

Year 6 Science - Light

Key Vocabulary

Light source	An object that emits (gives off/ sends out) light around itself.
Retina	A thin layer of tissue at the back of the eye
Lens	Transparent film at the front of the eye
Pupil	The round opening at the centre of the iris
Cornea	Transparent part of the eye that covers the iris
Iris	The coloured tissue at the front of the eye
Reflection	The bouncing of light (or heat or sound) by a surface without absorbing it.
Refraction	The change in direction of light as it travels through a material such as glass.

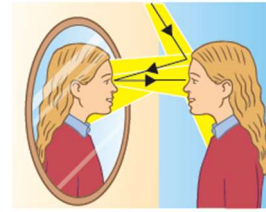
Stem sentences

"I predict that _____ because/ therefore _____"

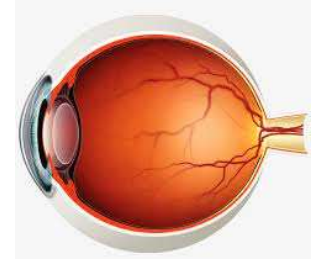
"In order to improve my investigation I would amend _____"

"There is a degree of trust/distrust in my results because _____"

How do we see?



- Reflections are light bounced off a shiny surface.
- Some light rays hit the girl's face hit the mirror.
- They bounce off the mirror and travel to her eyes.
- The rays in her eyes help her see her reflection.



Refraction

A glass or Perspex block can change the direction of a light ray.

Light changes direction as it passes from air into the block.

Once it emerges the other side it changes direction again.



Water refracts the light, making the pencil appear bent when in the water.

How are shadows formed?

Darkness is an absence of light. Shadows look different based on the transparency of the object.

Transparent objects = faint shadows (more light gets through)

Translucent objects = darker than transparent, lighter than opaque object shadows.

Opaque objects = dark shadows



Splitting light.



There are seven main colours in the spectrum and many more in between.

Most of the light waves in the light spectrum is invisible to the human eye.

Other animals can see parts of the light spectrum that we cannot see.

The light waves that we see from the sun can be described as white light. This contains all of the colours in the spectrum above.

Some uses of mirrors.

In shops and supermarkets for security.

In cars for safety.

In hairdressers to watch what is happening.

At the dentist to look around teeth.

On the roadside to see around corners.

Periscopes in submarines

