Light

Year 3/4 Cycle A Autumn 2

Key Vocabulary

Light—A form of energy that travels in a wave from a source

Light source—An object that makes its own **light**

Dark—**Dark** is the absence of **light**.

Reflection- The process where **light** hits the surface of an object and bounces back into our eyes.

Reflective—A word to describe something which **reflects light** well.

Shadow—An area of darkness where light has been blocked.

Opaque—Describes objects that do not let any **light** pass through them.

Pupil—The black part of the eye which lets **light** in.

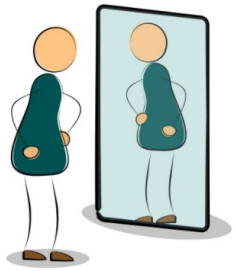
Retina -A layer at the very back of the eye. The **retina** takes the **light** the eye receives. It then changes it into nerve signals to send to the brain.

Sticky Knowledge

We need **light** to be able to see things. **Light** travels in a straight line. When **light** hits an object, it is **reflected** (bounces off). If the **reflected light** hits our eyes, we can see the object. Some surfaces and materials **reflect light** well. Other materials do not **reflect light** well.

Reflective surfaces and materials can be very useful.

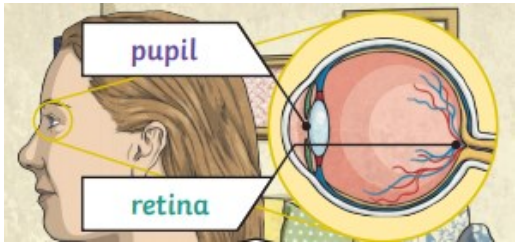
Mirrors **reflect light** very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand. The surfaces that reflect **light** best are smooth, shiny and flat.



A **shadow** is caused when **light** is blocked by an **opaque** object. A **shadow** is larger when an object is closer to the **light** source. This is because it blocks more of the **light**.

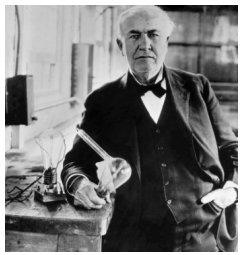
When the **light source is directly above the object, the shadow will be directly underneath**

When a **light** source is to one side of an object, the **shadow** will appear on the opposite side. The **shadow** will also be longer.



The **pupils control the amount of light entering the eyes. If too much light enters, then it can damage the retina. To help protect the eyes, you can wear a hat with a wide brim and sunglasses with a UV rating.**

Significant People



Thomas Edison created a 'gentle' light in a bulb that could burn for a good amount of time, making it practical to be used in people's homes.

Book