

Sound facts

- Sound waves are **longitudinal waves**- the vibrations are in the same direction as the direction of travel.
- Sound is just **energy** made by **vibrations** so when any object vibrates it causes movement in the air and when you're within range of the vibrations, you hear a sound.
- When the vibrations are fast, the sound is high. When the vibrations are slow, the sound is low.
- The ear is not the only detector that we have in our body. Sound waves can also be felt, for example, sometimes you can feel the vibrations that thunder makes.
- When the signals come in they are fast and jumbled but our brains have the ability to sort them into an organised pattern, this means we can hear music and understand speech

How does the ear work?

1. The vibrations in the air make the **eardrum** vibrate
2. The vibrations are passed through the three small bones (**ossicles**) to the **cochlea**
3. Signals are passed from the cochlea to the brain through the **auditory nerve**
4. Our brain then interprets these signals as sound