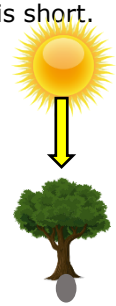
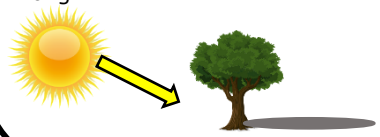
Light

As the earth spins, it makes the sun appear to rise in the east in the morning. Because the sun hits an object at an angle, the shadow is long.

As the earth continues to spin the sun is overhead by midday. Because the sun hits the object from above, the shadow is short.



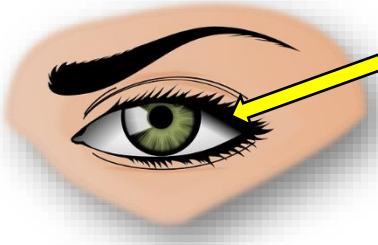
As the earth spins and the sun sets in the west in the evening, the shadow is long.



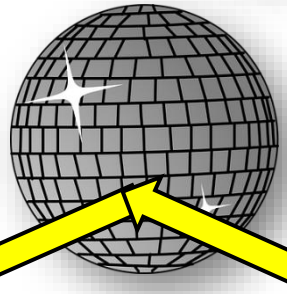
Light travels in straight lines. It travels from the light source either directly into our eyes, or reflecting off objects at 670 million mph.

Because light travels in straight lines, when it hits an object, it is blocked. It can't bend around the object so it casts a shadow.

LIGHT SOURCES



A mirror is <u>not</u> a light source.
It reflects light so doesn't create it.



When light hits a smooth object, it bounces off (reflects) making it appear shiny.

Opaque: This is the name given to objects which light *cannot* travel through. They block light and create shadows

Translucent: This is the name given to objects which *some light can* travel through.

Transparent: This is the name given to objects which light *can* travel through.

1.) We can see objects because light reflects off them and into our eyes.
2.) Light reflects off most objects, especially colours like white and yellow.
3.) If there is no light at all (pitch-black), then there is no light to reflect and we can't see anything at all.
4.) At night you can still see a bit in the dark because the moon is reflecting light.

Rainbows are formed when the sun shines through water particles (transparent) and when white light passes through, it 'bends' and splits into the range of colours which make white light

ROY G. BIV

Light - Useful links

BBC Bitesize
https://www.bbc.co.uk/bitesize/topics/zbssgk7/resources/1

Science Sparks
https://www.science-sparks.com/category/key-stage-2-science/light/

The School Run (List of useful books here too)
https://www.theschoolrun.com/what-is-lightl

Explorify
https://explorify.wellcome.ac.uk/blog/explorify-at-home-light