

What I already know

What is a light source?

Something that creates light.



Electric lights



Chemical reactions (glow worms and glow sticks)



fire



The sun and other stars

The sun can be dangerous

We need to protect ourselves from the light from the sun as it can damage our eyes and our skin.



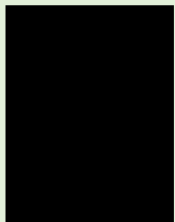
Without light I can't see



lots of light from the sun



A little light reflected by the moon



No light at all

Reflection



Light reflects off of surfaces in lots of directions.

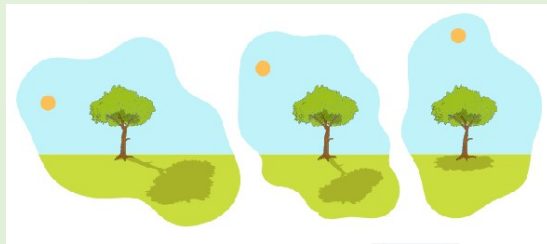
Some surfaces (like mirrors) reflect really well.



Shadows



Shadows are made when an object **blocks light** from a light source

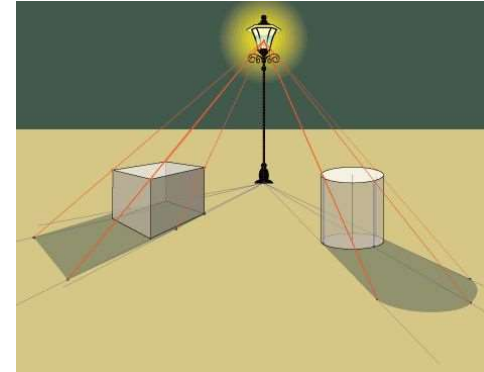
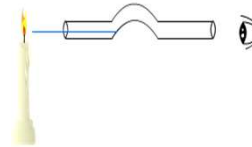
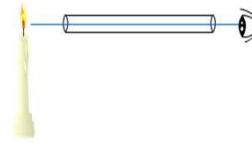


Shadows **change direction** and **length** when the light source moves.

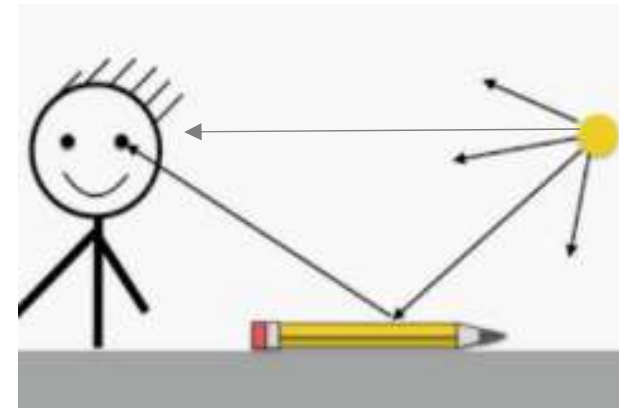
Year 6 Why are shadows important?

What I will learn in this enquiry

Light travels in straight lines



Because light travels in straight lines it can be blocked, meaning we either can't see it, or that shadows are formed.

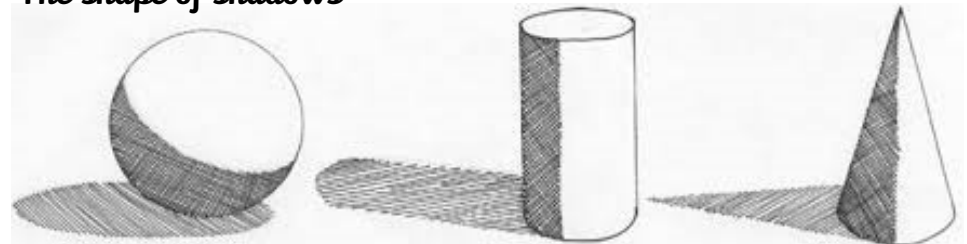


How do we see?

We can see light sources because their light travels directly to our eyes.

We can see objects that aren't light sources because light from a light source reflects off them and into our eyes.

The shape of shadows



The shape of a shadow is the same as the shape of the object causing it because light travels in straight lines.