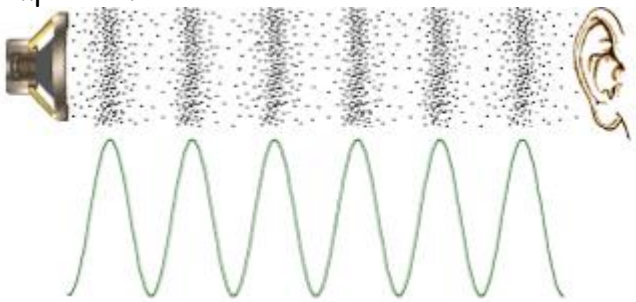
Year 4 Sound

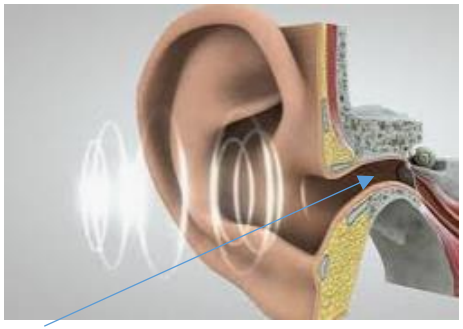
Vocabulary	
Amplitude	a measure of the strength of a sound wave
Decibel	a measure of how loud a sound is
Electricity	a form of energy that can be carried by wires and in used for heating and lighting, and to provide power for devices
Energy	the power from sources such as electricity that makes machines work or provides heat
Frequency	a measure of how many times per second the sound wave cycles
Medium	something that makes possible the transfer of energy from one location to another
Pitch	how high or low a sound is
Power	Power is energy, especially electricity, that is obtained in large quantities from a fuel source and used to operate lights, heating, and machinery
Soundwaves	invisible waves that travel through air, water, and solid objects as vibrations
Source	where something comes from
Transmit	to pass from one place or person to another
Travel	how something moves around
Vibrations	invisible waves that move quickly
Volume	how loud or quiet a sound is

Loud and Quiet – The Volume of Sound

Sounds are created by air particles vibrating. The louder the sound, the bigger the vibration. Air particles vibrate less when quite sounds are made. The size of vibration is called the amplitude.

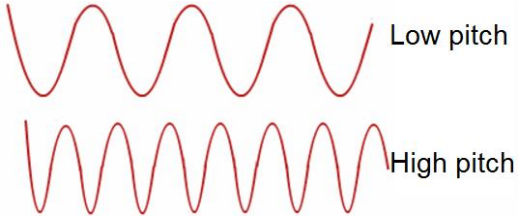


Inside your ear, the vibrations hit the eardrum. Vibrations travel through to the inner ear and are changed into electrical messages to the brain. The brain tells you that it is a sound.



eardrum

High and Low Sounds – The pitch



Pitch is how high or low a sound is. Faster vibrations make a high pitched sound (whistle blowing) and slower vibrations make a low pitched sound (thunder rumbling).

You can change the pitch of a sound in different ways. Think of a guitar string…

The length and the thickness of the string will change the pitch of the sound made. Changing how tightly stretched the string is, will also change the pitch of the sound.

Did you know…?

All sounds travel at the same speed! Light travels much faster than sound. Light travels at 299 792 458 meters per second. Sound travels at 343 meters per second.