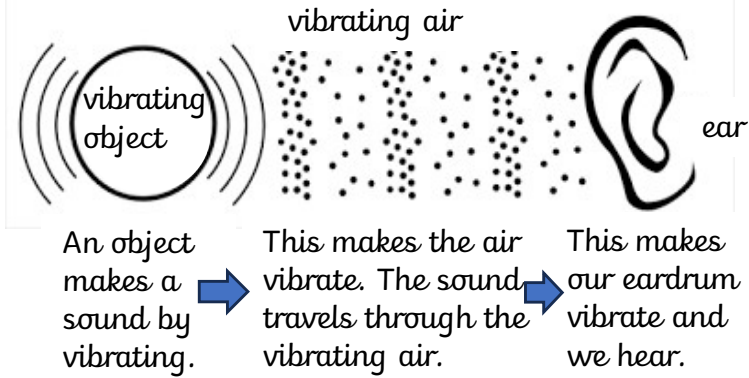


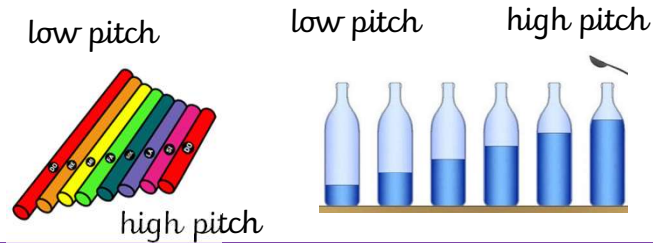
## How is sound made?



## Year 4 Knowledge organiser – What is sound?

### How can pitch be changed?

The size and shape of an object can change the pitch of the sound it makes. Faster vibrations make the pitch higher.



### Examples of low pitch

a lion's roar  
thunder

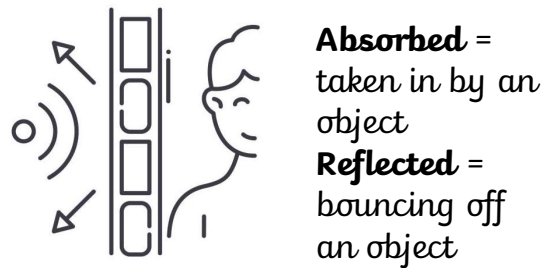
### Examples of high pitch

a mouse's squeak  
a child's voice



### Sound insulation

- Sound can be **absorbed** or **reflected** by materials to stop sound travelling.



### What is volume?

Volume = the loudness or quietness of a sound.



### Examples of loud sounds:

sirens, alarms, shouting, drilling

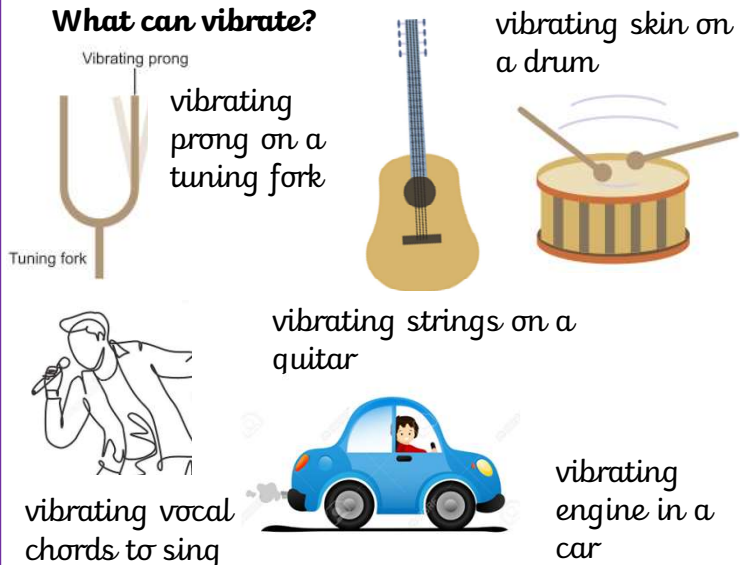
Sound gets quieter the further you are from the source of the sound because the waves get weaker.



### Examples of quiet sounds:

whispering, bees buzzing, humming

### What can vibrate?



### How does sound travel?

- Sound needs to travel through a solid, a liquid or a gas.
- Sound can't travel when there is nothing to travel through (like in a vacuum in space).
- Sound travels in **waves**.
- The waves start at the vibrating object and move out in all directions.

