

PROGRESSION OF SKILLS AND VOCABULARY POLICY 2019



SCIENCE ESSENTIAL SKILLS Y1-Y6: LIGHT AND SOUND					
KEY STAGE 1		LOWER KEY STAGE 2		UPPER KEY STAGE 2	
End of Y1 expectations	End of Y2 expectations	End of Y3 expectations	End of Y4 expectations	End of Y5 expectations	End of Y6 expectations
Identifying and naming:					
		Identify that light is reflected from surfaces, using equipment such as mirrors to demonstrate.	Listen to and be able to identify a variety of familiar sounds and what is vibrating in each case.	Identify by investigation if and how light and sound travel through space, using specific examples to validate their thinking.	Identify parts of the eye and draw a diagram showing how light enters our eyes in order to see, using the correct scientific vocabulary.
Phenomena:					
		Recognise that dark is the absence of light and describe how light behaves.	Describe how sound travels through a medium to the outer ear and how sound is transferred to the inner ear.	Investigate shadows in relation to times of day and explain why the Sun appears to move across the sky.	Describe how white light can be split using prisms and droplets of water and what colours white light is made from.
Physical processes:					
		Explain that when a light source is blocked a shadow is formed.	Describe and demonstrate how the volume or pitch of a sound can be altered, using a range of equipment such as musical instruments.	Describe the Earth's rotation to explain day and night.	Explain how light behaves and travels in straight lines. Demonstrate, using a model or diagram, how this explains why we can see objects and how shadows are formed.
Classifying:					
		Classify a range of objects as either light sources or light reflectors.	Investigate and classify materials for their ability to insulate against sound.		Classify a range of objects or surfaces for their reflective qualities using scientific testing.
Comparing:					

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		Compare how the size, shape and sharpness of shadows can change, using equipment or models.	Measure and compare the volume of a sound at different distances from its source, using appropriate equipment.	Compare day lengths during different seasons and provide an explanation for why they differ.	Compare how a beam of light changes direction (refraction) when passing through different mediums, such as water and air.
Safety:					
		Recognise that light from the Sun is damaging for vision and the skin, and how we can protect ourselves.	Recognise that it isn't safe to look directly at the Sun, even when wearing dark glasses.	Recognise that it isn't safe to look directly at the Sun, even when wearing dark glasses.	Recognise the dangers of using lasers and how they can be used safely.

KEY VOCABULARY: LIGHT AND SOUND					
KEY STAGE 1		LOWER KEY STAGE 2		UPPER KEY STAGE 2	
End of Y1 expectations	End of Y2 expectations	End of Y3 expectations	End of Y4 expectations	End of Y5 expectations	End of Y6 expectations
		light see dark reflect surface natural, artificial star, Sun, Moon shadow blocked solid torch, candle, lamp sunlight, dangerous, protect eyes	sound vibrate, vibration, vibrating air medium ear hear sound volume, pitch faint, fainter loud, louder string, percussion, woodwind, brass insulate		light travels straight reflect reflection light source object shadows mirrors periscope rainbow filters