



Prior Learning:

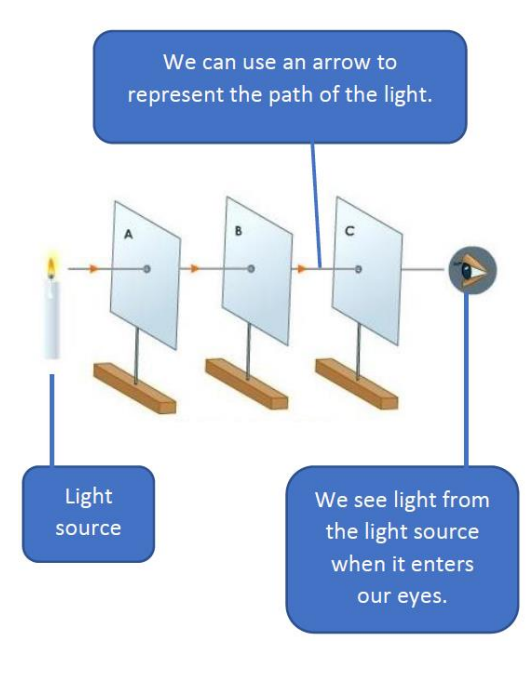
Year 3:

- Need light in order to see and dark is absence of light
- Light is reflected from surfaces
- Light from sun can be dangerous
- Recognise shadows are formed when light is blocked by an opaque object
- Find patterns in the way that size of shadows change

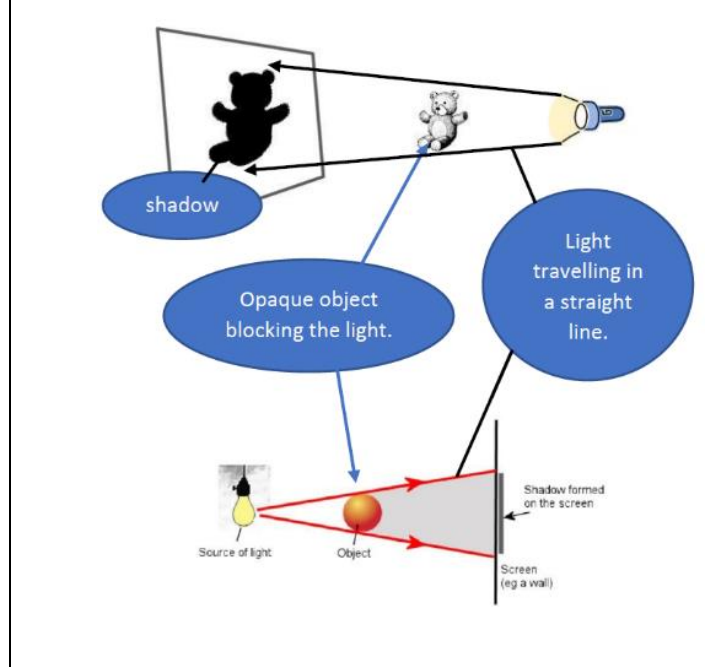
Key Vocabulary:

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 travels in a straight line:



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



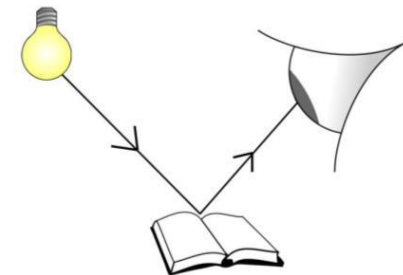
Significant Scientist

Abu Ali al-Hasan
(Alhazan)
(965 – 1040)

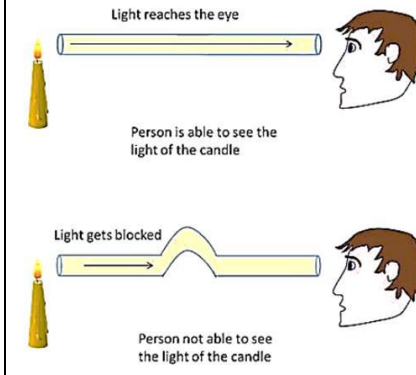


Alhazan was an Iranian mathematician, astronomer and physicist. He was the pioneer of modern optics. He carries out experiments with pinhole cameras and candles and explained how the image is formed by rays of light travelling in straight lines.

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



Light may come directly from a light source.



Can I answer:

- How does light travel?
- How are we able to see objects?
- How does light travel from a light source to your eye?
- Why do shadows have the same shape as the objects that cast them?

