



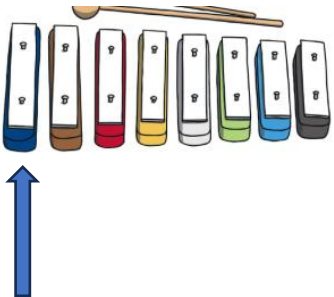
# Sound

## Objectives

- 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. (Computing)
- Recognise that sounds get fainter as the distance from the sound source increases. (Computing)

## Questions

- How are sounds made?
- What is pitch?
- What is a data logger?
- Sounds get fainter/louder as the distance from the sound source increase.



Will it create a high or low pitch? How do you know?

## Scientist: Alexander Graham Bell (1847-1922)

Bell was a Scottish-born American scientist and inventor, most famous for his work on the development of the telephone. He **experimented with transmitting speech**: sending sound from one place to another.

On **March 10th, 1876**, his invention worked: **the first telephone!**

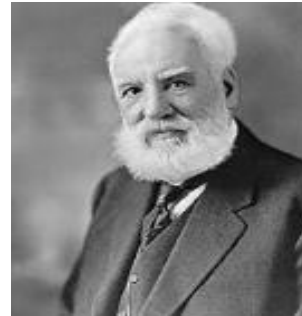
Other inventions included: a sound recorder and player called a **graphophone** and a **metal detector** for bullets



Alexander's first telephone that worked (1875). However, the sound wasn't clear enough.



A copy of the first successful telephone, as was used on March 10th, 1876.



## Scientific Terminology

**Decibels (dB)** is a unit of measurement for how loud a sound is.

**Data Logger** is a small, electronic device that records data over time.

**Eardrum** is a thin, tightly stretched piece of skin that vibrates when sound waves hit it, like a drum.

**Pitch** is how high or low a sound is

**Medium** is a substance that transmits energy, such as air, water, glass, or metal.

**Vibrations** are very quick movements that travel through the air and other mediums.

**Volume** is how loud or quiet a sound is.

