Light

A timeline of light

(Ireland)

Background

Light has been used throughout history as a medium for communication. Looking initially to the Sumerians (4500 – 1900 BC) where they used the earliest known forms of glyphs. To the more commonly known form of Egyptian hieroglyphs where they used up to 1,000 distinct characters. They all needed light to be observed. From Stonehenge to Newgrange using the reliability of light has been used throughout history to communicate to each other. Today we use light to send light packets of data along fibre optic cables from our home nearly instantaneously.

Follow these steps:

1. Ask students how do we communicate today – list their replies on the white board
2. Students go home and ask parents how did they communicate with each other when they were children
3. Then students should investigate in pairs the history communication by using light.

So what happened?

They can come across the use of heliographs and flashing mirrors. Finally they should make a timeline of how communication improved as time progressed. They should then be ready to investigate how modern day fibre optic works.

What next?

Start investigating how light behaves. Work through the other worksheets; ‘How can we use light outside of earth (VIDEO 106)’, ‘How laser light is different to normal light (VIDEO 104)’, ‘How to direct light over long distances (VIDEO 98)’, ‘How to move light around corners (VIDEO 95)’

You will need:

✓ A white board
✓ Marker
✓ Internet access