



## Physics Unit: Sound

What does progression of knowledge look like at St Leonard's?

Year	Progression of knowledge:
EYFS	<ul style="list-style-type: none"><li>● Explore different musical instruments and the sounds they make, making loud and quiet sounds etc.</li><li>● Discuss everyday experiences of sound, sounds pupils like/ dislike, loud and soft/ quiet sounds</li><li>● Using experiences of telephones to discuss how sounds are sent and received by our ears and some simple activities to investigate it</li></ul>
4	<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>
5	<ul style="list-style-type: none"><li>● Recall the different structures of the ear and the function of each part</li><li>● Explain how sound waves can be modelled</li><li>● Describe what happens to a sound wave over time</li><li>● Calculate the speed of sound in different substances</li><li>● Explain what an auditory range is</li><li>● Give examples of animals that have large auditory ranges</li><li>● Describe how sound can be useful in everyday life</li></ul>
KS3 (NC)	<ul style="list-style-type: none"><li>● Frequencies of sound waves, measured in hertz (Hz); echoes, reflection and absorption of sound</li><li>● Sound needs a medium to travel, the speed of sound in air, in water, in solids</li><li>● Sound produced by vibrations of objects, in loudspeakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal</li><li>● Auditory range of humans and animals</li><li>● Pressure waves transferring energy; use for cleaning and physiotherapy by ultrasound; waves transferring information for conversion to electrical signals by microphones</li></ul>