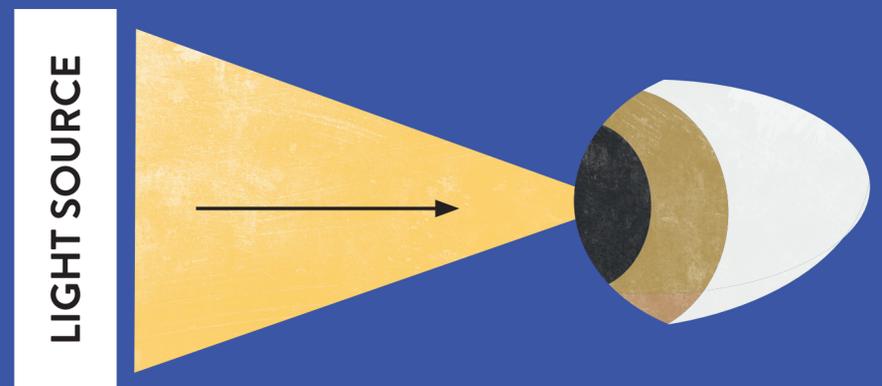


LIGHT

Core Learning of this unit

- Children will recognise that they need light in order to see things and that dark is the absence of light.
- Children will learn that **light travels** in a **straight line** and the **speed of light** is 300,000 km/s.
- Children will learn that light from the sun can be dangerous and that there are ways to protect their eyes.
- Children will name some **sources of light** and sort materials into those which are good and bad **reflectors** of light.
- Children will identify that **shadows** are formed when the light from a light source is blocked by an **opaque** object.



Prior Learning & Curriculum links



Prior learning

- From Key stage 1: Some properties of materials including glass; mirrors are made from shiny materials. Children also know that shadows are dark and are similar in shape to the object forming them.

Curriculum Links

- RE: The significance of light in religion.

Working Scientifically



- **Find patterns** in the way that the size of shadows change, when the light source moves or the distance between the light source and the object changes.
- **Investigate** and **measure** shadows, and find out how they are formed and what might cause the shadows to change.
- **Record observations** of investigations on shadow formation in a systematic way.

Vocabulary



- **Dull:** a surface that scatters light and does not look shiny.
- **Shiny:** surfaces that reflect lots of light.
- **Reflect:** to change the direction of light using a shiny surface.
- **Mirror:** a shiny polished surface.
- **Observation:** what we see happening in a scientific test.
- **Explanation:** a sentence (or sentences) giving a reason for something happening.
- **Light source:** the place where light originates from.
- **Shadow:** darkness caused by light being blocked.
- **Transparent:** letting most or all light through.
- **Translucent:** letting some light through.
- **Opaque:** not letting light pass through.
- **Description:** a statement that says what you see.
- **Kaleidoscope:** a toy that shows changing patterns.



Significant People

Justus von Liebig (a German chemist) developed a process for applying a thin layer of metallic silver to one side of a pane of clear glass. This technique was soon adapted and improved upon, allowing for the mass production of mirrors.