



Subject	Science	Theme	Sound	Term	Autumn 1
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What should I already know?	Working Scientifically	Enquiries & Investigations
- That ears are the part of the human body associated with hearing. - From experience in other subjects, particularly in Music, to listen with concentration to sounds and to create and combine them.	Further develop understanding of fair testing (<i>by setting up a comparison of volume at different distances – how to make sure the original sound is constant</i>) Use sound meters (<i>to measure volume of different sounds and from different distances</i>) Make systematic observations (<i>of volume to investigate the best materials for soundproofing</i>) Gather comparative data about pitch of a sound (<i>using a continuum</i>) Use results of investigations into volume and pitch to make a musical instrument that produces sounds of different volume and pitch	- How loud are sounds? Use sound meters to measure the volume of different sounds, and of sounds at different distances from the source. - What makes sound? Closely observe a range of different sound sources to identify the vibrations associated with the sound created. - How can we change the volume and pitch of a sound we make? (elastic bands of different thicknesses, saucepan lids of different sizes, etc). - What's the best way of stopping sound? Investigate the best materials for soundproofing. - Make a musical instrument that produces sounds of different volume and pitch

What should I know by the end of the unit?	Significant Scientific Thinking	Key Vocabulary															
- How sounds are made (through something vibrating). - The pitch of a sound depends on particular features of the object that produces it. - Vibrations from a source of sound travel through a medium (for example air) to the ear. - If the vibration that produces a sound is stronger, a louder sound will be produced. - As the distance from the sound source increases, the volume of a sound decreases.	Sound is associated with something vibrating.  Sound travels through a medium to reach the ear.	<table><tr><td>source</td><td>The vibrating object that makes a sound and from which that sound travels to the ear.</td></tr><tr><td>vibration / vibrating</td><td>Continuous quick shaking motion.</td></tr><tr><td>volume</td><td>How loud a sound is.</td></tr><tr><td>pitch</td><td>How high or low a sound is.</td></tr><tr><td>soundproofing</td><td>Material or processes by which a sound is made quieter.</td></tr><tr><td>sound meter</td><td>A piece of electronic equipment that can measure sound in decibels and record the reading given.</td></tr><tr><td>sound wave</td><td>The way in which sound passes through a medium, by moving the particles in the medium to and fro.</td></tr></table>	source	The vibrating object that makes a sound and from which that sound travels to the ear.	vibration / vibrating	Continuous quick shaking motion.	volume	How loud a sound is.	pitch	How high or low a sound is.	soundproofing	Material or processes by which a sound is made quieter.	sound meter	A piece of electronic equipment that can measure sound in decibels and record the reading given.	sound wave	The way in which sound passes through a medium, by moving the particles in the medium to and fro.	
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