## Year 6: Light

Subject Specific Vocabulary

| cornea | The outer clear covering over <br> the eye. |
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| iris | The coloured part of the eye. |
| Iens | The part of the eye that focusses <br> the light. |
| light ray | The path light takes. |
| pupil | The black hole in the centre of <br> the coloured part (iris) that lets <br> light into the eye. |
| rainbow | Occurs when sunlight hits rain, <br> splitting the light into its colours. |
| reflection | Light bouncing off the surface of <br> an object. |
| symmetry | When one shape becomes <br> exactly like another if you flip, <br> slide or turn it. The simplest type <br> of symmetry is 'reflection' or <br> 'mirror' symmetry. |

## Working Scienilifically

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to set up further comparative and fair tests.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Identify scientific evidence that has been used to support or refute ideas or arguments.
- Gather and record data to help in answering questions.



## By the end of this unit, I will know:

Light travels in straight lines and travels faster than sound $(330 \mathrm{~m} / \mathrm{s})$.

Because light travels in straight lines, the edges of light beams are straight and shadows are the same shape as the object casting them. Shadows can be changed depending on the position of the object in relation to the light source.

If the light source is small, the edges of the shadows are sharp. If a large light source is used, the edges of the shadow are blurred.

We see because light is reflected off objects and into our eyes. All objects reflect a small amount of light that comes from a light source.

Plane mirrors reflect light very well producing a mirror/symmetrical image. Whatever direction the light hits the mirror, it will be reflected in the equal but opposite direction.

When light passes from one material into another, it changes direction. The change in direction is known as refraction.

Our famous scientists for the term are:
Sir Isaac Newton and Maria Telkes


