

Year 4 - Sound

Why do different musical instruments make different sounds?

Prior learning

In Year 1, you will have identified the sense of hearing.

Future learning

You will learn more about ultrasound and sound vibrations in secondary school.

In this unit you will:

- 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

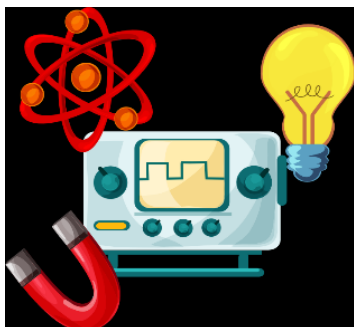
Key Scientist: Alexander Graham Bell



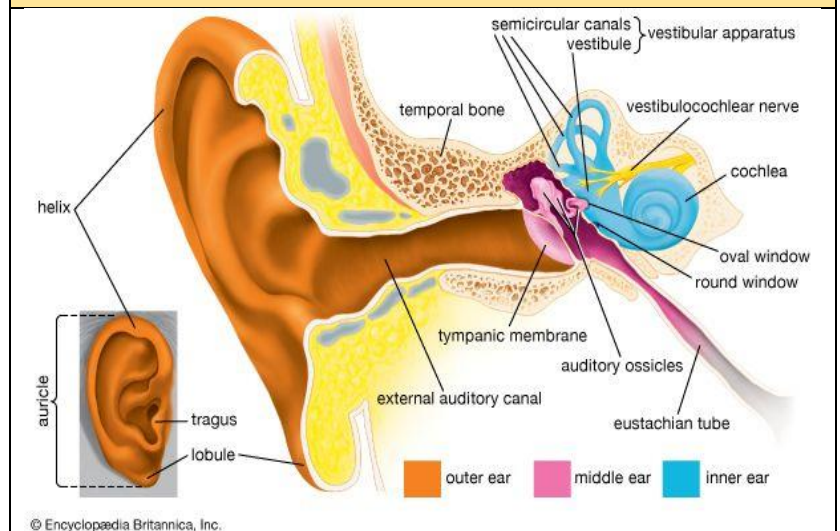
Alexander Graham Bell was most famous for inventing the telephone. In his younger years, he gave music lessons and studied how sound travelled through making vibrations.

Science discipline: *Physics*

Physics is a science that studies matter and its motion as well as how it interacts with energy and forces.



Scientific diagram



Vocabulary:

- **Sound:** Is created when something vibrates and sends waves of energy (vibration) into our ears.
- **Vibration:** The rapid back-and-forth movement of physical particles, as a reaction to different forces.
- **Pitch:** The pitch of a sound is how high or low the sound is. A high sound has a high pitch and a low sound has a low pitch.
- **Volume:** The volume of a sound is how loud or quiet the sound is.
- **Faint:** Very little strength or intensity.
- **Insulation:** A specialised type of insulation that is designed to reduce the transfer of noise inside and outside your home using a range of materials.
- **Auditory:** The process of hearing.
- **Sound waves:** Vibrating forms of energy that are made of molecules and look like waves.