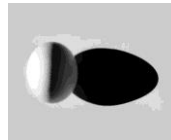## Light

learn...

A light source is something that gives out light. Light is made by burning, electricity or chemical reactions. The Sun is an example of a burning light source. We must never look directly at the sun. The light it produces can be harmful to our eyes. A lamp is an example of an electric light source. Glow sticks are an example of a chemical reaction light source.

We need light to see in the dark. Dark is the absence of light. The Sun and stars always give us light but we can only see them when it is dark. The Moon is not a source of light even though we can see it in the dark. The Sun's light reflects on the moon, making it appear alight.

Light travels in straight lines. When light is blocked by an opaque object, a dark shadow is formed. When light is blocked by a transparent object, a faint shadow is formed. The size of a shadow changes as the light source moves. The further away the light source is, the smaller the shadow is. The closer the source of light, the bigger the shadow.

Key vocabulary:

source	Where something comes from.
opaque	If an object is opaque, you cannot see through it.
transparent	If an object is transparent, you can see through it.
translucent	If an object is translucent, some light can pass through it.
angle	The direction from which you look at something.
reflect	Light is sent back from the surface and does not pass through it.
shadow	A dark shape on a surface that is made when something sits between a light and a surface.

Investigations:

- How can we make different length shadows?

- How does the length of shadows change during the day?

Inspirational Scientist

Percy Shaw – inventor of reflective Cat's eyes

Working scientifically

In this topic we develop the following practical skills:

- ✓ asking relevant questions and using different types of scientific enquiries to answer them
- ✓ making systematic and careful observations and, where appropriate, taking accurate measurements
- ✓ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables