

What should I already know?

- Why we need light and why it is important.
- The name of several types of light e.g.: sun, light bulb, candle.

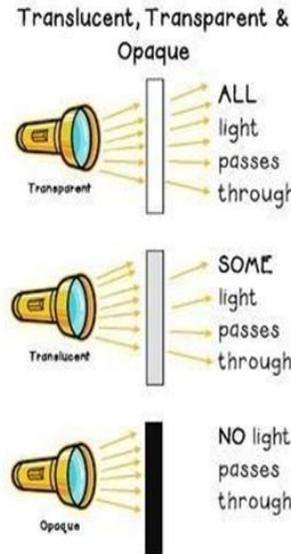
What will I know by the end?

- We need light in order to see things.
- Dark is the absence of light.
- There are natural and man-made sources of light.
- Light is reflected from surfaces.
- Light from the sun can be dangerous and that there are ways to protect our eyes.
- Shadows are formed when the light is blocked by an opaque object.
- Why the size of shadows change.

Scientific Skills and Enquiry

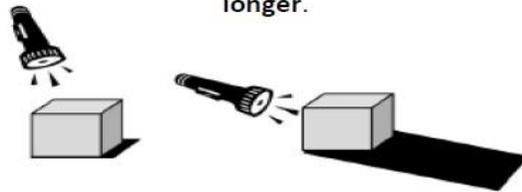
- Asking relevant questions.
- To identify and classify different sources of light.
- Gathering, recording and presenting data when exploring the best materials to absorb light and reflect light.
- Using results to draw simple conclusions from the investigation.
- Reporting on findings from enquiries – sharing experiences.
- Making systematic and careful observations.

Sources of Light can be natural or man-made



How the size of shadows can change

As the **light source** moves **higher** in relation to the **object**, the **shadow** gets **shorter**. As the **light source** moves **lower**, the **shadow** gets **longer**.



Vocabulary

Light source: An object that produces its own light e.g. sun, fire, torch.

Opaque object: An object which does not allow light to pass through it e.g. wood.

Reflection: When a light hits a surface and bounces off.

Refraction: When light passes through a different object and its direction changes.

Retina: The retina is at the back of your eye and contains light-sensitive cells. When you look at something, light hits the retina and sends signals to the brain to interpret what you are seeing.

Shadow: A dark area or shape caused by the blockage of light.

Spectrum: A range of colours caused when white light is refracted. A rainbow shows a spectrum of colours.

Sunlight: Is the light and energy that comes from the Sun. Its scientific name is **solar radiation**.

Translucent object: An object which allows some light to pass through it. It may be possible to see some unclear images through the object e.g. tissue paper.

Transparent object: An object which allows light to pass through it so that objects behind it can be easily seen e.g. clear/plain glass.

UV Rays: Ultraviolet rays are waves of light that come from the Sun. Some of them can be harmful to our skin and eyes.

