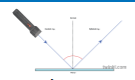
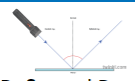




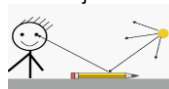
Key Vocabulary

 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.
 Incident Ray	A ray of light that hits a surface.
 Reflected Ray	A ray of light that has bounced back after hitting a surface.
 the law of reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray
 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.
 visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum.
 prism	A prism is a solid 3D shape with flat sides. The two ends are an equal shape and size. A transparent prism separates out visible light into all the colours of the spectrum.
 shadow	An area of darkness where light has been blocked.

Core Four

How Can We See?

Rays of light travel from a light source and hit objects around us. The rays of light reflect, or bounce, off an object, and then travel into our eyes. This reflection of light allows us to see the object.



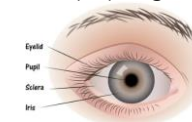
Isaac Newton

Isaac Newton shone a light through a transparent prism, separating out light into the colours of the rainbow. All the colours together merge and make Visible light.



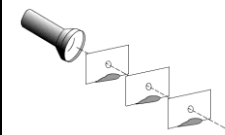
Our Eye

Our eyes have a small window at the front called a pupil, through which light can enter. When it is dark, our pupils go larger, in order to let more light in so that we can see better. In bright lights, our pupils go smaller.



How light Travels

Light travels in a straight line from light sources.



SCIENCE – LIGHT

How do we see?

Link Big Question: How does light travel?



Prior Knowledge

- A light source is something that emits light by burning, electricity or chemical reactions.
- Burning light sources include the Sun, flames from a fire and stars
- We need light so that we are able to see in the dark.
- This is because the dark is the absence of light.
- Light travels in straight lines.
- When light is blocked by an opaque object, a dark shadow is formed.
- The Moon is not a source of light even though we can see it in the dark.

Key facts/stats:

- Light is a form of energy that makes it possible to see.
- Light is given off some objects (for example the Sun). Darkness is the absence of light.
- Light can reflect off surfaces (e.g. mirrors). Light is absorbed by other materials.
- Objects can be labelled as transparent, translucent, or opaque, depending on the amount of light that they let through.
- Shadows are formed when light is blocked by an opaque object.