

YEAR 3

	EFYS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
LIGHT PHYSICS	<p>The three Prime ELGs of Communication & Language, PSED and Physical Development provide the foundations of which all other learning is built upon.</p> <p>Specific: The Natural World ELG Explore the natural world around them, making observations Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>			<p>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.</p> <p>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.</p>			<p>Recognise that light appears to travel in straight lines 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. 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. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>

LIGHT COMPOSITES

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.

COMPONENTS							
	1	2	3	4	5	6	End Point
	Can I identify sources of light?	What is reflection?	How can light be reflected?	Do I recognise that light from the sun is dangerous?	How are shadows formed?	How do shadows change?	Children will identify light sources, create reflections and shadows, noting how shadows can change.
CONCEPTS Link to concept map	ENERGY	ENERGY	ENERGY	ENERGY	ENERGY	ENERGY	Understand what a light source is and that without a light source there is darkness. Understand shadows come from blocked light and can be changed.
SKILLS	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 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.	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.	Recognise light is needed to see, and darkness is the absence of light. Understand light can be reflected from surfaces and also create shadows. Recognise the sun is a potentially dangerous light source.
KNOWLEDGE	Know that light is needed to see and darkness comes from having no light source.	Know what reflection means.	Know that light can be reflected.	Know that the light from the sun can be dangerous because of UV.	Know what a shadow is and how shadows relate to light.	Know what a shadow is and how shadows relate to light. Know why the size of a shadow is different/can be changed.	Light sources can reflect and create shadows. The sun is a potentially dangerous light source.
LESSON LINK	MTP Term 4	MTP Term 4	MTP Term 4	MTP Term 4	MTP Term 4	MTP Term 4	
PROGRESSIVE VOCABULARY	light darkness emit reflect source	light source dark reflection visible illuminate	reflect mirror light beam	sun uv light emit retina	light shadow opaque translucent transparent	shadow light source observe pattern opaque size distance change	Articulate and recognise subject specific vocabulary
CURRICULUM EXPERIENCES						Using a torch independently to create shadows and	

						explore changing the length.	
END POINT	Children will know a variety of light sources and identify light is needed in order to see, therefore we cannot see in darkness.	Children will understand what reflection is and identify reflective materials.	Children will know that light travels in straight lines and that Mirrors reflect light onto an object.	Know that the sun is a light source and that emits UV rays which can be dangerous and harmful to our eyes.	Children will understand what a shadow is and recognise that shadows are formed when the light source is blocked from a solid object.	Children will understand that the size/length of a shadow can change and explain why.	

