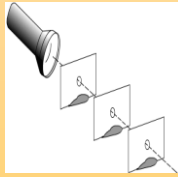


Year 4 Knowledge Organiser - Light

What is the difference between light and dark?



How does light travel?



How do mirrors affect the way we see things?



What is the difference between opaque, translucent and transparent materials?

I know...

Light is a form of energy emitted by a range of natural (the sun and fire) and man-made (torches, lightbulbs and candles) light sources. Light travels in straight lines, if something is blocking the light it cannot pass through it or travel around it. This creates a shadow. The opposite of light is dark, this is the absence/lack of light.

Some materials and objects are reflective, this means they let light bounce off them so they can be seen clearly. This includes coats, reflective strips on book bags, cat eyes and road signs. Reflective materials are important because they keep people safe, especially at night when there isn't a lot of light.

I know the difference between opaque, translucent and transparent materials and can use a torch to put items into categories.

Keyword

Definition

UV light

Ultraviolet light that is radiated from the sun.

Light

A form of energy.

Light source

Something that emits light.

Dark

The absence of light.

Opaque

Something that doesn't let any light through.

Translucent

Something that some light pass through it but it is scattered.

Transparent

Something that lets light through and you can see through it.

Did you know...

- Our main source of light on Earth comes from the Sun. A ray of light travels very fast. The speed of light in space is approximately 300 million metres per second.
- It takes just over 8 minutes for light to travel from the Sun to Earth a distance of 93 million miles.
- The white light from the Sun is made up of the seven colors (spectrum) of the rainbow

