

Working Scientifically

<p>Prediction - I can predict what I think will happen when the straw enters the water.</p>	<p>Explain – To explain scientifically how light travels from our findings of the investigation.</p>	<p>Compare and record - I can record my results as a graph to show how much light is reflected from different types of surfaces.</p>
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What I should already know

- recognise that they need light in order to see things and that dark is the absence of light
- notice that light is reflected from surfaces
- recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- recognise that shadows are formed when the light from a light source is blocked by a solid object
- find patterns in the way that the size of shadows change.
- VOCAB – translucent, transparent and opaque

Key Vocabulary

Light	The natural agent that stimulates sight and makes things visible.
Light Source	Something that provides light, whether it be a natural or artificial source of light.
Rainbow	An arch of colours visible in the sky, caused by the refraction and dispersion of the sun's light by rain or other water droplets in the atmosphere.
Reflection	The throwing back by a body or surface of light, heat or sound without absorbing it.
Refraction	The bending of light as it passes from one substance to another with the bending caused by the difference in density between two substances.
Spectrum	A band of colours, as seen in rainbows, produced by separation of the components of light by their different degrees of refraction.

What I will know by the end of the unit

I understand if a light source is man-made or a natural source.
 I can describe why the moon appears to be a source of light.
 I can understand that light appears to travel in straight lines.
 I can explain how reflection works.
 I understand that we see things because light travels from light sources to our eyes or from light source to objects and then to our eyes.
 I understand how shadows are formed and can explain the patterns of these to others.
 I understand that white light is made up of more than one colour and why objects appear as a particular colour
 I understand how rainbows are formed.
 I can explain the scientific term 'refraction'

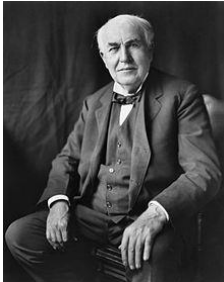
Investigate



Science Experiments about **LIGHT**

1. Light from the bulb hits the boy's face and bounces off.
2. The light reflected from the boy's face hits the mirror.
3. The light reflected from the mirror travels to the boy's eyes, so he can see the image of his face reflected in the mirror.

People we need to know

Thomas Edison	1847 – 1931 Invented the light bulb
	

Useful links

- http://www.bbc.co.uk/bitesize/ks2/science/physical_processes/light_dark/play/
- <http://www.bbc.co.uk/learningzone/clips/light-and-reflection/246.html>
- <http://www.bbc.co.uk/learningzone/clips/how-does-light-create-shadows/2172.html>
- http://www.bbc.co.uk/schools/scienceclips/ages/7_8/light_shadows.shtml
- <http://www.bbc.co.uk/learningzone/clips/demonstrating-how-light-travels-in-straight-lines/1625.html>