



Science Knowledge Organiser – Year 6 Light



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
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.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that 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.

Key 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.

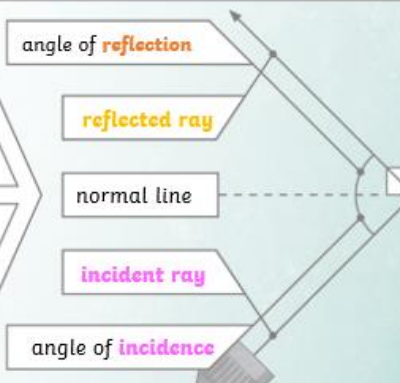


The law of reflection

states that the angle of **incidence** is equal to the angle of **reflection**. Whenever **light** is **reflected** from a surface, it obeys this law.

The angle of **reflection** is the angle between the normal line and the **reflected ray light**.

The angle of **incidence** is the angle between the normal line and the **incident ray of light**.



Light travels as a wave. But unlike waves of water or sound waves, it does not need a medium to travel through.

This means **light** can travel through a vacuum - a completely airless space.

