

Science Knowledge Organiser



Topic: Light

Year 6:
Summer Term

Strand: Physics

What should I already know?

- Light is needed to see
- There are different sources of light
- Shadows are formed when light is blocked
- Some materials are opaque and others are transparent

Significant scientists

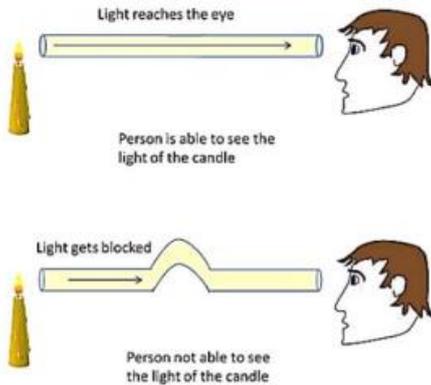
Abu Ali al-Hasan (Alhazen) (965-1040)



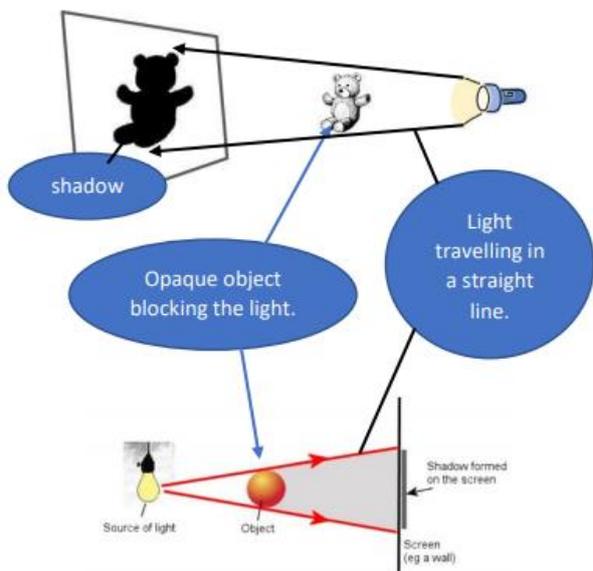
Alhazan was an Iranian mathematician, astronomer and physicist. He was the pioneer of modern optics. He carried out experiments with pinhole cameras and candles and explained how the image is formed by rays of light travelling in straight lines.

Key vocabulary	
light source	A natural or artificial source of light.
straight lines	Light travels in straight lines.
light ray	Each line of light travelling in a straight line from its place of origin.
reflect	To throw back light from a surface.
shadow	A dark area created where light from a light source is blocked by an object. The object blocking the light will be opaque or translucent.

Light may come directly from a light source.

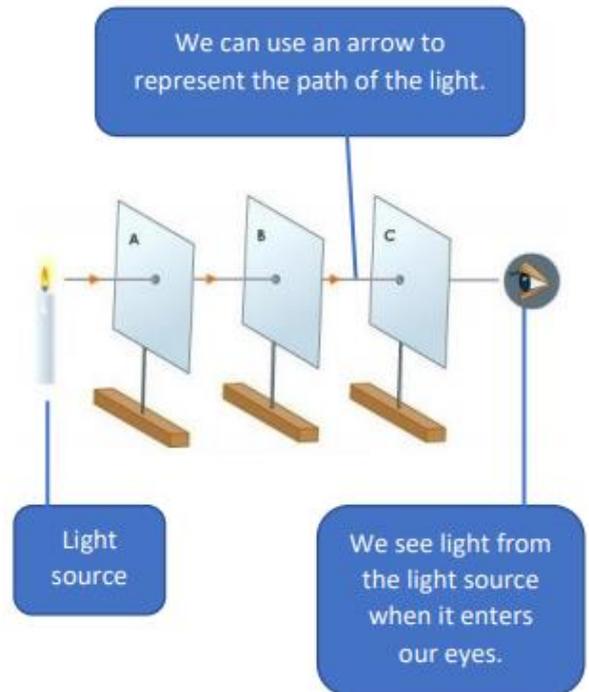


Shadows have the same shape as the objects that cast them:



Light travels in a straight line:

We can use an arrow to represent the path of the light.



For objects that are not a light source, light must be reflected from the object into our eye for us to see the object:

