

Key Vocabulary Overview	
light	a type of energy that enables animals to see
eye	an organ that receives light and visual images, then transmits them to the brain
light source	an object or device that emits light
natural light source	objects in nature that emit light
artificial light source	human-made objects that emit light
Sun	the star that provides light and heat to the Earth
sunglasses	glasses with tinted lenses that protect eyes from being harmed by sunlight
protect	to keep something from harm
reflection	when light bounces off an object
shiny	describes a material that is smooth and reflects light
dull	describes a material that is not bright or shiny
opaque	describes a material that light cannot travel through
translucent	describes a material that allows some light to travel through
transparent	describes a material that all light can pass through
shadow	the dark area caused by an object blocking the path of light between a light source and a surface
conclusion	a statement of what you have found out from your observations in an enquiry
evaluation	a judgement of how well the enquiry worked and how the enquiry could be improved

Where Does Light Come From?

Light is emitted by a **light source**.



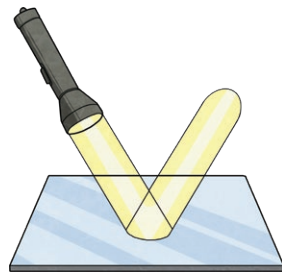
How Does Light Travel?



Light is needed to see. **Light** travels from **light sources** in straight lines.

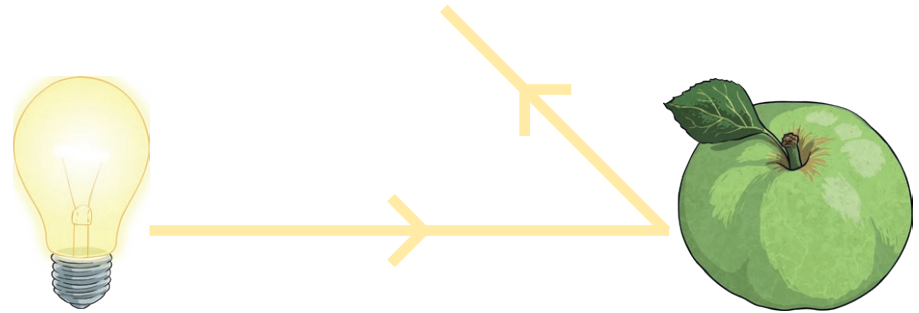
Mirrors

Mirrors are not **light sources**. They **reflect light** because they are **shiny**. **Light** bounces off their surfaces.



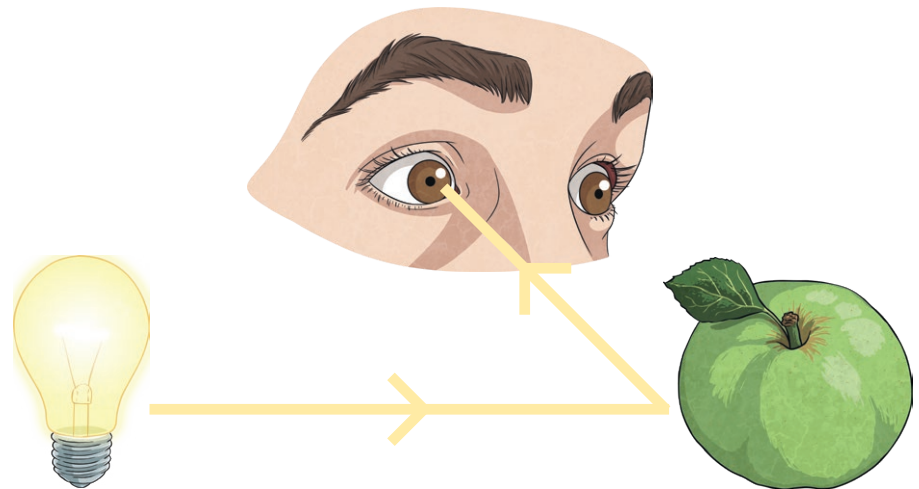
Reflection

Reflection occurs when **light** bounces off an object.



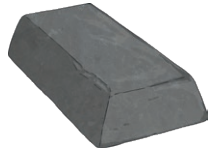
How Do We See?

People can see when **light reflected** from objects enters the **eye**. If there is no **light** to be **reflected** off objects, the objects will not be seen.

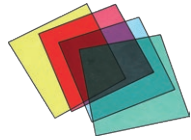


Light and Materials

Objects made of **opaque** materials do not allow **light** to travel through them.



Objects made of **translucent** materials allow some **light** to travel through them.



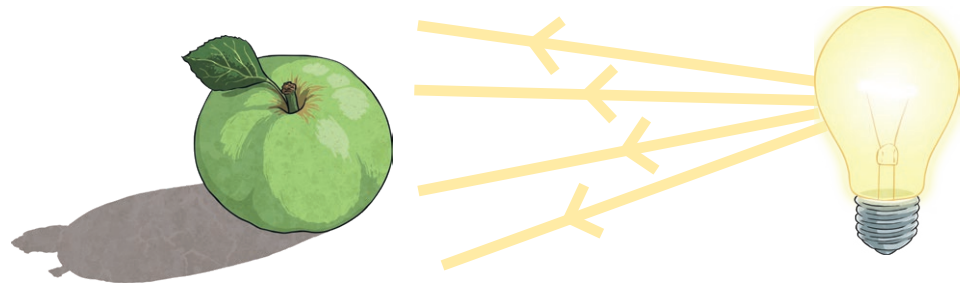
Objects made of **transparent** materials allow almost all **light** to travel through them.



Shadows

A **shadow** is a dark area behind an object.

When **light** reaches an object, the object blocks its path. This leaves **shadow** behind the object.

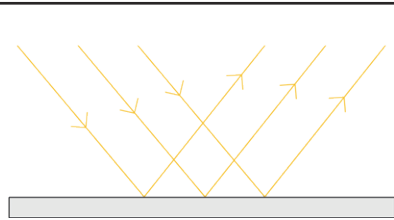
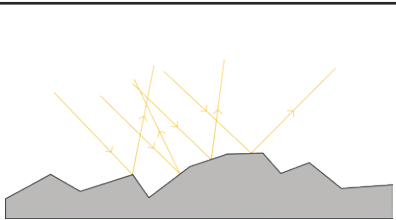


Shiny or Dull?

Different surfaces **reflect light** in different ways.

When **light** rays hit a rough surface, they scatter. You do not get a clear **reflection**.

When **light** rays hit a smooth surface, they bounce off uniformly and we see a **reflected** image.



Sun Protection

Light from the **Sun** can hurt and damage our **eyes** and can also burn our skin.

We can **protect** ourselves by:

- never looking directly at the **Sun**;
- wearing sunglasses;
- wearing long clothes and a sun hat;
- using sun cream with a strong SPF.

