Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'

Sustainability

Subject: Science

Year group: 4

Term: Spring

Unit name: Sound

Strand: Physics

National curriculum:

- To identify how sounds are made, associating some of them with something vibrating. (Vibration stations)
- Recognise that vibrations from sounds travel through a medium to the ear. (String phones)
- Find patterns between 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 sound gets fainter as the distance from the sound source increases

Working Scientifically:

- Ask relevant questions.
- Make careful observations and use a range of equipment.
- Gather, record and classify data.
- Record findings using scientific language, drawings, labelled diagrams.
- Identify similarities and differences.
- Use straightforward scientific evidence to answer questions to support findings.

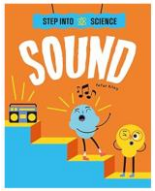
Prior Knowledge – Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans)

Key Vocabulary: Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation.

Key Scientists:

Alexander Graham Bell
Delia Derbyshire (electronic music)

Suggested books:



Respect	Integrity

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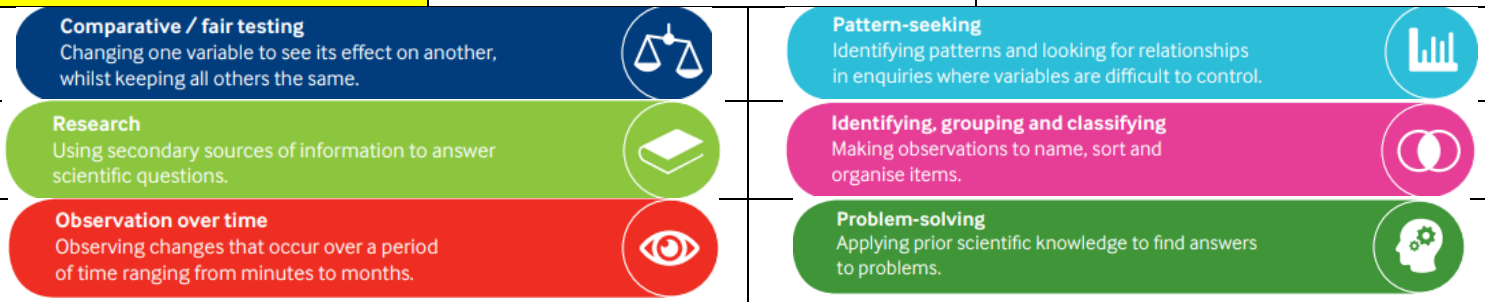
Key learning objectives- ***Highlighted boxes = Learning Objective for that lesson. The other two are your Success Criteria.***		
Knowledge	**Working Scientifically**	**Scientific Enquiry**
To identify how sounds are made, associating some of them with something vibrating.	To observe vibrations which cause sound.	To identify how sounds are made.
To recognise that vibrations from sounds travel through a medium to the ear. - Recognise that sounds get fainter as the distance from the sound source increases.	To set up tests to create the best string phone	To plan a fair test.
To find patterns between pitch and volume of a sound and features of the object that produced it.	To record my results in a table to spot patterns.	To spot patterns in my results.
To recognise that sound gets fainter as the distance from the sound source increases	To record my results in a table and a line graph.	To spot pattens in my results to make conclusions.
To find patterns between pitch and volume of a sound and the features of the object that produced it.	To observe how sounds are created and feeling the vibrations causing the sound.	To carry out a pattern seeking enquiry.
To identify how sounds are made, associating some of them with something vibrating.	To set up our own test and evaluating o results	To conduct a fair test.

Scientific Enquiry Key



Assessment- Key indicators:

Can describe different types of objects producing different sounds and that the sound is produced by vibration in the object. Can describe sounds travelling through different mediums such as air, water, metal. Can find patterns between pitch and volume and the features of the object producing it. Can recognise that sounds get fainter as the distance from the sound source increases.

Can explain what happens when you strike a drum or pluck a string- use diagrams to show. Demonstrates how to increase/decrease pitch and volume.