

Sound



Prior Learning	
<p>This unit will build on the knowledge and skills learned in KS1 Prior learning will be knowledge and understanding of how sounds are made and how they travel to your ear. We will also be applying the knowledge of pitch and volume learned in music to this science unit.</p>	
Key vocabulary for this unit	
Pitch Volume Vibrations Particles Soundproofing Solids	Gases Absorb
Learning Sequence	
Good vibrations	<ul style="list-style-type: none"> To identify how sounds are made, associating some of them with something vibrating.
Hearing Sounds	<ul style="list-style-type: none"> To recognise that vibrations from sounds travel through a medium to the ear. To find patterns between the volume of a sound and the strength of the vibrations that produced it.
Higher and Lower	<ul style="list-style-type: none"> To find patterns between the pitch of a sound and features of the object that produced it.
String Telephone	<ul style="list-style-type: none"> To recognise that sounds get fainter as the distance from the sound source increases.
Soundproofing	<ul style="list-style-type: none"> To investigate the best material for absorbing sound.
Making Music	<ul style="list-style-type: none"> To make a musical instrument which plays different sounds and explain how it works.
Alexander Graham Bell	<ul style="list-style-type: none"> To recognise that vibrations from sounds travel through a medium to the ear in the context of Alexander Graham Bell's invention of the telephone. To describe Alexander Graham Bell and his inventions. To report on findings, including oral and written presentations and displays in the context of Alexander Graham Bell's invention of the telephone. To present my findings about Alexander Graham Bell.
Assessment milestones	

<p>Working Scientifically:</p> <ul style="list-style-type: none"> • To make and explain predictions. • To make and record accurate observations. • To use scientific language to explain their findings. 	<p>Scientific Knowledge:</p> <ul style="list-style-type: none"> • To explain how sound sources vibrate to make sounds. • To explain how sounds travel to reach our ears. • To explain how vibrations change when the loudness of a sound changes • To describe the patterns between the pitch of a sound and the features of the object that made the sound.
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Electricity

Prior Learning	
<p>This unit will build on the knowledge and skills learned in KS1 As this is the first unit on electricity in primary science, prior learning will be knowledge and understanding of which appliances use electricity and how electricity reaches our homes as well as the children's own knowledge of electricity through the reading of books etc.</p>	
Key vocabulary for this unit	
Cells Wires Bulbs Buzzers Switches	Series circuit Conductors Insulators Appliances
Learning Sequence	
Appliances	• To classify and present data, identifying common appliances that run on electricity.
Making Circuits	• To identify circuit components and build working circuits.
Complete Circuits	• To investigate whether circuits are complete or incomplete.
Conductors and Insulators	• To investigate which materials are electrical conductors or insulators.
Switches	• To explain how a switch works in a circuit, build switches and report my findings.
Electrical Discussions	• To discuss and solve problems about electricity using reasoning skills.
Garrett Morgan	• To build a traffic light using series circuits.

Assessment milestones

Working Scientifically:

- Children can record their findings using labelled diagrams.
- With some guidance, children can decide how to set up a simple practical enquiry, make predictions and draw simple conclusions from their results.
- Children can report and present their results and conclusions to others in oral forms.

Scientific Knowledge:

- Children can identify different circuit components and explain what they do.
- Children can build series circuits, identifying and explaining whether they are complete or incomplete.
- Children can explain what electrical conductors and insulators are and give several examples of these.
- Children can identify several different switches and explain how switches work in a circuit.