






## Science Medium Term Plan

	<b>Year Group:</b>	<b>Term:</b>	<b>Topic/Unit :</b>		
	3	Summer	Light		
<b>National Curriculum Programme of Study</b>	<ul style="list-style-type: none"> <li>• Recognise that they need light in order to see things, and that dark is the absence of light.</li> <li>• Notice that light is reflected from surfaces.</li> <li>• Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</li> <li>• Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</li> <li>• Find patterns in the way that the size of shadows change.</li> </ul>				
<b>Prior Learning</b>	<ul style="list-style-type: none"> <li>• Explore how things work. (Nursery – Light)</li> <li>• Talk about the differences in materials and changes they notice. (Nursery – Light)</li> <li>• Describe what they see, hear and feel whilst outside. (Reception – Light)</li> <li>• Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans)</li> <li>• Describe the simple physical properties of a variety of everyday materials. (Y1 - Materials)</li> </ul>				
<b>Future Learning</b>	<ul style="list-style-type: none"> <li>• Recognise that light appears to travel in straight lines. (Y6 - Light)</li> <li>• Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. (Y6 - Light)</li> <li>• 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. (Y6 - Light)</li> <li>• Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. (Y6 - Light)</li> </ul>				
<b>Links to other subjects</b>	Science – plants				
<b>Enrichment</b>	Create shadow puppets/ puppet show				
<b>Working Scientifically</b>	<b>Comparative tests</b> 	<b>Identify and classify</b> 	<b>Observation over time</b> 	<b>Pattern seeking</b> 	<b>Research</b> 
	How does the distance between the shadow puppet and the screen affect the size of the shadow?	How would you organise these light sources into natural and artificial sources?	When is our classroom darkest?	Are you more likely to have bad eyesight and to wear glasses if you are older?	How does the Sun make light?
<b>Working Scientifically Assessment Focus</b>	Do: record – Light: making shadows <b>Working Scientifically: Do: Gather and record data to answer questions.</b> <b>Assessment Focus</b> <ul style="list-style-type: none"> <li>• Can children make a series of careful observations?</li> <li>• Can children record their observations in a systematic way that relates to the question?</li> </ul>				
<b>Sticky vocabulary</b>	Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous <b>Working Scientifically vocabulary:</b> comparative test, diagram, results, reason, question, findings,				

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<b>End points</b>	<ul style="list-style-type: none"><li>• We see objects because our eyes can sense light.</li><li>• Dark is the absence of light.</li><li>• We cannot see anything in complete darkness.</li><li>• Some objects, for example, the sun, light bulbs and candles are sources of light.</li><li>• Objects are easier to see if there is more light. Some surfaces reflect light.</li><li>• Objects are easier to see when there is less light if they are reflective.</li><li>• The light from the sun can damage our eyes and therefore we should not look directly at the sun and can protect our eyes by wearing sunglasses or sunhats in bright light.</li><li>• Shadows are formed on a surface when an opaque or translucent object is between a light source and the surface and blocks some of the light.</li><li>• The size of the shadow depends on the position of the source, object and surface.</li></ul>
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