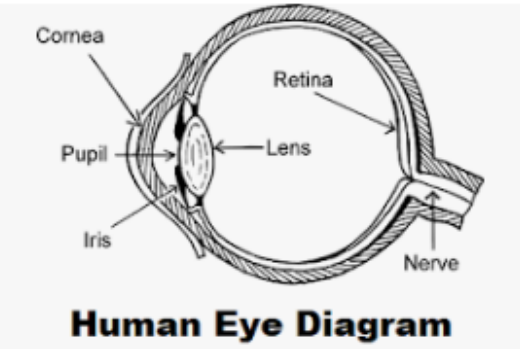
Science Knowledge Organiser — Light (Term 2) — Year 5

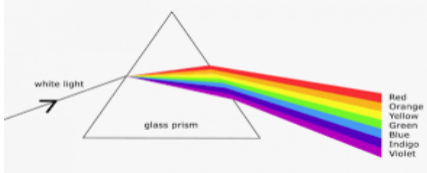
Our learning

In our science lessons this term, we are learning about Light. This is part of the **physics** aspect of science. Through our learning we will be considering the **cause and effect** of different scientific processes. We will be learning about how the human eye works and how we see things. We will learn about different sources of light.

We will investigate periscopes to see how they enable people to look around and over objects.



Human Eye Diagram



A prism

Information

We see things when light from an object goes into our eyes. Light travels in straight lines.

The light may come directly from a light source (such as the sun) but it may also be reflected from an object into our eyes in order to be seen.

Our eyes are made up of different parts which all have specific functions:

- The cornea is the front layer of the eye and helps the eye focus.
- The pupil is the black hole in the centre and acts as a gateway for light.
- The iris controls how much light goes in.
- The lens helps to focus the light.
- The retina turns light rays into signals understood by the brain.

White light is made up of a spectrum of different colours which can be split up using a prism.

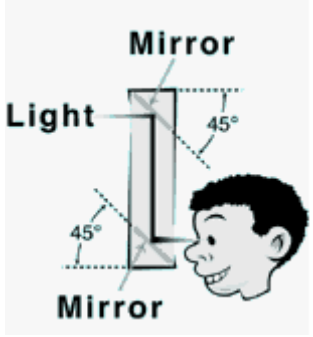
As a scientist I will...

- Take measurements using a range of scientific equipment with increasing accuracy and precision.
- Plan and carry out comparative and fair tests making systematic and careful observations

Vocabulary

Reflection– the return of light from a surface.
Refraction-The bending of light rays.
Spectrum– the range of different colours which is produced when light passes through a glass prism or through a drop of water
Shadow– A dark shape made when light is stopped or blocked by an object or a person
Light source– A source of light makes light. Examples include the sun, stars, fires and torches.
Prism– A piece of glass with several flat sides which can be used to bend light.
Opaque– Something which cannot be seen through and does not allow light to pass through it.


A periscope in a submarine



How a periscope works

