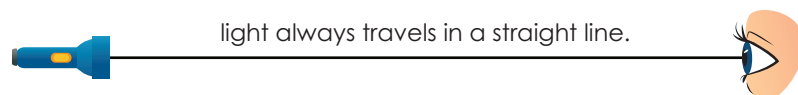


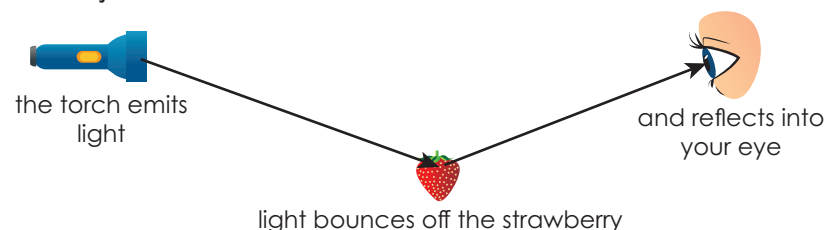
Seeing objects

Light sources are objects that give out (emit) light. They can be natural, like the Sun, or artificial like light bulbs. Darkness is when there is little or no light.

When looking at a light source, the light travels straight into your eye:



When seeing an object:

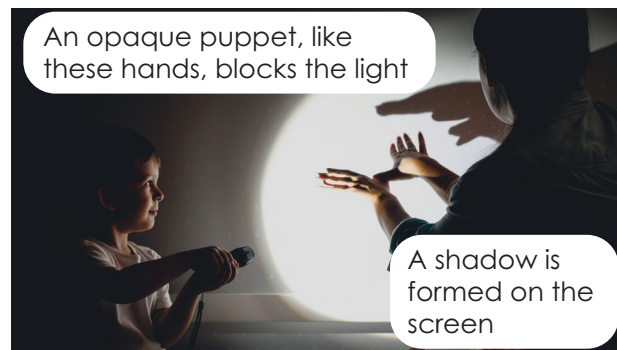


Shadows

Shadows are areas where there is no light and it's blocked by an object.

Sundials use shadows to tell the time of day.

- The closer an object is to a light source, the bigger the shadow becomes.
- The height of a light source above an object affects the size of the shadow produced.



In shadow puppetry, a bright light is shone onto a puppet.

Sun

UV rays from the Sun can damage your eyes and cause sunburn, skin ageing, and illness. To protect yourself:



Transparent objects	Translucent objects	Opaque objects
Allow all light to pass through them	Allow some light to pass through them	Allow no light to pass through them
Do not form shadows	Form faint shadows	Form clear dark shadows

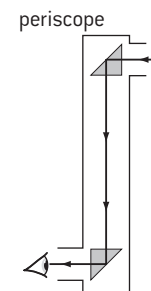
Non-reflective materials are rough, matt, or dark coloured.

Reflective materials are smooth, shiny, or pale coloured.

Mirrors

Mirrors produce a reflected image that is back to front.

Periscopes use two mirrors to see things when there is no direct line of sight.



Word	Definition
brightness	How much light an object gives off.
darkness	When there is no light.
emit	To emit something such light is to send it out.
image	An image is a picture.
iris	The coloured part of the eye.
light source	A light source may be natural such as the Sun or Moon, or it may be an artificial one from lamps or torches.
material	Material is the stuff that objects are made from.
matt	Not shiny.
mirror	A mirror is a piece of glass, in which you can see yourself.
non- reflective	A surface that does not reflect light well.
opaque	An object is opaque if you cannot see through it.
periscope	An instrument used to see things that are not in a direct line of sight.
pupil	The dark part of the eye is a hole called the pupil.
reflect	When light hits a surface and bounces off it in a different direction.
shadow	The dark area where light is blocked is a shadow.
shiny	Something that is shiny looks very bright and gives out light.
sundial	A device that shows the time by a shadow made by the sun.
translucent	A surface that allows some light to pass through it.
transparent	A surface that allows all light to pass through it.
ultraviolet (UV) rays	A form of light which is not visible to the human eye.