

Year 6-Term 1 – Science – Light.



Curriculum Key Question: Where are we going?
Topic: How were children affected by the Second World War?

To share knowledge about light.
 To understand how we see things and how the human eye works.

To understand that light travels from a light source.
 To understand the term reflection, refraction, bending.

To investigate how light travels in straight lines.
 To investigate reflection.
 To design and make a periscope.

To know how shadows are formed.
 To plan and carry out a fair test.

To carry out a fair test.
 To gather results
 To make conclusions

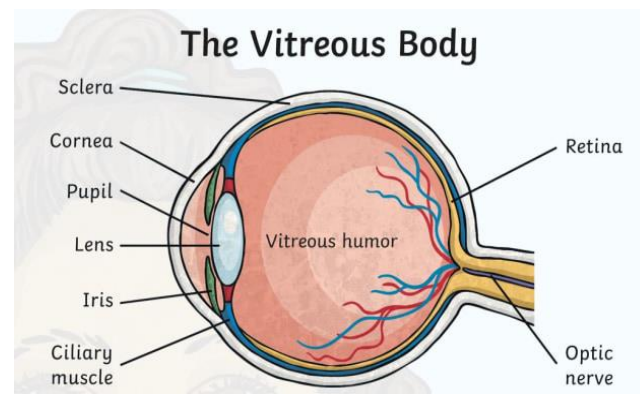
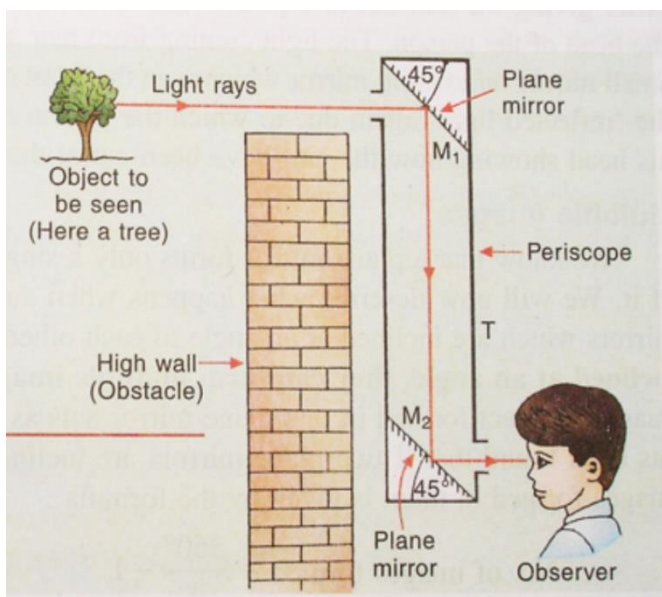
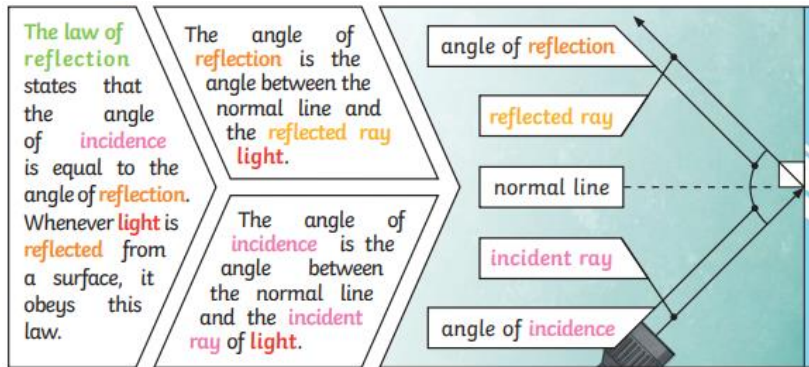
To know that white light is made up of a spectrum of colours.
 To use prisms to understand refraction and light splitting.

What should I already know?

Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces.
 Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
 Recognise that shadows are formed when the light from a light source is blocked by an opaque object.
 Find patterns in the way that the size of shadows change.

Scientific skills:

To predict what a graph might look like before collecting results.
 To make a hypothesis where I say how one thing will affect another and give a reason for my suggestion with a developing understanding of the scientific concept.
 To use equipment fit for purpose to take measurements which are increasingly accurate and precise.
 To decide the most appropriate equipment to use to collect data.



Key vocabulary:

- Angle:** The angle from which you look at something.
- Light:** Brightness which allows you to see things.
- Mirror:** A flat piece of glass which reflects light, so that when you can see yourself in it.
- Opaque:** You cannot see through it.
- Reflects:** Sent back from the surface and not pass through it.
- Shadows:** A dark shape on the surface, made when something stands between a light and the surface.
- Source:** Where something comes from.
- Surface:** The flat top part of something or the outside of it.
- Torches:** A small electrical light which is powered by batteries.
- Translucent:** Some light can pass through
- Transparent:** See through
- Refraction:** When light travels from air into water, it slows down, causing it to change direction slightly.
- Light source:** Something that provides light, whether it be a natural or artificial source of light (e.g. the sun, a torch)
- Periscope:** Apparatus consisting of a tube of attached to a set of mirrors/prisms through which an observer can see things otherwise out of sight