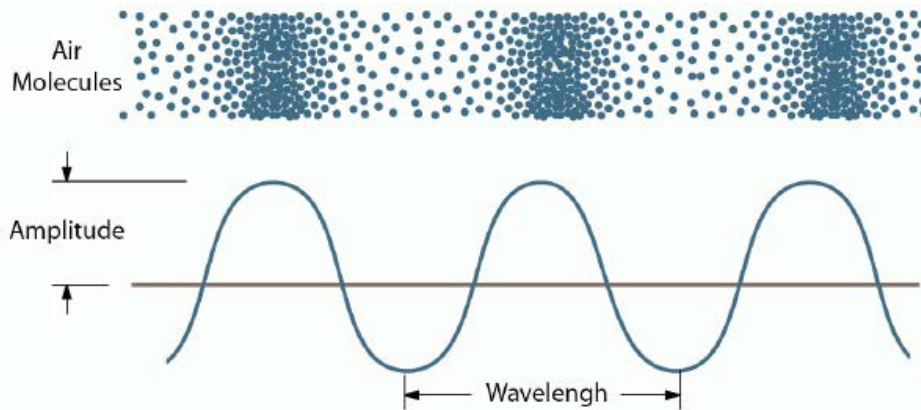


Year 8: Sound

- Sound consists of vibrations which travel as a longitudinal wave through substances.



- The denser the medium, the faster sound travels.
- The greater the amplitude of the waveform, the louder the sound.
- The greater the frequency (and therefore the shorter the wavelength), the higher the pitch.
- Sound does not travel through a vacuum.
- The speed of sound in air is 330 m/s, a million times slower than light.

Keywords

Absorption: when energy is transferred from sound to a material.

Amplitude: the maximum amount of vibration, measured from the middle position of the wave, in metres.

Auditory range: the lowest and highest frequencies that a type of animal can hear.

Echo: reflection of sound waves from a surface back to the listener.

Frequency: the number of waves produced in one second, in hertz.

Longitudinal wave: where the direction of vibration is the same as that of the wave.

Oscilloscope: device able to view patterns of sound waves that have been turned into electrical signals.

Pitch: how low or high a sound is. A low (high) pitch sound has a low (high) frequency.

Vacuum: a space with no particles of matter in it.

Vibration: a back and forth motion that repeats.

Volume: how loud or quiet a sound is, in decibels (dB).

Wavelength: distance between two corresponding points on a wave, in metres.

