



Jerry Clay Academy Subject Unit Overview



Subject: Science (Sound) Year Group: 4

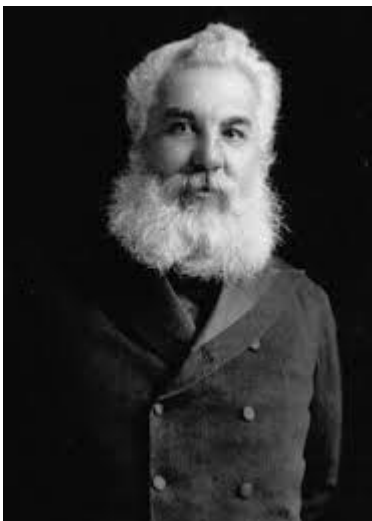
Term: Summer

Core Learning of This Unit:

- To investigate how sound can travel through solids, liquids and gases.
- To know that sound is made by air molecules vibrating.
- To know that when vibrations are made (e.g. when you clap your hands) the air around the object vibrates. This is the air molecules vibrating.
- To know that sound travels much slower than light, whether in air or in water. You often hear things after you see them, for example you see the lightning before you hear the thunder
- To know that the louder the sound the bigger the vibration. The size of the vibration is called the amplitude.
- To investigate soundproofing.

Prior Learning:

From KS1 and 2: Children will have some knowledge of how the human body works through studying the Animals including humans units of work.



National Curriculum Statements:

Pupils should be taught to:

- 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 Vocabulary:

- **particles**-solids, liquids and gases are made of particles so small we are unable to see them.
- **vibration** A back-and-forth movement.
- **sound waves**- vibrations travelling from a sound source.
- **volume**-the loudness of a sound.
- **amplitude**-the size of a vibration.
- **pitch** -how high or low a sound is.
- **soundproof**-to prevent sound from passing through.
- **absorb sound**-to take in sound energy.
- **vacuum**-a space where there is nothing. There are no particles in a vacuum.
- **ear**-an organ used for hearing
- **eardrum**-a part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin.

Significant People

Alexander Graham Bell was a Scottish-born American inventor, scientist, and engineer who is credited with inventing and patenting the first practical telephone. He also co-founded the American Telephone and Telegraph Company in 1885.