



# Year 4: Sound Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge about Sound
<b>vibrating</b>	Sound is caused by the vibration of a medium (usually air) and it travels in waves.	<p><b>The PIED PIPER of HAMELIN</b> MICHAEL MORPURGO • EMMA CHICHESTER CLARK</p>	<input type="checkbox"/> Sound travels with a speed of 767 miles per hour but it cannot travel through a vacuum.
<b>pitch</b>	A high sound has a high pitch and a low sound has a low pitch. A tight drum skin gives a higher pitched sound than a loose drum skin.		<input type="checkbox"/> Sound comes from vibrations. These vibrations create sound waves which move through mediums such as air and water before reaching our ears.
<b>volume</b>	Volume is the perception of loudness from the intensity of a sound wave. The higher the intensity of a sound, the louder it is perceived in our ears, and the higher volume it has.		<input type="checkbox"/> Dogs can hear at a higher frequency as compared to humans.
<b>insulation</b>	Protecting something by surrounding it with material that reduces or prevents the transmission of sound.		<input type="checkbox"/> Our ears vibrate in a similar way to the original source of the vibration, allowing us to hear many different sounds.
<b>outer, middle and inner ear</b>	The ear is made up of three different sections: the outer ear, the middle ear, and the inner ear. These parts all work together so you can hear and process sounds.		<p><b>Important facts to know by the end of the sound topic:</b></p> <ul style="list-style-type: none"> <li>• <b>Know how sound is made.</b></li> <li>• <b>Know how sound travels from the source to the ears.</b></li> <li>• <b>Know to associate sound with vibration.</b></li> <li>• <b>know the correlation between pitch and the object producing a sound.</b></li> <li>• <b>know the correlation between the volume of a sound and the strength of the vibrations that produced it.</b></li> <li>• <b>know what happens to a sound as it travels away from its source.</b></li> </ul>
<b>cochlea</b>	The cochlea looks like a spiral-shaped snail shell deep in your ear. And it plays an important part in helping you hear.	<input type="checkbox"/> When traveling through water, sound moves four times faster than when it travels through air.	
<b>auditory</b>	Auditory is close in meaning to acoustic and acoustical, but auditory usually refers more to hearing than to sound.	<input type="checkbox"/> Sound is used by many animals to detect danger, warning them of possible attacks before they happen.	
<b>frequency</b>	Frequency is measured as the number of wave cycles that occur in one second.	<input type="checkbox"/> The loud noise you create by cracking a whip occurs because the tip is moving so fast it breaks the speed of sound!	
<b>hammer</b>	The ear has little bones called ossicles that help you hear! They are called the hammer (malleus), anvil (incus), and stirrup (stapes). They amplify the sound or make it louder.		