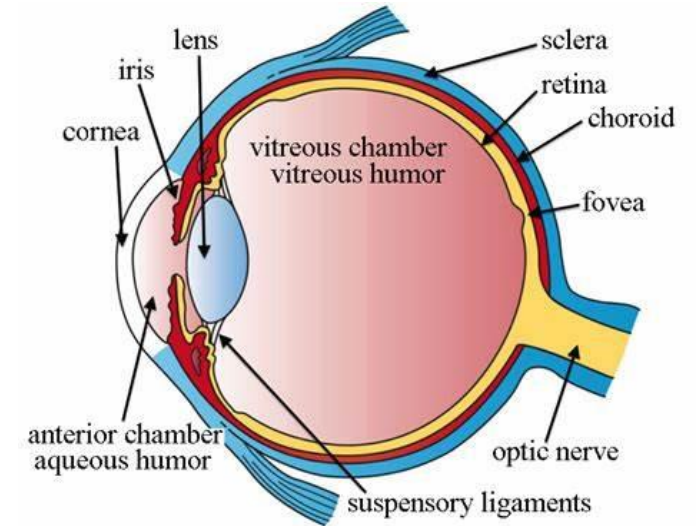


Year 6
Science
Summer 2

Light

Parts of the eye



An image is seen because light travels through the cornea and is focussed by the lens on the retina. Our brain then interprets these image using cones and rods.

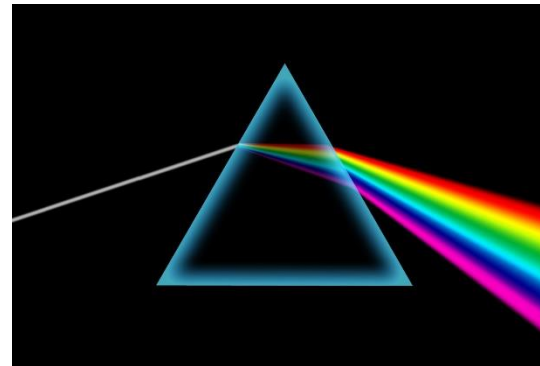
Key Vocabulary	Definition
artificial source	This would be something that emits light and would not be natural. It could be a light bulb.
darkness	The absence of light.
illumination	Lighting or light.
iris	The coloured part of the eye.
lens	A part of the eye which refracts the light rays onto the back of the eye.
opaque	An object that blocks light. We cannot see through it.
periscope	A device with mirrors at 45° so that it can use light to see over or around objects.
prism	A 3D shape with two end faces and parallel rectilinear sides between them. It can be used to refract light.
refract	When water, air or glass makes a ray of light change direction after it enters at an angle.
retina	The layer at the back of the eye.
shadow	A shape made by something coming between the light source and the surface it is projected onto.
transparent	An object which light can pass through. We can see objects clearly through it.
white light	Scientists describe the sun light as white light. It is light at different wavelengths together. When they have been refracted, it forms a rainbow.

Refraction

Light is refracted when it enters a material like water or glass.

Depending on the density of the material, light will reduce in speed as it travels through, causing it to change direction.

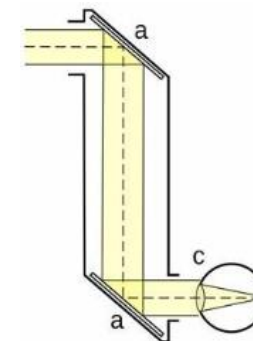
This could refract white light into the different colours.



Periscope

A periscope is a device which is used to help people see around corners or over the top of something.

It is used in submarines and was widely used during WWI where putting one's head over the parapet was dangerous as they were at risk of being shot.



The periscope works by reflecting the light using mirrors placed at 45° angles. As light travels in a straight line, the direction of site can be changed to look behind you as well.