

Science Topic: Light

Year 6 Autumn 2



Prior Learning

In previous years, we learnt that light is a form of energy that travels in straight lines and that darkness is the absence of light. We found out that everything we see is either a light source or an object that is reflecting light into our eyes. We also learnt that if light cannot travel through an object, it is opaque and creates shadows, and that when light can travel through an object it is transparent.

What? (Key vocabulary)

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Angle of Incidence	The angle at which a ray of light hits a surface. This is equal to the angle of reflection .
Prism	A 3D shape with flat sides and two identical ends. Glass prisms can refract light.
Refraction	When a ray of light passes from one medium to another, which causes it to change direction or speed.
Dispersion	When different colour light waves are split from white light due to the different frequencies of the coloured light waves.
Spectrum	The visible colours – red, orange, yellow, green, blue, indigo, violet - which make up white light, that can be seen when light is refracted.
Periscope	An instrument which uses lenses and mirrors so that the viewer can see objects which would otherwise be blocked from sight.
Lens	Part of the eye behind the iris which focuses light onto the retina.
Cornea	The transparent coating at the front of the eye which refracts light as it enters.
Sclera	The white part of the eye which coats the outside of the eye.
Retina	Part of the eye that uses photoreceptors to change refracted light into nerve signals.
Optic Nerve	Part of the eye that sends signals from the retina to the brain to interpret.

Who? (Significant people)

Mozi	The first scientist to describe the principle of the camera obscura and develop a pinhole camera.
Melina Kunar	Studies how the eye processes visual displays and the effects of blinking on sight.