



How we see...

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 light.



2. The ray of light is reflected off the chair and travels in a straight line to the girl's eyes, enabling her to see the chair.

1. Light from the light bulb travels in a straight line and hits the chair.



Vocabulary you will know...



Light Source	A source of light makes light e.g. sun, torch.
Light Rays	Light travelling in straight lines.
Reflection	When light bounces off a surface, changing the direction of a ray of light.
Shadow	A dark shape on a surface that is made when something stands between a light and surface.



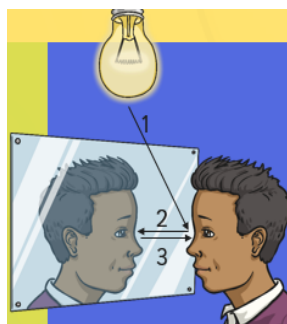
Vocabulary you will hear...



Transparent, translucent, opaque, straight lines, absence of light.

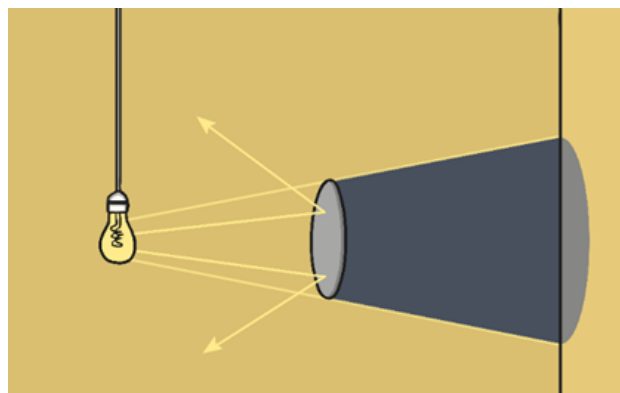
Reflection

- Light from the bulb hits the boy's face and bounces off.
- The light reflected from the boy's face hits the mirror.
- The light reflected from the mirror travels to the boy's eyes, so he can see the image of his face reflected in the mirror.



Shadows

- Shadows are formed when an opaque object blocks a ray of light.
- A shadow is always the same shape as the object that casts it.



Scientist: Ibn al - Haytham

Al-Haytham was referred to as 'the father of modern optics'. He was the first to explain that vision occurs when light reflects from an object and then passes into one's eyes. His most influential work is titled Kitab al-Manazir.



Quiz Corner



- 1) Explain what a light source is.
- 2) How does light travel?
- 3) Describe how a reflection works.
- 4) How is a shadow formed?
- 5) Are shadows always the same size?