

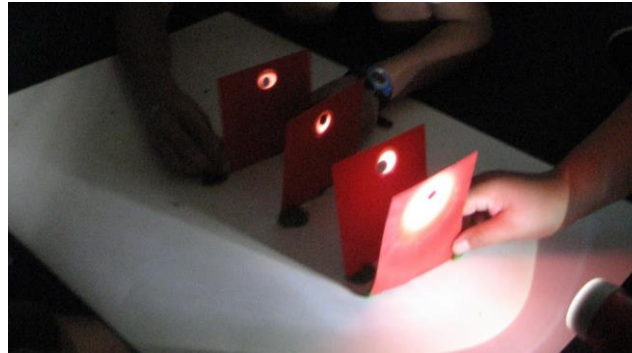


Science

How can you light up your life?

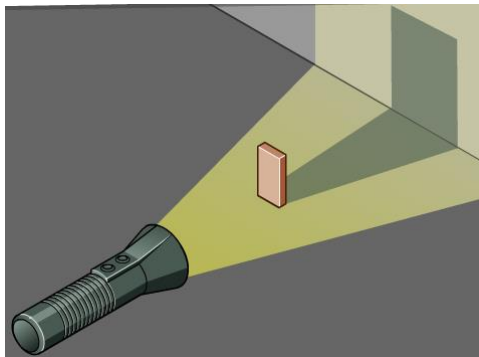
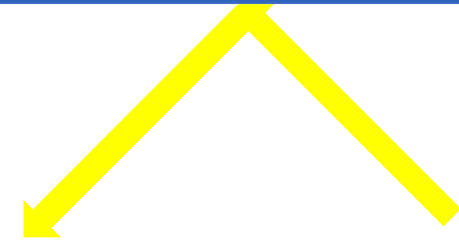
Key Vocabulary	Definition
Absorb	To take in.
Light rays	Imaginary lines used to explain how waves of visible light move.
Reflect	To cast back light from a surface.
Straight	To move in one direction only.

Light travels in straight lines.

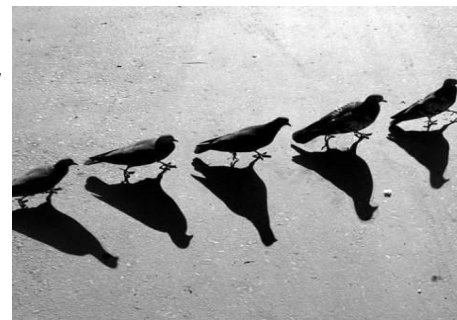


Light reflects off a mirror like a ball hitting a hard surface. The angle it hits the mirror at is the same that it is reflected at.

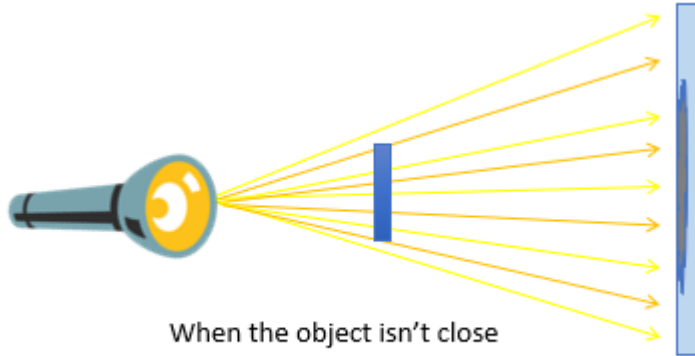
You should have found out that light can only travel in a straight line. The light was mostly blocked by the card but some of the light travelled through the holes and you could see it come out the other end.



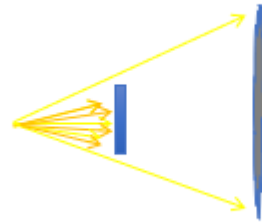
Light travels in straight lines. Some objects will form a shadow when light hits them. This is because they block the light. Shadows are the same shape as the object that casts them.



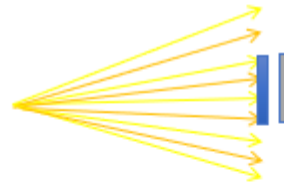
This is because light travels in straight lines and cannot bend around an opaque object in their path. A concentrated light source casts a sharp shadow.



When the object isn't close to the surface, light has an opportunity to spill and bounce off other objects around the edge – this makes the shadow fuzzy.



Fuzzy shadow.

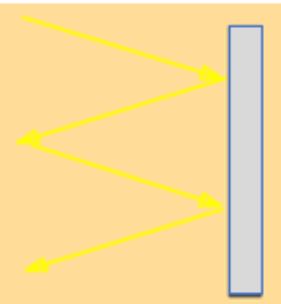


Sharp, clear shadow.

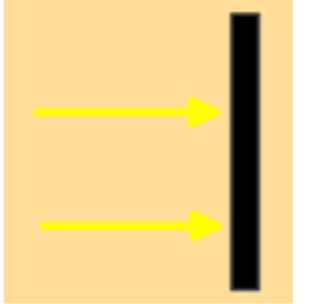
The closer the object to the surface the less light is able to reflect and bounce behind. This means the shadow is sharp.



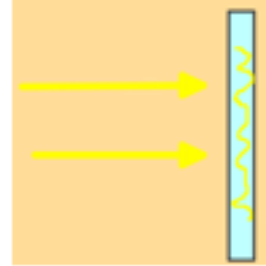
Shiny and light objects reflect light.



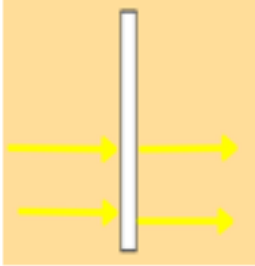
Dark objects absorb the light. They look black.



Translucent objects let some light through. For example, tracing paper.



Transparent objects let most of the light through. For example, glass.



The image appears upside down because light rays cross each other in the eye. The brain interprets the image so that we see it the right way up.

