



Subject	Science	Theme	Light	Term	Spring 1
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What should I already know?
<ul style="list-style-type: none"> - Some everyday materials are transparent - Some everyday materials are opaque - Days can be different lengths according to the seasons

What should I know by the end of the unit?
<ul style="list-style-type: none"> - We need light in order to see things and that dark is the absence of light. - Light is reflected from surfaces. - Light from the sun can be dangerous and that there are ways to protect our eyes. - Shadows are formed when the light from a light source is blocked by a solid object. - There are patterns in the way that the sizes of shadows change.
<p>Silver Threads:</p> <p>Process – Seeing is a process involving a light source, reflection from surfaces and light entering the eye</p> <p>Changes – Shadows can be changed by moving a light source</p> <p>Energy – light is a form of energy which travels in straight lines from a light source</p>

Working Scientifically
<ul style="list-style-type: none"> - Set up a simple practical enquiry - Set up a comparative test - Make systematic observations (<i>how shadows change</i>) - Take accurate measurements using standard units (<i>cm</i>) - Draw simple conclusions (<i>how can reflective materials be useful in real life?</i>) - Identify changes and patterns related to a simple process (<i>moving a light source – how do shadows change?</i>)

Key ideas/people
<p style="text-align: center;">Shadows</p>

Enquiries & Investigations
<ul style="list-style-type: none"> - What happens when we remove a light source? - Which materials are most reflective? What are the properties of reflective materials? How are they used in the real world? - Which materials are transparent, translucent and opaque? - What causes shadows to change? - What happens if a light source is pointed towards a mirror?

Key Vocabulary	
light	Light is a type of energy. Light waves travel in straight lines from a light source and reflect from objects to our eyes so that we can see.
light source	Anything that makes light, for example the sun, a light bulb or a candle.
dark	The absence of light. It is dark if you take the light source away.
shadow	A dark area which is created when an object blocks light from a light source.
reflect	When light bounces off a surface, for example a mirror.
transparent	See-through. Light can pass through a transparent object easily.
translucent	Almost see-through. Some light can pass through a translucent object.
opaque	Not see-through. No light can pass through an opaque object.