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.

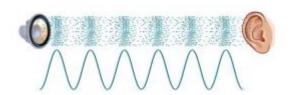


Key vocabulary

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.

How do we hear?

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



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