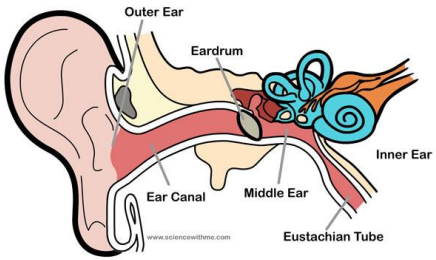
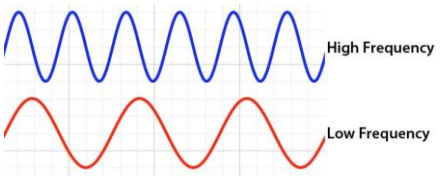
Year 4: Sound

Subject Specific Vocabulary

vibrating	When something moves continuously to and fro. A sound vibrates as it travels through the air.
pitch	The quality of a sound which depends on the speed of the vibrations. A high sound has a high pitch and a low sound has a low pitch.
volume	A measure of how loud or quiet something sounds and is related to the strength of the vibrations.
insulation	Protecting something by surrounding it with material that reduces or prevents the transmission of sound.
outer, middle and inner ear	The ear is made up of three different sections. These parts all work together so that you can hear and process different sounds.
decibels (db)	A unit of measurement which indicates how loud a sound is.
sound waves	Sound waves are vibrating forms of energy that look like waves and travel through solids, liquids and gases.
frequency	Frequency is how many waves there are per second. The higher the frequency, the more vibrations there are and the higher the pitch.
states of matter	A phrase used to describe the physical properties of something: solid, gas or liquid.
particles	Tiny bits of matter that make up everything in the universe.

Information





Important knowledge

- ❑ I know that sounds are made when materials vibrate.
- ❑ I know that the length of time a material vibrates for depends on that material's physical properties.
- ❑ I know that sound travels by vibrations being passed on from particle to particle.
- ❑ I know why solids are better at passing these vibrations from particle to particle.
- ❑ I know that pitch is the 'squeakiness' of a sound.
- ❑ I know that loudness and pitch are not the same thing.
- ❑ I know that volume describes the loudness of a sound.
- ❑ I know that louder sounds will travel further than quieter sounds.
- ❑ I know why sounds get fainter with distance.
- ❑ I can record data relating to sound in a table.

Working Scientifically

- ❑ I can describe the patterns between the length of a material and the sound it makes when it vibrates.
- ❑ I can collect and record data relating to how sound travels through solids, liquids and gases using tables, diagrams and annotations.
- ❑ I can compare how sound travels through different media and explain why there are differences.
- ❑ I can make observations and collect data related to pitch.
- ❑ I can explain the relationship between pitch and frequency.
- ❑ I can record my findings in a way that I choose and set up a fair test.
- ❑ I can use the internet to find out about the loudness of different sounds.