



*Good Vibrations:
The Science of Sound*

Vocabulary
Builders

Acoustics: the way sound waves travel in a space.

Amplify: to make a sound louder

Auditory canal: or the ear canal is a tube that starts with the outer ear and ends at the ear drum.

Auricle: the outside portion of the ear made from cartilage and skin that funnels sound vibrations to the middle and inner ear

Cochlea: turns sound vibrations into nerve pulses that are sent to the brain. It is a curly snail shaped tube that is filled with fluid and lined with tiny hairs

Decibels: are used to measure how loud a sound is.

Doppler effect: when a sound source moves closer to you the sound raises its pitch and lowers when it moves away, like the wailing sound from a passing police siren that gets louder then softer.

Eardrum: or tympanic membrane is a thin piece of skin located at the end of the ear canal that vibrates from sound waves

Echoes: are sounds that have their sound waves bounced off a hard surface and are heard or repeated after the original sound.

Frequency: the number of sound vibrations that happen per second, the higher the frequency the higher the pitch.

Hertz: a way to measure sound waves

Incus: or anvil bone is one of the three bones of the middle ear

Malleus: or hammer bone is one of the three bones of the middle ear

Megaphone: a tool that makes sounds louder

Note: a musical sound played at a specific pitch.

Nerve pulses: are signals sent to the brain from different sense organs. The brain interprets the signals into sight, sound, feelings or tastes.





Physics: is a branch of science that studies energy and matter. Sound is a form of energy. Physicists are scientists who study sound.

Pitch: describes how high or low a note sounds. Notes with high pitches have faster sound waves than lower pitches.

Resonance: when the vibrations of one thing make some thing else vibrate. Different musical instruments use resonance to make sounds louder.

Scale: a series of different musical notes. A scale starts with a note then moves up in a series of predictable steps for a total of eight notes.

Semicircular canals: this organ helps us keep our balance. It looks like a coil of tubes filled with fluid and works like a bubble level.

Sound waves: sound moves through air in the form of a pattern of vibrations similar to the ripples in water.

Stapes: or stirrup bone is one of the three bones of the middle ear. It is the smallest bone in the body.

Stethoscope: a tool used by doctors to make body sounds, like your heart beat, louder and easier to hear.

Vibrations: very fast back and forth movements, like the movement of a drum head after its been hit.

