

Light Theory



This project teaches children about the way that light behaves, travelling in straight lines from a source or reflector, into the eye. They explore how we see light and colours, and phenomena associated with light, including shadows, reflections and refraction.

- How light travels;
- Light, sight and the human eye;
- Visible light;
- Perceiving colour;
- Shadows;
- Reflections;
- Plane, concave and convex mirrors;
- Measuring light;
- Refraction;
- Working scientifically – identifying and classifying, comparative tests, pattern seeking, research

Children will create a mind map to recap their prior learning about light sources, reflectors, day and night, sun safety and shadows. They will observe how light travels in straight lines. They will use their research skills to discover what happens to light when it enters the eye and how this relates to how we see. They will learn about the electromagnetic spectrum, finding out about visible light in detail. They will investigate how we perceive colour, learning that the stimulation of cells in the eye helps us perceive light, dark and colour. Using a torch for a light source, they will explore how shadows change, including their shape, size and how they become distorted. They will discuss what happens to light when it strikes a surface, learning about absorption, reflection, scattering and transmitted light. They will use different mirrors, including plane, concave and convex, to explore how they affect reflections. They will use a light meter to measure light and will observe refraction, and ask and answer scientific questions about the phenomena.