



**sound**

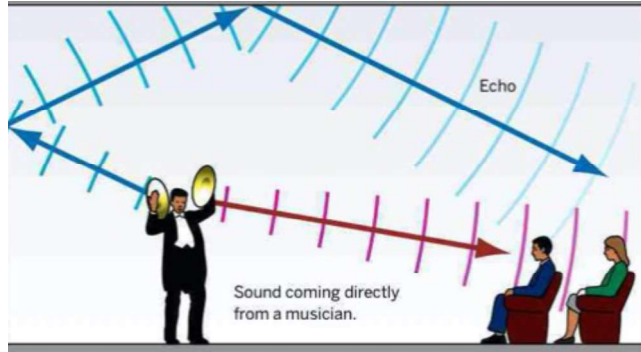
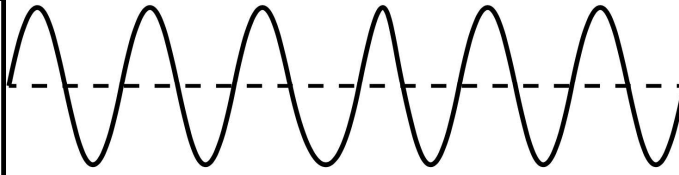
travels in **waves as vibrations**

sound waves can **ONLY** travel through a **medium**

A medium such as

- air (gas)
- water (liquid)
- wood (solid)

sound travels through anything with **particles** ✓



**properties of sound**

**sound**

is transfer of **energy**

**vibrations create sound**

regular and repeated movement of an object that moves backwards and forwards

sound can't travel in a vacuum (no particles) ✗

**sound travels in air**

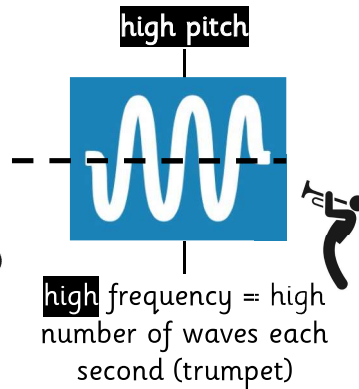
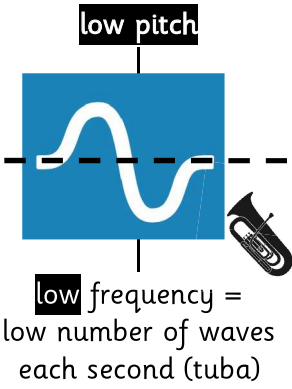
340 metres each second

**pitch**  
(frequency)

number of sound waves each second

sounds high or low

how frequent waves are



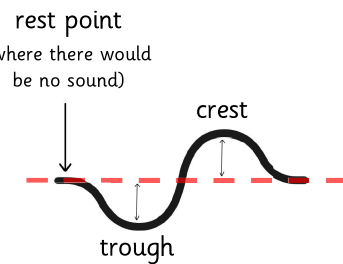
3 things that affect **pitch** (frequency) of the sound wave

- size
- length
- tightness

of the thing that is vibrating

**loudness**

size of the sound waves



bigger the waves

more energy

louder it sounds

**2 things that affect loudness**

amount of energy

amount of stuff vibrating (larger sound boxes can make larger sounds)

**hearing**

sounds travel through a medium (air, water, wood) and enter your ear canal

sounds vibrate the ear drum, middle ear and inner ear

vibrations send messages to your brain

**sound fades**

vibrations get fainter as the distance from the source increases

the same amount of energy is spread over a larger area