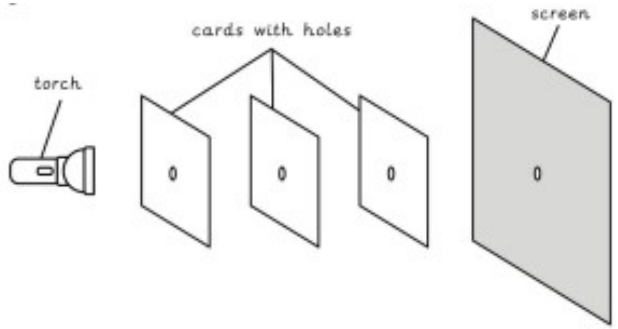
Year 6	Science	Light and reflection

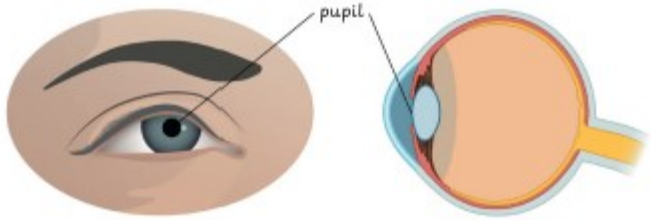
The pathway of light

Light travels in a straight line. The holes must line up exactly for the line to pass through and show on this screen. This is because light cannot move around objects - it travels in a straight line.



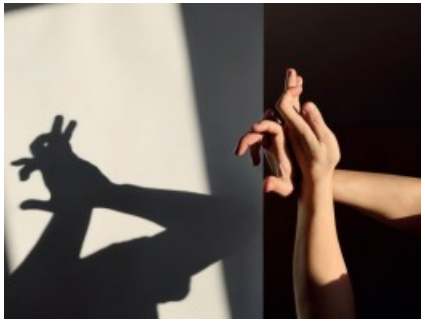
See the light

Light needs to enter the eye for us to see. It enters through the pupil. Light may come directly from a luminous object or reflect off a non-luminous object.



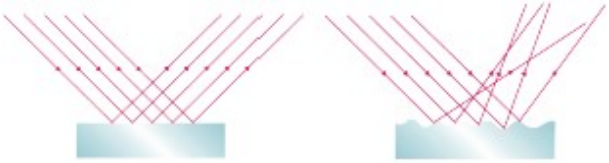
Measuring shadows

A shadow is formed when an opaque object is in the pathway of light because light travels in straight lines. Shadows have the same shape as the object that cast them. The size of a shadow changes as the light source moves.



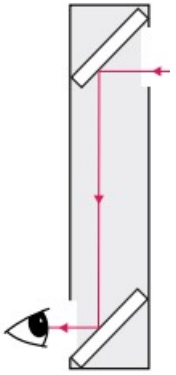
Reflecting light

Light can change direction when it reaches a different material. Reflection is when light does not pass through a material and changes direction. Shiny surfaces reflect light uniformly whereas rough surfaces scatter the light rays.



Making a periscope

Periscopes are long, vertical tubes that contain a set of mirrors to give a view above the position of the eye.



Using mirrors

Mirrors are useful in lots of situations:

- Looking at the back of your hair when you get it cut
- Dentists looking at the inside of the mouth
- Rear view and side view mirrors in a car to look at your surroundings in a vehicle