

**Year 4 Progression map – Sound**

<b>National curriculum objectives:</b>	<b>Scope:</b>	<b>Coherence:</b>
<ul style="list-style-type: none"> <li>• Identify how sounds are made, associating some of them with something vibrating</li> <li>• Recognise that vibrations from sounds travel through a medium to the ear</li> <li>• Find patterns between the pitch of a sound and features of the object that produced it</li> <li>• Find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>• Recognise that sounds get fainter as the distance from the sound source increases</li> </ul> <p><b>Misconceptions:</b></p> <ul style="list-style-type: none"> <li>• That sound cannot bend around corners</li> <li>• That we cannot hear sounds that we cannot see</li> <li>• That sound does not travel well through solids</li> <li>• That we cannot hear under water</li> </ul>	<p><b>HEP Science lesson titles:</b></p> <ol style="list-style-type: none"> <li>1. How are sounds made?</li> <li>2. How does sound travel?</li> <li>3. How do our ears work?</li> <li>4. Big or small?</li> <li>5. High or low?</li> <li>6. Can you keep the noise down?</li> </ol> <p><b>Working scientifically skills used:</b></p> <ul style="list-style-type: none"> <li>• <b>Conclusions/ Modelling</b> making an instrument</li> <li>• <b>Modelling</b> String telephone</li> <li>• <b>Modelling</b> The ear</li> <li>• <b>Modelling</b> Making a loudspeaker</li> <li>• <b>Comparative testing and pattern seeking</b> Pitch</li> <li>• <b>Comparative testing</b> Sound proofing</li> </ul>	<p><b>Literacy:</b> Cloze, comprehension questions, labelled diagrams, sequencing.</p> <p><b>Key vocabulary:</b> Brass, string, woodwind, vibration, vocal cord, echoes, medium, particle, wave, auditory nerve, audiologist, cochlea, ear canal, eardrum, hearing impairment, pinna, amplifier, decibel, audible range, echolocation, hertz, pitch, sonar, ultrasonography, ultrasound</p> <p><b>English:</b> Tier 3 vocab phonetically spelt, reporting on findings, including oral and written explanations, story boards, text comprehension, summarising</p> <p><b>Maths:</b> Measuring accurately (data logger), estimation, averages,</p> <p><b>Art and DT</b></p> <p>Design your own instrument, loudspeaker and string telephone</p> <p>Generate, develop, model and communicate ideas use a wider range of materials and components, including construction materials, textiles and</p>

		<p>ingredients, according to their functional properties and aesthetic qualities</p> <p><b>Music:</b> Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians, and develop an understanding of the history of music</p>
<b>Builds on:</b>	<b>Future learning:</b>	<b>Further reading:</b>
<p><b>Year 2:</b></p> <ul style="list-style-type: none"> <li>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</li> </ul> <p><b>Year 3</b></p> <ul style="list-style-type: none"> <li><b>Light</b> (energy)</li> <li><b>Forces</b> (Effects of forces on objects)</li> <li><b>Animals Including Humans</b> (Adaptations)</li> </ul> <p><b>Year 4:</b></p> <ul style="list-style-type: none"> <li><b>States of Matter</b></li> </ul>	<p><b>Year 4:</b></p> <ul style="list-style-type: none"> <li>Electricity</li> </ul> <p><b>Year 6:</b></p> <ul style="list-style-type: none"> <li><b>Light</b></li> <li><b>Electricity</b></li> </ul>	<p><a href="#">Sound (All about Science)</a> Angela Royston</p> <p><a href="#">Sound and Hearing (Popcorn Science)</a> Angela Royston</p>