

Sound Progression map Year 4

Previous Year: Year 1	Current Year: Year 4	Next Year: KS3												
<ul style="list-style-type: none"> Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans) 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Waves on water as undulations which travel through water with transverse motion; these waves can be reflected, and add or cancel – superposition. <ul style="list-style-type: none"> 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. Pressure waves transferring energy; use for cleaning and physiotherapy by ultra-sound. Waves transferring information for conversion to electrical signals by microphone. 												
<p style="text-align: center;"><u>Key learning for the topic:</u></p> <p>A sound produces vibrations which travel through a medium from the source to our ears. Different mediums such as solids, liquids and gases can carry sound, but sound cannot travel through a vacuum (an area empty of matter). The vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound. The loudness (volume) of the sound depends on the strength (size) of vibrations which decreases as they travel through the medium. Therefore, sounds decrease in volume as you move away from the source. A sound insulator is a material which blocks sound effectively. Pitch is the highness or lowness of a sound and is affected by features of objects producing the sounds. For example, smaller objects usually produce higher pitched sound</p>	<p style="text-align: center;"><u>How can the learning be applied?</u></p> <ul style="list-style-type: none"> Classify sound sources. Explore making sounds with a range of objects, such as musical instruments and other household objects. Explore how string telephones or ear gongs work. Explore altering the pitch or volume of objects, such as the length of a guitar string, amount of water in bottles, size of tuning forks. Measure sounds over different distances. Measure sounds through different insulation materials. 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px; text-align: center;">PE links</td> <td style="padding: 5px;"><u>Learning Values:</u></td> </tr> <tr> <td></td> <td style="padding: 5px;">-respect</td> </tr> <tr> <td></td> <td style="padding: 5px;">-responsible</td> </tr> <tr> <td></td> <td style="padding: 5px;">-resourceful</td> </tr> <tr> <td></td> <td style="padding: 5px;">-resilient</td> </tr> <tr> <td></td> <td style="padding: 5px;">-risk taker</td> </tr> </table>	PE links	<u>Learning Values:</u>		-respect		-responsible		-resourceful		-resilient		-risk taker
PE links	<u>Learning Values:</u>													
	-respect													
	-responsible													
	-resourceful													
	-resilient													
	-risk taker													

Possible stimulus to teach:

Sonam and the Silence by Eddie Ayres & Ronak Taher

A Story Like the Wind by Gill Lewis & Jo Weaver

The Phoenix of Persia by Sally Pomme Clayton & Amin Hassanzadeh Sharif

The Sound of Silence by Katrina Goldsaito & Julia Kuor