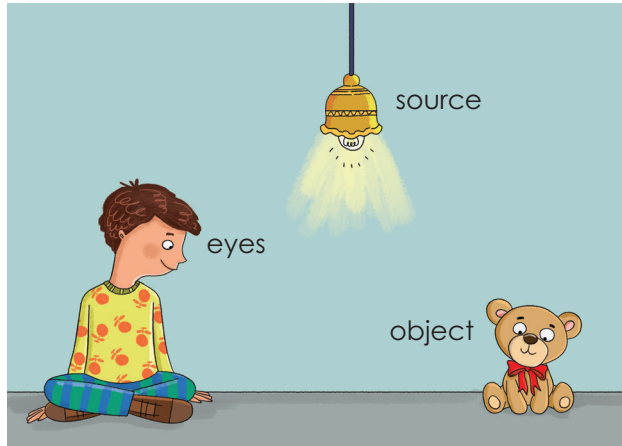


Light

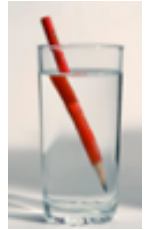
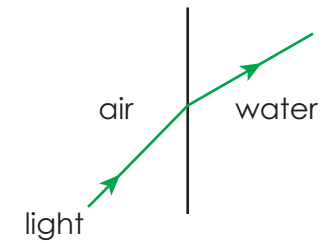
- Light sources give out light. They can be natural like the sun or artificial like a light bulb.
- Light always travels in straight lines.
- To see objects, light travels from:

source → object → eyes



Refraction

Refraction happens when light changes speed and direction when it travels through transparent objects.



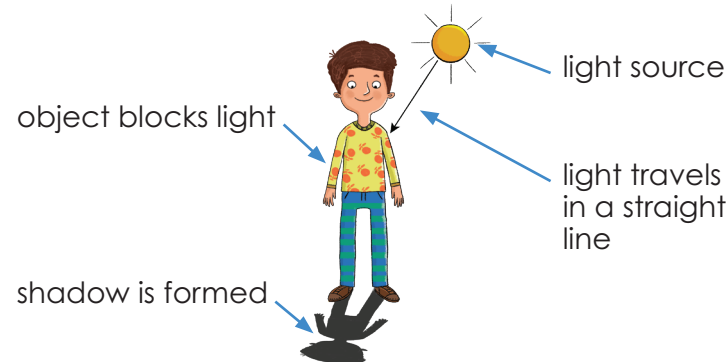
When light refracts, it bends and can cause illusions.

Reflection

- Reflection is when light bounces off any object and changes direction.
- Light reflects off all objects. Pale coloured or shiny objects are more reflective than dark coloured or dull ones.

Shadows

Shadows happen when light is blocked by an object. A less opaque object will have a clearer shadow.



- The higher the light source, the shorter the shadow.
- The closer the object is to the light source, the larger the shadow.

Colour

Sir Isaac Newton discovered that white light is made up of different colours. Coloured objects reflect that colour of light and absorb the other colours.



Word	Definition
artificial light	Light that is created by humans.
colour	White light is composed of more than one colour. It is made of all the colours of the rainbow.
environment	The conditions in which a living thing exists.
eye	An organ in the body that detects light and creates visual images.
illusion	Something that you think is real or happening but is not.
incident ray	Light that hits an object.
light pollution	The use of too much artificial light, usually at night.
light source	Anything that makes light, whether natural or artificial.
luminous	Shining or glowing in the dark.
non-luminous	Not giving off light.
opaque	Does not allow light through and so cannot be transparent.
prism	A piece of glass that breaks up light into the colours of the rainbow.
reflect	When light bounces off an object and changes direction.
reflection	The image you can see in a mirror or other shiny surface.
refraction	When light changes speed and direction through a transparent material.
shadow	A dark shape that falls on a surface when light is blocked by an object.
translucent	Allows light to shine through without being fully transparent.
transparent	Able to let light through so that you can see through it.