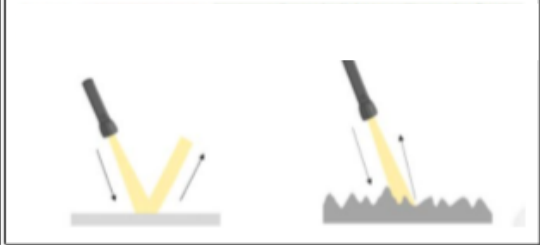


Science knowledge

REFLECTION - When light from an object is reflected by a surface, it changes direction. It bounces off at the same angle it hits it.

Smooth, shiny surfaces such as mirrors and polished metals reflect light well. Dull and dark surfaces such as dark fabrics do not reflect light well.



Example: light travelling and reflecting from a smooth surface.

Example: light travelling and reflecting from a rough surface

Light travels in a straight line. We see things when light enters our eyes. When light hits an object it is reflected (bounces off) and enters our eyes. This is how we see objects.

Smooth, shiny surfaces such as mirrors and polished metals reflect light well.

Dull and dark surfaces such as dark fabrics reflect less well.

The Sun is a natural light source. We only see the Moon because it reflects light from the Sun.

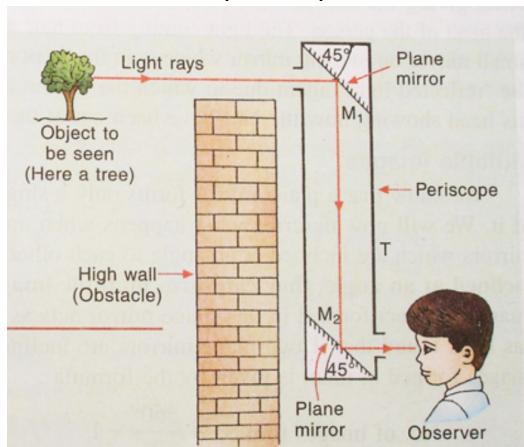
Shadows are created when an opaque object blocks light. As light travels in straight lines, the shadows are the same shape as the object casting them.

In the periscope, light bounces at 45° and it is reflected again right into your eye.

Science Vocabulary

Word	Definition
Light	Light is a wave which can come from natural or man-made sources.
Reflection	Is when light hits the surface of an object and bounces back into our eyes. Reflection allows us to see objects.
Refraction	The bending of light as it passes through different materials.
Spectrum	The range of coloured light that makes up white light.
Rainbow	The refraction of white light into all of its colours.
Colour	The appearance of things as a result of refracting light.
Shadow	Shadows are formed when light from a source is blocked by an opaque object.
Periscope	A device that enables you to see over walls or around corners. Rays of light hitting the mirror of the periscope are reflected twice.

How a periscope works



Shadows

- Shadows are formed when an opaque object blocks a ray of light.
- A shadow is always the same shape as the object that casts it.

