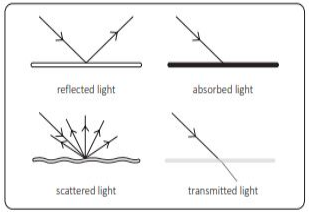
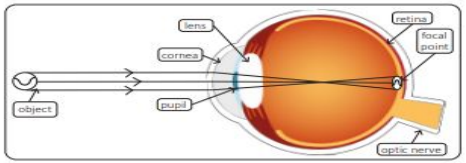
Year 6 Science - Summer Term 1: Light Theory

How does light travel?

1. Light travels in waves in straight lines. Light waves in diagrams are drawn as straight lines with arrowheads that show the direction of travel. The angle at which light hits a reflective surface is the same angle at which it is reflected.



2. Due to how light travels, we can see things because they give out or reflect light into the eye.



3. Light sources give out light. They can be natural or artificial. When light hits an object, it is absorbed, scattered, reflected or a combination of all three.

4. Cones in the retina that are sensitive to red, green and blue light help us to see different colours. When different combinations of cones are stimulated, we see different colours.

5. A shadow appears when an object blocks the passage of light. Apart from some distortion or fuzziness at the edges, shadows are the same shape as the object. The distortion or fuzziness depends on the position or type of light source.

6. Mirrors and lenses are used in a range of everyday objects (telescopes, periscopes, cards and on roads). The human eye has a lens that bends and focuses light on the back of the eye (retina) so that we can see.

waves	**straight lines**	**arrowheads**	**reflect**	**light sources**	**natural**
artificial	**absorbed**	**retina**	**shadow**	**distortion**	**lens**