Amblecote Primary School—Knowledge Organisers

Phase: 3/4	**Subject:** Science	**Focus:** Sound	**Term:** Spring

What I should already know?

Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Knowledge

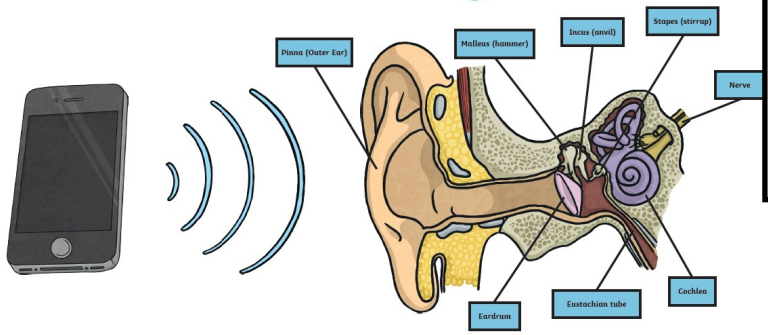
Sound is a type of energy, Sounds are created by vibrations. The louder the sound, the bigger the vibration.

Sound can travel through solids, liquids and gases. Sound travels as a wave, vibrating the particles in the medium it is travelling in. Sound cannot travel through a vacuum.

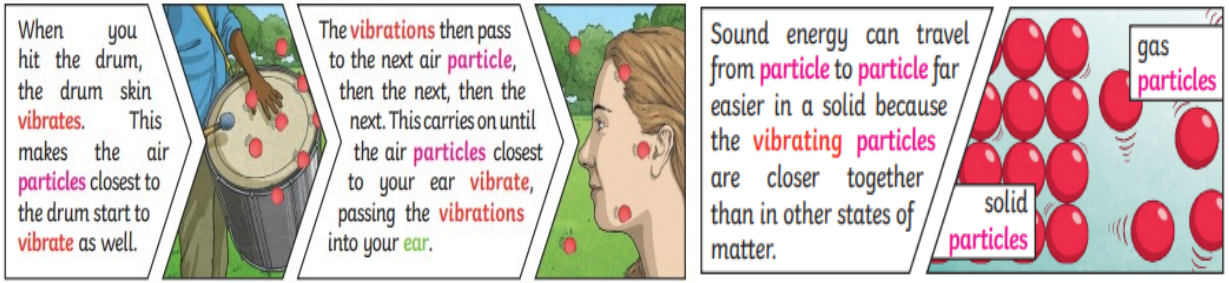
Vocabulary

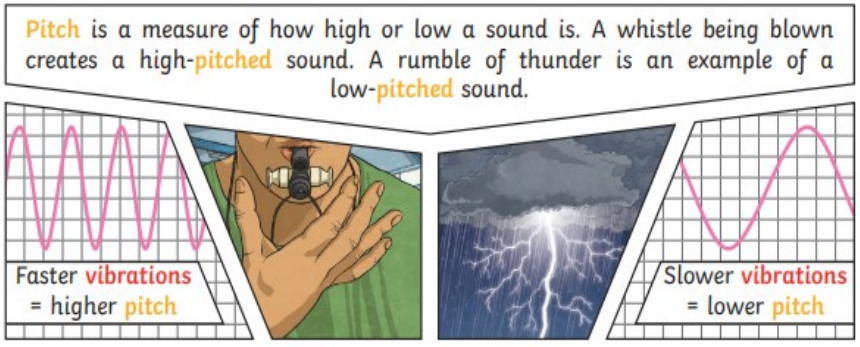
Vibration	A quick movement back and forth.
Sound wave	Vibrations travelling from a sound source.
Volume	The loudness of a sound.
Amplitude	The size of a vibration. A larger amplitude = a louder sound.
Pitch	Hoe low or high a sound is.
Ear	An organ used for hearing.
Particles	Solids, liquids and gases are made of particles. They are so small we are unable to see them.
Soundproof	To prevent sound from passing through.
Absorb sound	To take in sound energy. Absorbent materials have the effect of muffling sound.
Vacuum	A space where there is nothing. There are no particles in a vacuum.
Eardrum	A part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin. It separates the outer ear from the middle and inner ear. Sound waves make the eardrum vibrate.

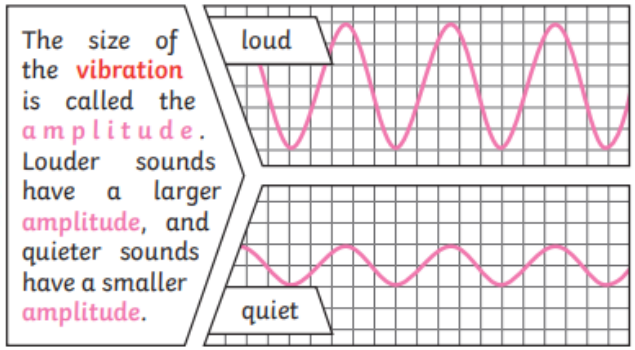
How Does Hearing Work?



Inside your ear, the vibrations hit the eardrum and are then passed to the middle and then the inner ear. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.







By the end of the unit I should know...

Identify how sounds are made, associating some of them with something vibrating.
Recognise that vibrations from sounds travel through a medium to the ear.
Find patterns between the pitch of a sound and features of the object that produced it.
Find patterns between the volume of a sound and the strength of the vibrations that produced it.
Recognise that sounds get fainter as the distance from the sound source increases.

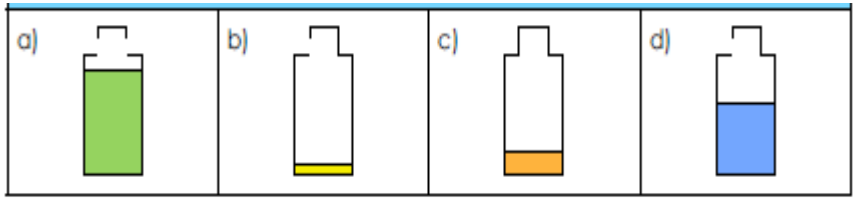
Question 1— Sound can only travel through air?	Start of Unit	End of Unit
True		
False		
Don't know		

Question 2 What are sound waves caused by?	Start of Unit	End of Unit
Vibrations		
Bubbles		
Light		
Gases		
Don't know		

Question 3 Which instrument do you make a sound by pulling a bow along the strings?	Start of Unit	End of Unit
Oboe		
Piano		
Violin		
Clarinet		
Don't know		

Question 4 What happens to a sound the further away from it you get?	Start of Unit	End of Unit
Nothing		
It gets louder		
It gets quieter		
It stays the same		
Don't know		

Question 5— Which of these materials would be best for soundproofing?	Start of Unit	End of Unit
Clingfilm		
Kitchen roll		
Cotton wool		
Tin foil		
Don't know		

Question 6 Which of these water bottles would have the highest pitch when you blow across the top?  	Start of Unit	End of Unit
A		
B		
C		
D		
Don't know		