

Year 4 SCIENCE Topic 5: Super-sonologists (4 Weeks)

Assessment Questions:

1. How is sound made?
2. What happens to the volume if the sound is made far away?
3. What causes the volume to be loud?
4. What equipment did you use to measure the volume of a sound?
5. What is sound measured in?
6. How did you make it a fair test?

Values: Compassion and Service

KNOW	DO	UNDERSTAND
<p>S: identify how sounds are made, associating some of them with something vibrating</p> <p>S: recognise that vibrations from sounds travel through a medium to the ear</p> <p>S: patterns between the pitch of a sound and features of the object that produced it</p> <p>S: find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>S: recognise that sounds get fainter as the distance from the sound source increases</p> <p>Vocabulary: <i>sound, vibrating/vibrations, travel, medium, pitch, patterns, volume, fainter, louder.</i></p> <p>Children know the words pitch, vibrations and volume.</p> <p>Children know how some sounds are made, linking this to vibrations, e.g. a drum with rice in it.</p> <p>Children know that sounds travel through a medium to the ear.</p> <p>Children know that the pitch of the sound is determined by the different features of an object.</p> <p>Children know that the volume of sound is linked to the vibrations it produces.</p> <p>Children know that as you go further away from a sound it gets fainter.</p>	<p>WS: setting up simple practical enquiries, comparative and fair tests</p> <p>WS: reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>WS: using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>WS: making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Use appropriate scientific vocabulary – vibrations.</p> <p>Experiment about how sound changes when you move away/closer to the source of the sound – fair test, ask questions, design an experiment.</p> <p>Experiment about how different sound affects recovery rate after exercise – fair test, graph, conclusions.</p> <p>Children use scientific equipment to record the volume of a sound.</p>	<p><i>PRIOR LEARNING: Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</i></p> <p>Children look at how different instruments make and change sound – links to music.</p> <p>Children make the links between music lessons and the Science that they have just learnt. They write about the instrument they play in music, and how the sound changes.</p> <p>Children refer back to their work in previous years about the body and the heart.</p>