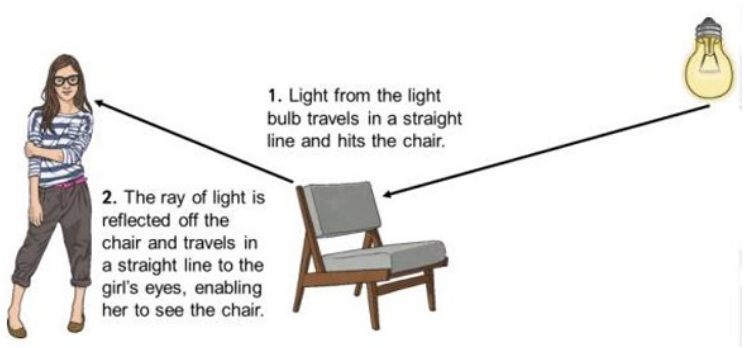
Light

Key facts

How do we see?

Light travels in straight lines. When light hits an object, it is reflected (bounces off) and enters our eyes. This is how we see the object. Rays of light travel from a light source and hit objects around us. The rays of light reflect, or bounce off an object, and then travel into our eyes. This reflection of light allows us to see the object.



Parts of the eye: Light enters the eye through the pupil. The iris helps the pupil change size depending on how bright the light is. The retina turns the light into signals the brain understands. The optic nerve carries this information to the brain.

Key vocabulary

Dark: The absence of light

Light: A source of energy that makes things visible.

Reflection: Reflection is when light bounces off a surface rather than being absorbed, changing the direction of a ray of light.

Refraction: This is when light bends as it passes from one medium to another. E.g. light bends when it moves from air into water.

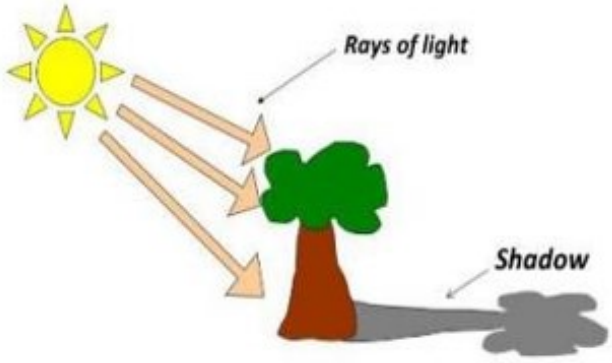
Spectrum: a band of colours, as seen in rainbows, produced by separation of the components of light by their different degrees of refraction.

Translucent: Describes objects that let some light through, but scatters the light so we can't see through them properly.

Transparent: Describes objects that let light travel through them easily, meaning you can see through the object.

How is a shadow formed?

Because light travels in straight lines, when there is an opaque object blocking it, a shadow is formed.



Key questions

- What is the pupil/retina/lens/iris? What is its function?
- How can we see objects?
- How does light travel?
- What does "reflection" mean?
- Why do we see shadows when light is blocked by an object?
- What causes a shadow to form?
- What does transparent/translucent/opaque mean?