






<p>Programme of Study Statements Identify how sounds are made, associating some of them with something vibrating.</p> <ul style="list-style-type: none"> Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases. 					<p>Key Vocabulary Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation</p>
<p>Investigations and Skills for thinking like a Scientist</p> <div style="display: flex; justify-content: space-around; align-items: center;">      </div>					<p>Sticky Knowledge:</p> <p>Sound travels from its source in all directions and we hear it when it travels to our ears.</p> <ul style="list-style-type: none"> Sound travel can be blocked. Sound spreads out as it travels. Changing the shape, size and material of an object will change the sound it produces. Sound is produced when an object vibrates. Sound moves through all materials by making them vibrate. Changing the way an object vibrates changes its sound. Bigger vibrations produce louder sounds and smaller vibrations produce quieter sounds. Faster vibrations (higher frequencies) produce higher pitched sounds
<p><u>Comparative Tests</u></p> <p>How does the volume of a drum change as you move further away from it?</p> <p>How does the length of a guitar string/tuning fork affect the pitch of the sound?</p> <p>Are two ears better than one?</p>	<p><u>Identify & Classify</u></p> <p>Which material is best to use for muffling sound in ear defenders?</p>	<p><u>Observation over time</u></p> <p>When is our classroom the quietest?</p>	<p><u>Pattern seeking</u></p> <p>Is there a link between how loud it is in school and the time of day? If there is a pattern, is it the same in every area of the school?</p>	<p><u>Research</u></p> <p>Do all animals have the same hearing range?</p>	<p><u>Prior Knowledge:</u></p> <p>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)</p>

<ul style="list-style-type: none"> • Potential Evidence to support our Scientists (I can..): <p>Can name sound sources and state that sounds are produced by the vibration of the object</p> <ul style="list-style-type: none"> • Can state that sounds travel through different mediums such as air, water, metal • Can give examples to demonstrate how the pitch of a sound are linked to the features of the object that produced it • Can give examples of how to change the volume of a sound e.g. increase the size of vibrations by hitting or blowing harder • Can give examples to demonstrate that sounds get fainter as the distance from the sound source increases <p>Can explain what happens when you strike a drum or pluck a string and use a diagram to show how sounds travel from an object to the ear</p> <ul style="list-style-type: none"> • Can demonstrate how to increase or decrease pitch and volume using musical instruments or other objects • Can use data to identify patterns in pitch and volume <ul style="list-style-type: none"> • Can explain how loudness can be reduced by moving further from the sound source or by using a sound insulating medium <p>Big Question: How can we make different sounds?</p>	<p>Future Knowledge:</p> <ul style="list-style-type: none"> • Waves on water as undulations which travel through water with transverse motion; these waves can be reflected, and add or cancel – superposition. (KS3) • Frequencies of sound waves, measured in Hertz (Hz); echoes, reflection and absorption of sound. (KS3) • Sound needs a medium to travel, the speed of sound in air, in water, in solids. (KS3) • Sound produced by vibrations of objects, in loud speakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal. (KS3)
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Cultural Capital		
<p>Visits and visitors</p> <p>We the Curious (Bristol) South Gloucestershire Music visit and lessons. Children learn to play a musical instrument.</p>	<p>Experiences and events</p> <p>Visit to the church and hear the bells being rung, listen to echoes in the church, hear organ being played.</p>	<p>Key texts</p> <p><i>Horrid Henry Rocks</i> (Francesca Simon) <i>Moonbird</i> (Joyce Dunbar) <i>The Pied Piper of Hamelin</i> (Natalia Vasquez)</p>
<p>Community events and links</p> <p>Attend a church service – Harvest, Christmas.</p>	<p>Global issues</p> <p>Guide dogs for the deaf</p>	<p>Famous people/ Key Scientists</p>

		Aristotle (Sound Waves) Galileo Galilei (Frequency and Pitch of Sound Waves) Alexander Graham Bell (Invented the Telephone)
Life Skills Creativity Curiosity Resilience Making Links	Key places Different places in school Wickwar church	