

Knowledge Organiser - Light and Shadows

We see things when light from a source enters our eyes



Light travels directly from the light source (candle flame) to the eye



Here the light goes from the light source, bounces off the object and into your eyes, so that you can see the object

Key Facts:

Light travels in straight lines.

Light travels very, very fast - 186,282 miles per second (that's like travelling around the world over 7 times in a second)

It is not safe to ever look directly at the sun, even when wearing sunglasses.

What is a light source?

A light source is something that makes its own light.

Common sources of light:

- The Sun
- Stars
- Flame
- Lamp

Reflection:

Light bounces off some materials better than others. Shiny objects reflect light well.

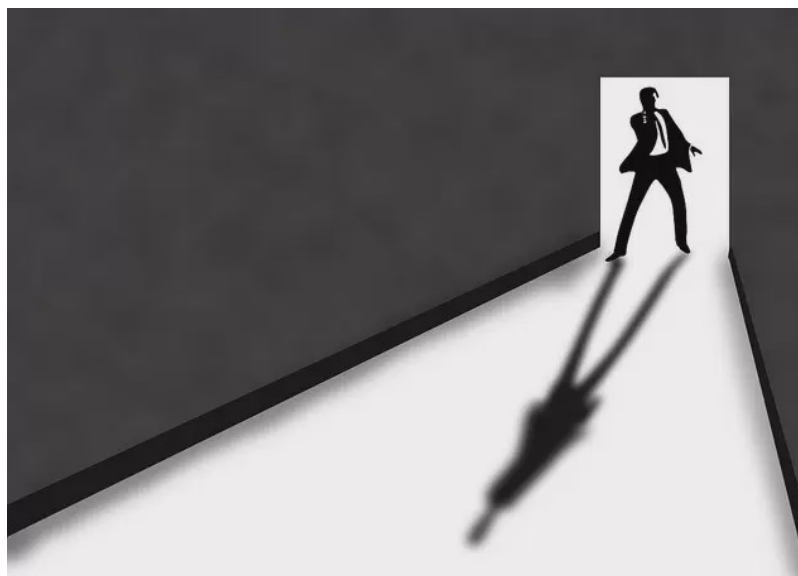
Light Reflectors:

- The moon
- Mirror
- Shiny objects

A shadow is formed when light from a source is blocked by an opaque object.

If an object is moved **closer** to the light source, the shadow gets **bigger**.

If an object is moved **further away** from the light source, the shadow gets **smaller**.



Key Vocabulary

Opaque

An object you are not able to see through

Transparent

Allowing light to pass through so that objects behind can be distinctly seen

Translucent

Allowing light, but not detailed shapes, to pass through; semi-transparent

Source

A thing from which something originates or can be obtained

Reflection

When light bounces off a surface

Shadow

A dark area or shape produced by an object blocking rays of light