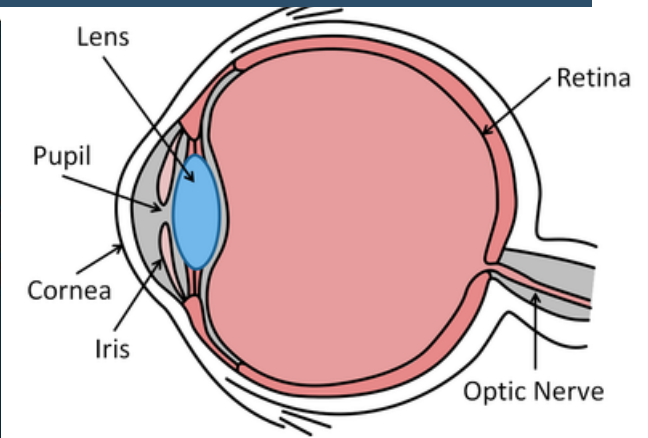
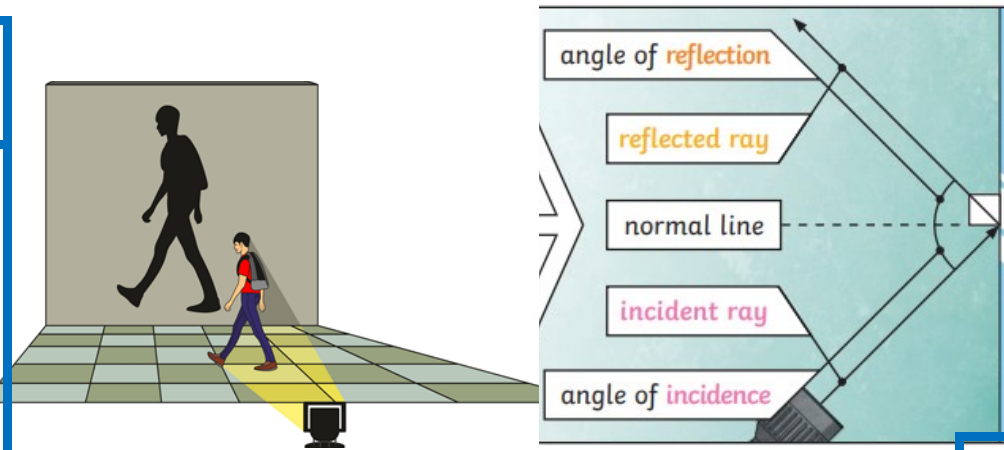




What I should already know

- Sticky knowledge from Year 4 light unit
- Know that common appliances run off electricity
- Construct, identify and label simple circuits
- Identify common conductors and insulators



Working Scientifically

- Investigate the relationship between light sources, objects and shadows by using a range of opaque objects.
- Investigate what happens when a light source is at a different distance from an opaque object.
- Observe how light is reflected.
- Extend your experience of light by looking at a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water, and coloured filters.

Sticky Knowledge

- ◆ Light travels from a source and it always travels in a straight line. If an object blocks the light's path, it will form a shadow. When light is blocked by a reflective surface, the light changes direction.
- ◆ Humans are able to see things because light travels into the eyes which then send signals to the brain. Without light, humans wouldn't be able to see anything at all.
- ◆ All surfaces reflect light to some degree. Some surfaces reflect a lot of light while some reflect very little.
- ◆ If a surface did not reflect any light you would not be able to see it because it is the light's reflection that travels to the eye in order to see objects.
- ◆ All surfaces absorb light. The less an object reflects light, the more it absorbs it.

Vocabulary

cornea	A transparent film over the iris.
lens	The lens focuses light to the retina.
sclera	The white part of the eye.
optic nerves	Nerves that carry signals to the brain.
retina	Changes light into nerve signals to send to the brain.
pupil	The black part of the eye which lets light enter.
iris	The colourful part of the eye which controls how much light goes through the pupil.
light wave	A characteristic of light that describes how it travels.
transparent	An object that allows light to travel straight through it.
translucent	An object that allows some light to travel through it.
opaque	An object that does not allow light to travel through it.
refraction	When light bends as it passes from one medium to