

Science Knowledge Organiser—Year 5/6 Cycle B



St Mary's &
St Benedict's
RC Primary School

Light



light—a form of energy



light source - an object that provides its own light



reflected —when light shines on a surface and bounces back



mirror — a surface that reflects a clear image

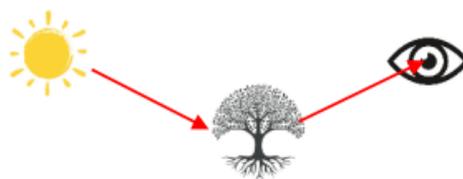


optical — relating to the science of optics



spectrum—a band of several colours

How We See



Light travels in **straight lines**. The light **rays** from a light source **reflect** off the object we are looking at. The light travels in a **straight line** and enters the eye through our **pupil**.

Shadows

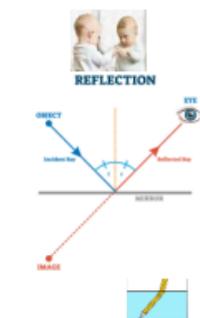


Opaque objects block the light rays so they can only travel around the edges of the object in straight lines. That is why a shadow is the same shape as the object.

The **closer** an object is to the light source, the **bigger** the shadow.

The **further away** the object is from the shadow, the **smaller** the shadow.

Bending Light



Reflection

Light reflects off shiny, bright or light surfaces. That is why you can see your reflection when you look in a mirror.

Refraction

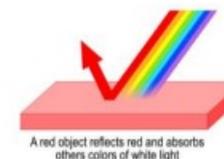
Water and bent shiny surfaces cause light rays to be reflected at different angles, meaning the reflection of the image is distorted.

Colours

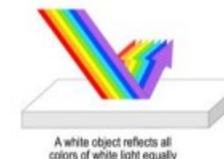


Absorption and reflection of light

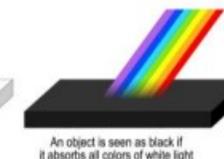
White light is made up of the colours of the rainbow. When light is refracted through a transparent object, a rainbow is formed.



A red object reflects red and absorbs others colors of white light



A white object reflects all colors of white light equally



An object is seen as black if it absorbs all colors of white light