Light

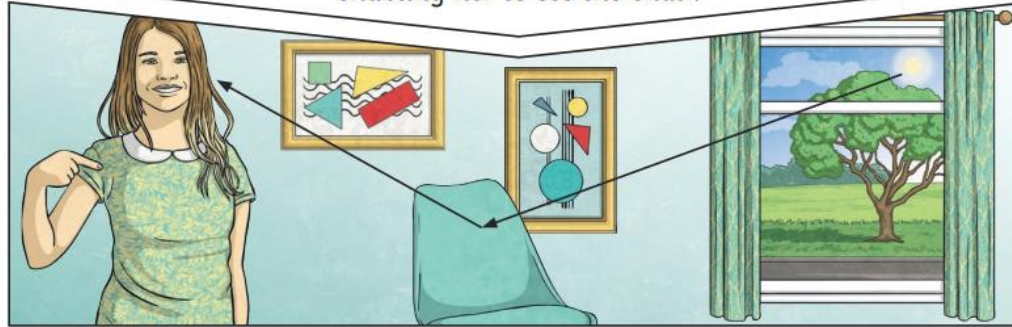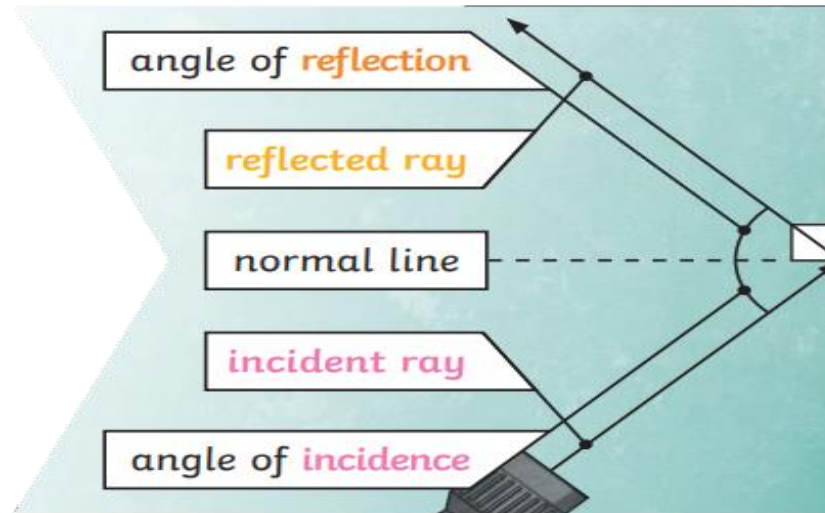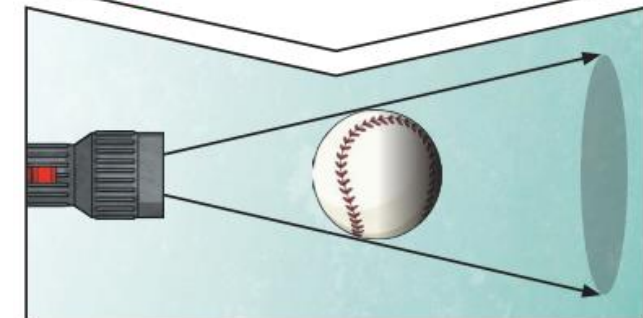|	Key Vocabulary
Incident Ray	A ray of light that hits a surface.
Reflected Ray	A ray of light that has bounced back after hitting a surface.
The law of reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray.
Refraction	This is when light bends as it passes 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.
Revisited from Year 3:	
Shadow	An area of darkness where light has been blocked.
Transparent	Describes objects that let light travel through them easily.
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

General Knowledge

We need **light** to be able to see things. **Light** waves travel out from sources of **light** in straight lines. These lines are often called rays or beams of **light**.

Light from the sun travels in a straight line and hits the chair. The **light** ray is then **reflected** off the chair and travels in a straight line to the girl's eye, enabling her to see the chair.

The spoon in this water looks as if it is bent. This is because **light** bends when it moves from air to water. When **light** bends in this way, it is called **refraction**.

angle of **reflection**

reflected ray

normal line

incident ray

angle of **incidence**

A **shadow** is always the same shape as the object that casts it. This is because when an **opaque** object is in the path of **light** travelling from a **light source**, it will block the **light** rays that hit it, while the rest of the **light** can continue travelling.

Rainbows are formed when the sun shines through water particles (transparent) and when white light passes through, it 'bends' and splits into the range of colours which make white light

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