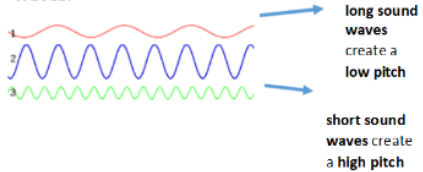
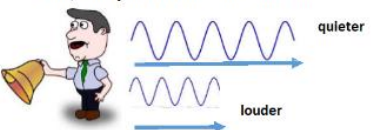




Subject: Science
 Year group: 4
 Term: Spring
 Unit name: Sound

| | |
|---|--|
| Prior Knowledge - 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) | |
| Scientific enquiry | |
| Classifying | Identifying good amplifiers and insulators of sound |
| Observing over time | Not relevant |
| Pattern seeking | Finding patterns in sounds made by different size objects and in different thicknesses of elastic bands Order of pitch Patterns and similarities in data from investigations |
| Comparative/fair testing | Investigating best insulators Volume and how it can be impacted Sound and distance |
| Researching | How sound travels |

| | |
|--|---|
| National curriculum: | |
| <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. | |
| Working scientifically: | |
| <ul style="list-style-type: none"> Can spot patterns in results and look for changes, similarities and differences Say what I have found out linking cause and effect. Children interpret their data to generate simple comparative statements based on their evidence. | |
| Assessment for learning Say what I have found out linking cause and effect. | |
| Children interpret their data to generate simple comparative statements based on their evidence. Recapping prior knowledge- beginning of unit- what do children already know? Beginning of each lesson- focus on recall of previous learning (quick quizzes) | |
| <p>Respect</p> <p>Do for other people the same things you want them to do for you.</p> <p>Matthew 7:12</p> | <p>Integrity</p> <p>An honest witness tells the truth. But a dishonest witness tells lies.</p> <p>Proverbs 12:17</p> |

| <i>Key Learning- what will the children know by the end of the unit?</i> | |
|--|--|
| To answer the question: how are sounds made? | A sound produces vibrations which travel through a medium from the source to our ears. When objects vibrate, a sound is made. · The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves. · If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations. |
| To understand how sound travels through a medium. | 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. |
| To explore the relationship between the pitch of a sound and the features of an object. | <p>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 sounds.</p> <p>Pitch:</p> <ul style="list-style-type: none"> • High pitch sounds are created by short sound waves. • Low pitched sounds are created by long sound waves.  |
| To find patterns between volume and the strength of vibrations. | |
| To recognise that sounds get fainter as the distance from the sound source increases. | <p>Volume:</p> <ul style="list-style-type: none"> • The closer you are to the source of the sound, the louder the sound will be. • The further away you are from the source of the sound, the quieter the sound will be.  |