## Year 4

## Sound

## Prior learning

This is the first time Sound is taught within the Primary Science Curriculum

- Hearing is one of the 5 senses (EYFS)
- Identify, name, draw, label basic body parts of the human body and know we use our ears to hear sounds around us (Year I - Animals including Humans)

Key learning		Key vocabulary		
Sound is an energy caused when something vibrates		Ear	An body part used for hearing	
Vibrations hit your eardrum deep inside your ear. Vibrations go to your middle ear and into your inner ear. They change to electrical signals and travel to		Eardrum	The thin, stretched out (like a drum skin) part of the ear, which sound waves make vibrate.	
your brain. Your brain tells you that you are hearing a sound.		Sound	Something that can be heard which is made by vibrations	
Vibrations from sounds travel through the air or water (mediums) to your ear.		Sound waves	Vibrations travelling from a sound source	
The pitch (high and low sounds) is the speed of vibrations. The faster the vibrations, the higher the		Vibration	An invisible wave of movement moving forwards and backwards	
sound. The slower the vibrations, the lower the sound.		Pitch	A high or low sound	
The volume (loud and quiet sounds) is based on the		Volume	A loud or quiet sound	
size of vibrations. The bigger the vibrations, the louder		Amplitude	How strong a sound wave is	
the sound. The smaller the vibrations, the quieter the sound.		Medium	What the sound travels through (solid,	
The further the sound vibrations travel the quieter the sound gets. The closer the vibrations, the louder the sounds are.			liquid, gas)	
Volume	Pitch		Outer ear	
Amplitude Amplitude		Middle ear Inner ear Ear drum		
Smaller strength of waves (amplitude) = quiet sound Smaller strength of waves (amplitude) = loud sound	Slow Fast vibrations vibrations make low make high sounds sounds			

Scientific skills			
By the end of the year, children should be able to	Opportunties for scientific enquiry within the unit:		
• Ask own questions relatiing to the topic	<ul> <li>Investigating strength of vibrations and the volume of the sound produced</li> </ul>		
<ul> <li>Make predictons about the outcomes of investigations</li> </ul>	<ul> <li>Investigationg the size of an object and the pitch of the sound it makes.</li> </ul>		
<ul> <li>Set up practical investigations</li> </ul>			
<ul> <li>Make simple observations</li> </ul>			
• Gather and record data			
<ul> <li>Present data in a variety of ways including diagrams, charts, tables and graphs</li> </ul>			
• Draw simple conclusions on results			