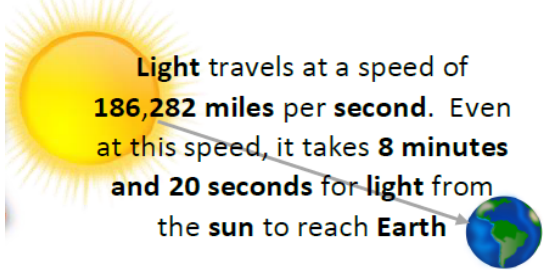
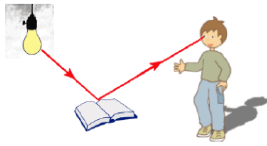


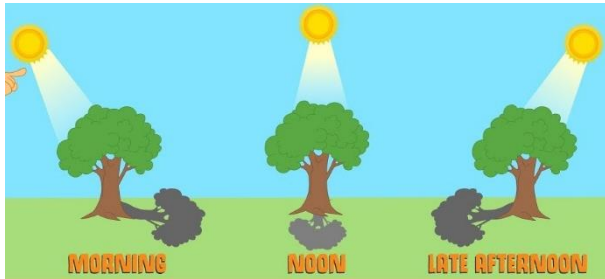
An angle is the difference in direction between two lines or surfaces. Angles are measured in degrees.



Light travels at a speed of **186,282 miles per second**. Even at this speed, it takes **8 minutes and 20 seconds** for light from the sun to reach Earth

How does the position of the sun affect a shadow?

Shadows occur when an opaque objects blocks the sunlight.



LARGE SHADOW when the toy is close to the light

SMALLER SHADOW when the toy is further from the light

TINY SHADOW when the toy is a long way from the light

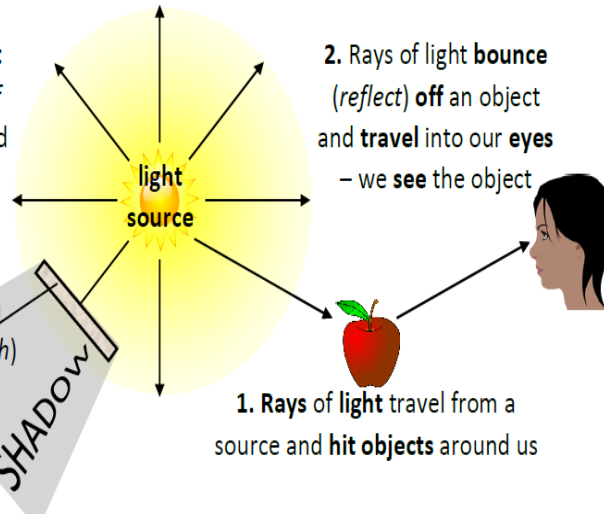
Year 6 Term 2: Light and Sight

How Light Travels

Light is a type of energy (electromagnetic radiation). Unlike sound, it doesn't need matter to travel through – it can travel through empty space (a vacuum) - which is how sunlight is able to reach us from outer space

Light travels in **straight lines** (rays or beams of light) from a **source** and in all directions

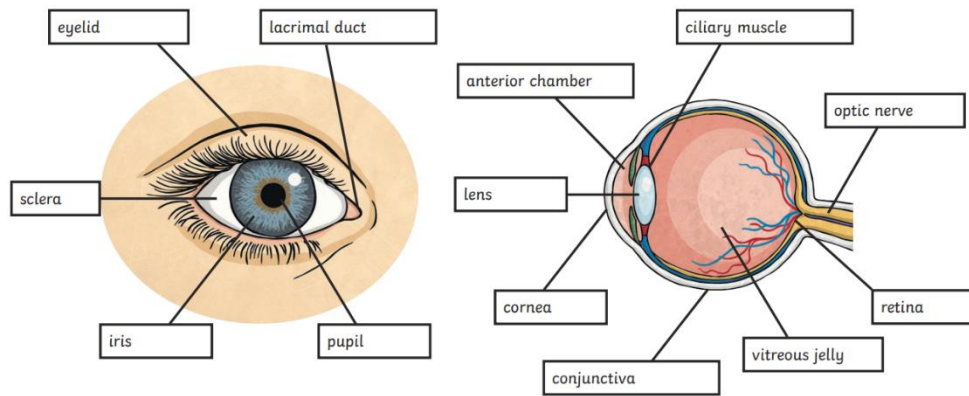
It can't bend around objects and if it hits an **opaque** (not see-through) object it is blocked



2. Rays of light **bounce** (reflect) off an object and **travel** into our eyes – we see the object

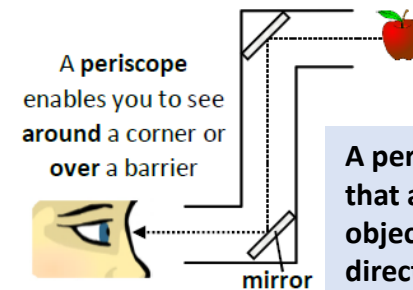
1. Rays of light travel from a source and **hit** objects around us

Here are the parts of a human eye...



Key Vocabulary

refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.
shadow	An area of darkness where light has been blocked.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that things let some light through, but scatters the light so we can't see through them properly.
opaque	Describes objects that do not let any light pass through them.
light	A form of energy that travels in a wave from a source.
light source	An object that makes its own light .
reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light .



A periscope enables you to see around a corner or over a barrier

A periscope is a vertical tube that allows a use to see objects that are bot in the direct line of vision.