



Knowledge Organiser

Science – Year 6



King Charles C of E (VC) Primary School
WHERE EVERYONE SHINES
 'Let your light shine before others' (Matthew 5:16)

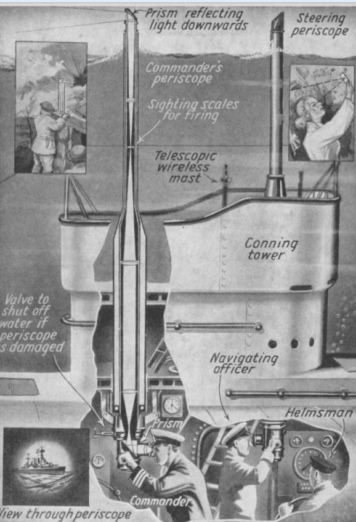


Vocabulary

I must use and know:
 light
 light source prism
 reflection shadow

I should use and know:
 opaque refraction
 translucent transparent

I could use and know:
 incident ray reflected ray
 the law of reflection
 visible spectrum

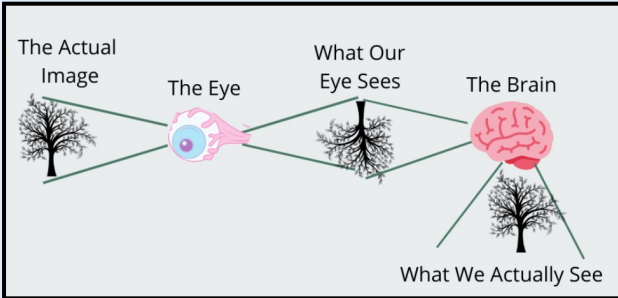


Our big question: What part did Falmouth play in WWII?

Remember this?	ARP wardens would ensure that blackout precautions were followed during the Blitz.	Submarines use periscopes to see what is around them.	Light can protect and endanger life.
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As scientists, we will learn how to...

Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes.	Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes.	Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
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Glossary

light	A form of energy that travels in a wave from a source.	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.
light source	An object that makes its own light .	visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum .
reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light .	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 .
incident ray	A ray of light that hits a surface.	shadow	An area of darkness where light has been blocked.
reflected ray	A ray of light that has bounced back after hitting a surface.	transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
the law of reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray .	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.



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**.

