

Year 4 key knowledge fact sheet - sound

Key vocabulary

Ear	The hearing organ.
Medium	A material that allows the transfer of energy from one place to another. E.g. solids, liquids, gases.
Pitch	How high or low a sound is.
Sound source	Where sound comes from. A sound source will produce vibrations.
Tuning Forks	A two-pronged fork device that vibrates when struck and produces a specific pitch.
Vibration	Something moving backwards and forwards very quickly.
Volume	How loud or quiet a sound is.

How are sounds made and how do they travel?

When objects **vibrate**, a sound is made.

The vibration makes the air around the object **vibrate** and the air vibrations enter your **ear**. These are called sound waves.

If an object is making a **sound**, a part of it is vibrating, even if you cannot see the vibrations.



Sound waves travel through a **medium** such as, air, water, glass, stone and brick.



Pitch

The **pitch** of a **sound** is how high or low it is. A squeak of a mouse has a high pitch. A roar of a lion has a low pitch.



A **high** pitch **vibrates** more than a **low** pitch.

Volume

The **volume** of a **sound** is how loud or faint it is. Fainter sounds have smaller vibrations and louder sounds have bigger vibrations.

The closer we are to sounds, the louder it will be.



A train arriving at a station sounds loud

The further away from a sound, the fainter (quieter) it will be.



A train in the distance sounds quieter

How do we hear?

The sound waves travel to the **ear** and make the ear-drums **vibrate**.

