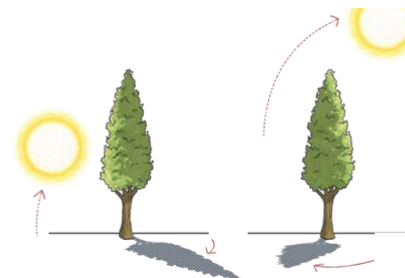
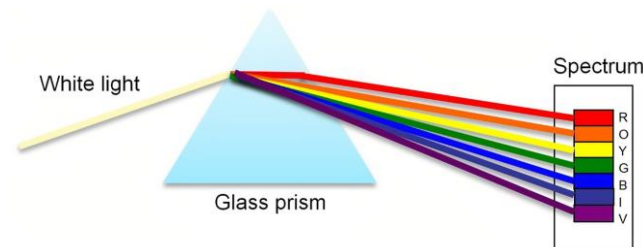
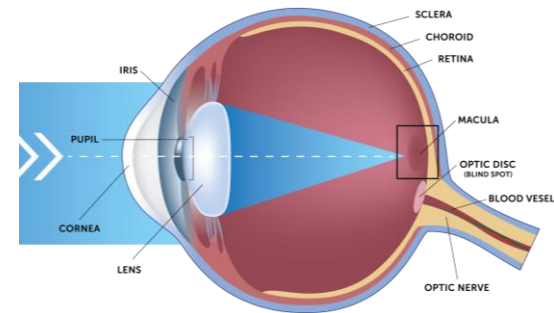
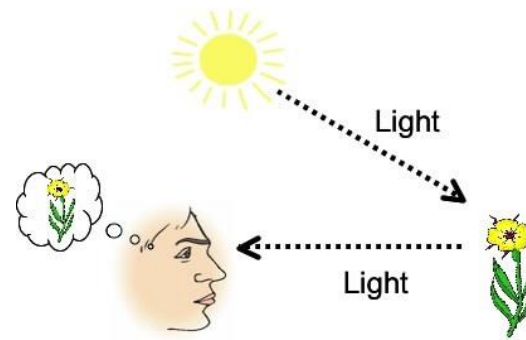


# Upper Key Stage 2: Let it shine Knowledge Mat

## Subject Specific Vocabulary

<b>light wave</b>	One of the characteristics of light is that it behaves like a wave. Light can be defined by its wavelength and frequency. The frequency is how fast the waves vibrate up and down.
<b>spectrum</b>	The visible colours of light when it is dispersed
<b>concave</b>	Is a lens that curves inwards and reflects light differently as a result.
<b>convex</b>	Is a lens that curves outwards and reflects light differently as a result.
<b>dispersal</b>	When white light is split into its colours by a prism.
<b>lens</b>	A lens is a curved piece of glass or plastic designed to refract light in a specific way.
<b>retina</b>	The retina is at the back of your eye and it has light-sensitive cells called rods and cones.
<b>cornea</b>	The cornea is thin, clear and covers your eye. It's important because it helps you see by focusing light as it enters the eye.
<b>iris</b>	By opening and closing the pupil, the iris can control the amount of light that enters the eye.
<b>pupil</b>	The pupil can be compared with the shutter of a camera. It is surrounded by the iris which is the coloured part of the eye.
<b>refraction</b>	Change in the direction of light when it passes through a different substance.
<b>reflection</b>	When light bounces off the surface of an object.



## Key 'sticky' Knowledge about Light

- Light travels in straight lines.
- Objects are seen because they give out or reflect light into the eye.
- Shadows are caused by objects blocking the path of light; therefore, they are the same shape as the objects that cast them.
- White light is made up of a spectrum of colours. A rainbow shows this spectrum.
- Light reflects from all objects. The way that different objects disperse light leads to us seeing different colours.
- Some substances, like glass and water, can change the path of light, so that it appears to 'bend' or change direction.