## Science Skills Coverage- Light and sound

Skill	Y3	Y4	Y5	Y6
Identification and	Identify that light is	Listen to and be able to	Identify by	Identify parts of the eye
functions	reflected from surfaces, using equipment such as mirrors. Recognise that dark is the absence of light and describe how it behaves. Explain how shadows are formed.	identify different familiar sounds and what is vibrating. Describe how sound travels through a medium to the outer ear and how sound is transferred to the inner ear. Describe and demonstrate how the volume or the pitch of a sound can be altered using equipment.	investigation if and how light and sound travels through space, using specific examples. Describe the Earth's rotations to explain day and night.	and draw a diagram showing how light enters our eyes in order to see, using the correct scientific terminology. Describe how white light can be split using prisms and droplets of water and what colours white light is made from.
Classification through	Classify a range of		Investigate shadows in	Classify a range of
Investigation	objects as sources or	Investigate and classify	relation to times of day	objects or surfaces for
	reflectors.	materials for their	and explain why the	their reflective qualities
	Compare how the size,	ability to insulate	sun appears to move	using scientific testing.
	shape and sharpness of	against sound.	across the sky.	
	shadows can change.			Compare how a beam

				of light changes direction when passing through different mediums.
Measuring		Measure and compare the volume of a sound at different distances from its source.	Compare day lengths during different seasons and provide an explanation for why they differ.	Explain how light behaves and travels in straight lines. Demonstrate using a model/diagram and how this explains why we can see objects and how shadows are formed.
Impact	Recognising that light from the sun is damaging for vision and the skin and how we can protect ourselves.	Recognise that certain sounds can be damaging for hearing and identify ways which the ear can be protected.	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.

Skill	Y3	Y4	Y5	Y6
Identification		Listen to and be able to	•	
		identify different		
		familiar sounds and		
		what is vibrating.		
		Describe how sound		
		travels through a		
		medium to the outer		
		ear and how sound is		
		transferred to the inner		
		ear.		
		Describe and		
		demonstrate how the		
		volume or the pitch of a		
		sound can be altered		

	using equipment.	
Classify	. Investigate and classify	
	materials for their	
	ability to insulate	
	against sound.	
Measuring	Measure and compare	
	the volume of a sound	
	at different distances	
	from its source.	
	Recognise that certain	•
	sounds can be	
	damaging for hearing	
	and identify ways	
	which the ear can be	
	protected.	
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