

Year 4 key knowledge fact sheet - sound

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.



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.

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.

The further away from a sound the



A train arriving at a station sounds loud

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**.

