Pentecost 1 Science Year 4: Sound (Physics)			
Scripture Link: Psalm 18:6			
National Curriculum Objective •			
Enquiry Question: What is sound?			
	Lesson 1	Lesson 2	Lesson 3
Learning intention for each lesson	To know how sounds are made	To know how we hear sounds and what sound waves are.	(Use lesson 6) To know how the ear works.
Recall and Retrieval	Can label a simple circuit Can explain how light helps us see things can identify the five senses	Can label the main parts of the human body know that sounds are made by something vibrating. know that sound is a type of energy	Know what matter is Can name the 3 types of matter know that vibrations travel through a medium to the ear Sounds can travel through solids, liquids and gases.
Sequence of substantive knowledge throughout the lesson	I know that sounds are made by something vibrating. I know that sound is a type of energy	I know that vibrations travel through a medium to the ear Sounds can travel through solids, liquids and gases.	I know that the vibrations hit your eardrum, then pass to the middle and inner ear. The vibrations are changed into electrical signals that are sent to your brain.
Key Skills/disciplinary knowledge	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;** • **identifying differences, similarities or changes related to simple scientific ideas and processes**	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;** • **identifying differences, similarities or changes related to simple scientific ideas and processes**	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;** • **identifying differences, similarities or changes related to simple scientific ideas and processes**
Key Vocabulary	Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation	Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation	Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation
Main teaching activity			

If the school has another short term planning format, this does not need to be included.			
Scaffolding			
Challenge			
Diversity Links			
Catholic Social Teaching Principles			Human Dignity – We are all people in Gods eyes and loved.
British Values			
Wider links			

Pentecost 1 Science Year 4: Sound (Physics)			
	Lesson 4	Lesson 5	Lesson 6
Learning intention for each lesson	To know that the pitch and volume of sound can vary.	To know that sounds get fainter the further away they are from the source.	(use part of lesson 5) To know how to explain why a range of materials make different sounds when shaken in similar containers
Recall and Retrieval	Know that the vibrations hit your eardrum, then pass to the middle and inner ear. The vibrations are changed into electrical signals that are sent to your brain. Explain what a force is and give examples. Describe some forces that can change materials	know that pitch of a sound varies upon the length of the object being blown Pitch is a measure of how high or low a sound is. Name some light sources Name some natural materials	know that volume varies according to the strength of the vibrations that produce it know that when sound vibrations spread out over a distance, the sound becomes quieter (link to ripples on a pond) name some man-made and synthetic materials
Sequence of substantive knowledge throughout the lesson	I know that pitch of a sound varies upon the length of the object being blown Pitch is a measure of how high or low a sound is. I know that volume varies according to the strength of the vibrations that produce it	I know that when sound vibrations spread out over a distance, the sound becomes quieter (link to ripples on a pond)	I know that bigger harder objects will make a louder sound. If there are lots of objects then the sound is muffled as they have less space to move around. Softer materials make a duller sound.
Key Skills/disciplinary knowledge	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;** • **identifying differences, similarities or changes related to simple scientific ideas and processes**	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **setting up simple practical enquiries, comparative and fair tests;** • **making systematic and careful observations** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;** • **using results to draw simple conclusions,** • **identifying differences, similarities or changes related to simple scientific ideas and processes**	• **asking relevant questions and using different types of scientific enquiries to answer them;** • **setting up simple practical enquiries, comparative and fair tests;** • **making systematic and careful observations** • **recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;** • **reporting on findings from enquiries, including oral and written explanations, displays or presentations o results and conclusions;** • **using results to draw simple conclusions,** • **identifying differences, similarities or changes related to simple scientific ideas and processes**

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Main teaching activity ***If the school has another short term planning format, this does not need to be included.***			
Scaffolding			
Challenge			
Diversity Links			
Catholic Social Teaching Principles			
British Values			
Wider curriculum links			