when it passes from one medium to another

shadow - a dark shape that appears on a surface when something moves between the light source and an object

translucent - when an object lets some light pass through it

transparent - when an object lets all light pass through it

A ray diagram - a diagram that shows how light travels.



Key Knowledge:

Light travels in straight lines.

Light travels from a light source to an object.

Light is reflected from the object to the eye.

The shape of a shadow is determined by the shape of the object that blocks the light.

Refraction happens because light travels at different speeds in different substances.