

Knowledge Organiser

Year: 6	Term: Autumn 2	Topic: WW1 Science	Light	Physics
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Key Vocab

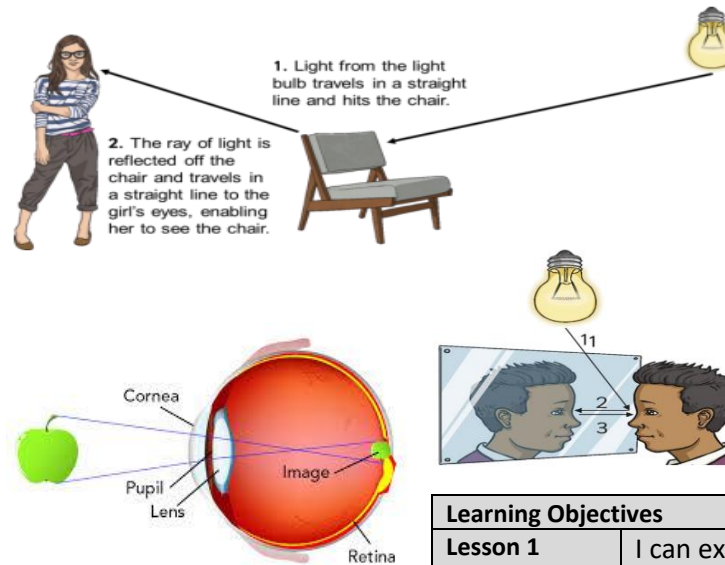
Light	Light is a type of energy that makes it possible for us to see the world around us
Source of light	The Sun and other stars, fires, torches and lamps all make their own light and so are examples of sources of light.
Reflection	Reflection occurs when a light ray hits a surface and bounces off.
Refraction	Refraction is the bending of light as it passes from one substance to another
Visible spectrum	The range of colours we can see with our eyes
Prism	A prism is a three-dimensional shape with identical ends, called bases, and flat sides called faces. A prism allows us to see the visible spectrum
Shadow	A dark area or a shape produced by an object coming between rays of light and a surface
Opaque	An opaque material does not let light through. It does not reflect light
Translucent	A translucent material lets light pass through, but objects on the other side can't be seen clearly
Transparent	Transparent materials allow you to see clearly through them

How do we see?

Light travels in straight lines. When light hits an object, it is **reflected** (bounces off) and enters our eyes. This is how we see the object.

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.



What are shadows?

When an object passes in front of a beam of light, the light can be blocked, making a shadow.

Opaque objects let no light through.

Translucent objects let some light through.

Transparent objects let all light through

The closer an object is to the source of light the bigger the shadow.

Shadows from the sun can be used to tell the time in a sundial.



Learning Objectives

Lesson 1	I can explain how light travels in straight lines.		
Lesson 2	I know how the eye sees objects.		
Lesson 3	I know how the eye sees in colour.		
Lesson 4	I can explain how shadows are made.		
Lesson 5	I can show what I have learnt.		

How is light reflected?

We see objects because light rays enter our eyes after bouncing off rough surfaces

When light rays hit a smooth surface the light is reflected at equal angles.

