The Hermitage School – Science (Physics)		
Topic: Sound	Year: 4	Autumn 2

What should I already know?

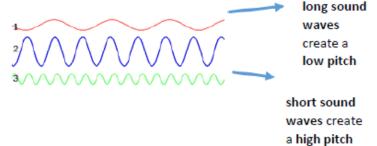
- Hearing is one of the five senses.
- Sounds can be combined using musical instruments.

What will I know by the end?

- Sound is made by vibrations.
- Different instruments vibrate in different ways.
- Vibrations can travel through solid, liquid and air.
- That volume is the loudness of sound and is measured in decibels.
- The louder a sound, the stronger the vibration.
- How sound travels and gets quieter over distance.
- Sound loses energy as it travels away from the source.
- That pitch is how high or low a sound is.
- How to make an instrument with different pitches.

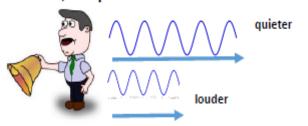
Pitch

- High pitch sounds are created by short sound waves.
- Low pitched sounds are created by long sound waves.



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.



Vocabulary

Amplitude—a measure of the strength of a sound wave.

Decibel—a measure of how loud sound is

Frequency—a measure of how many times per second the sound wave cycles.

Muffle— to make a loud sound be quieter.

Noise— an unwanted sound.

Pitch—how high or low a sound is.

Sound waves—invisible waves that travel through air, water and solid objects as vibrations.

Source— the beginning/origin of the sound.

Tension— how loose or tight the string can be.

Transmit—to pass from one place or person to another

Vibrations—invisible waves that move quickly.

Volume—how loud or quiet a sound is.

Scientific Skills and Enquiry

- Identify how sounds are made.
- Observe that vibrations from sounds travel through a medium to the ear.
- Find patterns between pitch of a sound and the object making it.
- Find patterns between volume and the strength of the vibrations.
- Understand the importance of fair testing.
- Recognise that sounds get fainter as the distance increases.