

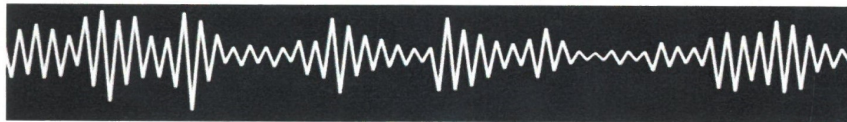
Foxes' Class Term 4: Investigating Sound

Vibrations

Sound is made when an object **vibrates** and therefore causes the air around it to vibrate too. These vibrations are carried to your ear for you to hear them.

Sound vibrations can travel through different materials: solids, liquids and gases. Sound travels better through some materials than others.

The louder the **volume**, the bigger the vibrations. The size of the vibration is called the **amplitude**.



Sounds travel in a **wave**. The vibrations make air particles closest to the object vibrate, which then passes the vibrations to the particle next to it and so on – like dominoes falling!

Pitch

Stringed Instruments

Tighter, thinner or shorter strings make higher **pitches**. Faster vibrations make pitches high and slower vibrations make pitches low.

Wind Instruments

The column of air inside the instrument causes it to **vibrate**. Shortening this makes a higher sound and lengthening it makes a lower sound.

Percussion Instruments

The surface is struck and it therefore vibrates. Smaller instruments have higher **sounds**. The tighter or thinner the skin on a drum, the higher the pitch.

Vibrate	A continuous movement. Looks as though it is shaking.
Volume	How loud or quiet a sound is.
Pitch	How high or low a sound is.
Particles	Everything in the world is made up of tiny particles – These can appear in different forms.
Amplitude	Amplitude is the measurement of the strength of a soundwave.
Sound	Vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear. This is known as a sound.
Soundproof	When you use objects such as material to try and make sounds less noisy.
Decibel	The unit of measurement used to measure the power of a sound.
Ear	An organ of hearing.

The Ear

