



Class 2

Madron Daniel Science Small Step Progression

Light – Year 3 Unit – Year B						
Retrieval vocab: N/A New Vocab: Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous.			Previous learning None		Links with Vision and Values. <i>Stimulate in every child a sense of curiosity and excitement about the world</i>	
	Working scientifically/ enquiry focus	Curriculum Strand/ Focus	Small step objective	Previous learning within the unit.	Lesson content	Outcome
1	Identify/classify	Light	Recognise that there needs to be light to see things and that darkness is the absence of light.	N/A	What is a light source?	The children can: Identify natural and man-made light sources; explain what darkness is and sort light sources according to criteria. -
2	Identify/classify	Light	Notice that light is reflected from surfaces.	<i>Identify natural and man-made light sources; explain what darkness is and sort light sources according to criteria.</i>	What is reflected light?	The children can: Identify reflective materials and understand how light is reflected. Design a poster to encourage younger children to wear reflective materials at night to keep them safe.
3	Identify/classify	Light	Recognise that light from the Sun can be dangerous and that there are ways to protect your eyes and skin from the Sun	<i>As above identify reflective materials and understand how light is reflected. Design a poster to encourage younger children to wear reflective materials at night to keep them safe.</i>	Is the Sun dangerous?	The children can: Explain why the Sun can be harmful to our eyes if we look at it directly. Identify ways in which we can protect ourselves from sun damage.



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4	Comparative testing	Light	Recognise that shadows are formed when light from a light source is blocked by an opaque object. Know that shadows take on the shape of an opaque object. I can predict where a shadow will form in relation to an opaque object and a light source.	<i>As above</i> <i>Explain why the Sun can be harmful to our eyes if we look at it directly.</i> <i>Identify ways in which we can protect ourselves from sun damage.</i>	What is a shadow?	The children can: Predict which materials make the best/worst shadows using the knowledge gained through their own exploration.
5	Pattern seeking	Light	Find patterns in the way that the length of shadows change.	<i>As above</i> <i>Predict which materials make the best/worst shadows using the knowledge gained through their own exploration.</i>	Does moving the light source above the object make the object's shadow longer?	The children can: Discuss the relationship between the height/ angle of the light source and the length of the shadow. Use the results from their investigation to explain how they know.
6	Identify/classify	Light	Know that light is reflected from surfaces (mirrors).	<i>As above</i> <i>Discuss the relationship between the height/ angle of the light source and the length of the shadow. Use the results from their investigation to explain how they know.</i>	How do mirrors work?	The children can: Explain how mirrors reflect light. Understand of how light behaves when it is reflected.