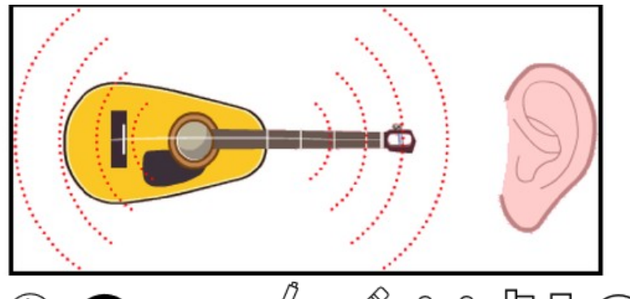
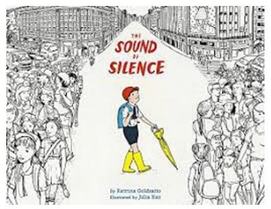
Year 4

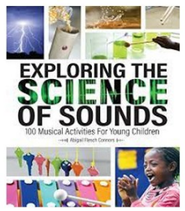
Sound



~Golden Thread of Reading~

Science Reading Spine
Changing Sound





How are you working Scientifically?

Set up simple practical enquiries, comparative and fair tests
Make systematic and careful observations
Gather, record, classify and present data in a variety of ways
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
Report on findings from enquiries
Use results to draw simple conclusions
Identify differences, similarities or changes related to simple scientific ideas and processes

Science	Year 4	Sound

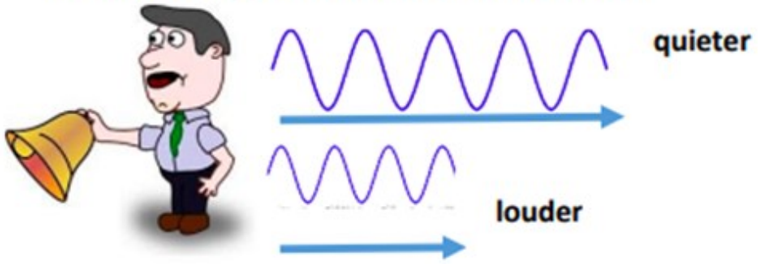
Pre existing knowledge

- Hearing is one of the five senses.
- Sounds can be combined using musical instruments.
- What the word vibration means.

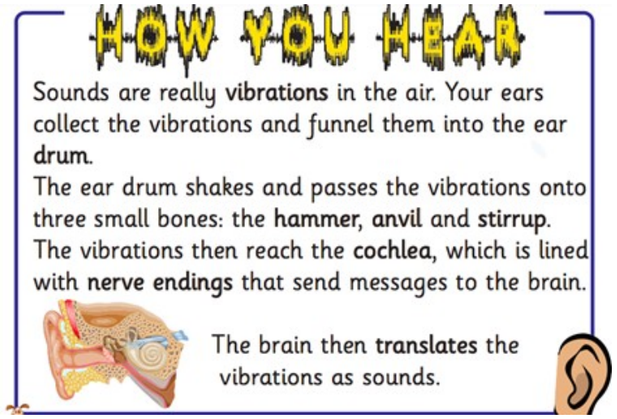
Vocabulary	
Vibration	A movement backwards and forwards.
Sound wave	Vibrations travelling from a sound source.
Volume	The loudness of a sound.
Amplitude	The size of a vibration. A larger amplitude = a louder sound.
Pitch	How low or high a sound is.

Volume:

- 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.



Pitch is a measure of how high or low a sound is. A whistle being blown creates a high-pitched sound. A rumble of thunder is an example of a low-pitched sound.



What is a sound?

A thing that can be heard. The object that makes the sound is called the source.

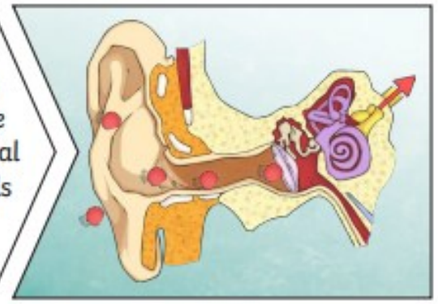
How do sounds travel?

Sound waves travel through a medium (such as air, water, glass, stone or brick). For example, if somebody is playing music in the room next door, the sound can travel through the bricks in the wall.

How do we measure sound?

Amplitude measures how strong a sound wave is.

Inside your ear, the vibrations hit the eardrum and are then passed to the middle and then the inner ear. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.



If you throw a stone in a pond, it will produce ripples. As the ripples spread out across the pond, they become smaller. When sound vibrations spread out over a distance, the sound becomes quieter, just like ripples in a pond.