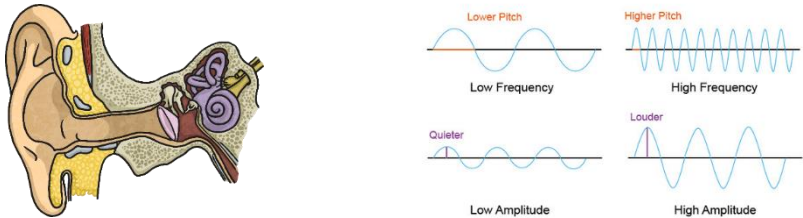



## Year 4: Sound Autumn | Year A

### What should I already know?

Hearing is one of my five senses. Sounds can be combined using musical instruments.

Key Vocabulary		I am learning to...
amplitude	a measure of the strength of a sound wave.	Describe and explain sound sources Explain how different sounds travel Explore ways to change the pitch of a sound Collect data about sound and look for patterns Explore how sounds travel through a solid
decibel	a measure of how loud a sound is.	
electrical signals	electrical messages that move between cells in the body (nerve impulses).	
energy	the power from sources such as electricity that makes machines work or provides heat.	
frequency	a measure of how many times per second the sound wave cycles	
pitch	how high or low a sound is.	
sound	Vibrations that travel through the air, or another medium and can be heard by the ear.	Key misconceptions
sound waves	invisible waves that travel through air, water, and solid objects as vibrations	Not always recognising that vibrations are the cause of a sound being produced. That volume and pitch of a sound are the same thing or mix them up. That sound only travels through air, not solids or liquids. That sound is slowed down by physical obstructions. That sound gets quieter as it travels further because it has 'faded out' or run out of 'energy'.
source of a sound	where a sound comes from.	
transmit	to pass from one place or person to another.	
vibrations	invisible waves that move quickly.	
volume	how loud or quiet a sound is.	
particle	a tiny part of matter. You can't see them with your eyes!	
Scientific diagrams		Key skills - working scientifically
		Finding patterns in the sounds that are made by different objects. They make and play their own instruments by using what they have found out about pitch and volume.
Key scientists		What will I be learning next?
 Aristotle (Greek philosopher who developed the concept that sound travels through air due to the movement of air particles).		Frequencies of sound waves, measured in hertz (Hz); echoes, reflection and absorption of sound. Sound needs a medium to travel, the speed of sound in air, in water, in solids sound produced by vibrations of objects, in loud speakers, detected by their effects on microphone diaphragm and the ear drum; sound waves are longitudinal auditory range of humans and animals.