

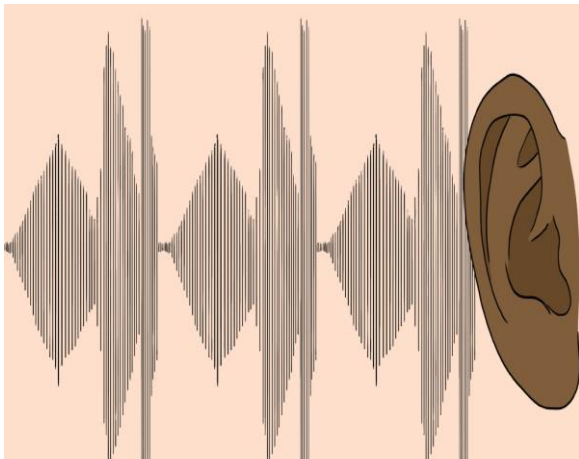
## Key vocabulary

accurate, air, communicate, compare, comparative test, conclude, conclusion, data, data logger, decibel, diagram, enquiry, evaluate, evidence, explain, explanation, fair, fair test, gas, observe, observation, pattern, pitch, pluck, predict, prediction, measure, measurement, liquid, refute, solid, sound, sound source, support, taut, travel, variable, vibrate, vibration, volume

## Working Scientifically

- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including [thermometers and] data loggers.
- Reporting on findings from enquiries, including oral and written explanations, [displays or presentations of results] and conclusions.
- Using results to draw simple conclusions, make predictions for new values, [suggest improvements and raise further questions.]
- Identifying differences, similarities or changes related to simple scientific ideas and processes.
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**Diagram 1:** Sound is created when something vibrates. The vibrations of molecules cause sound waves which we hear in our ears.



## Must – know knowledge

Sound is a type of energy made by **vibrations**. When something vibrates, it causes the air around it to move. These movements travel through the air in waves. Our ears pick up these waves, and our brain turns them into the sounds we hear. Every sound you hear—whether it’s music, someone talking, or a door slamming—starts with something vibrating.

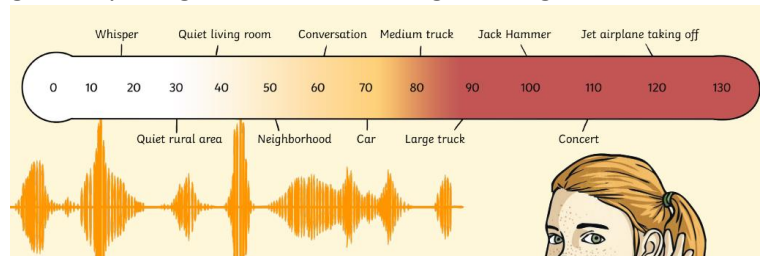
When an object vibrates, it makes the air around it vibrate too. These vibrations travel through the air as **sound waves**. The sound waves enter our **ears** and make our **eardrums** vibrate. The vibrations are passed through tiny bones and into the **inner ear**, where they are turned into signals that go to our brain. That’s how we hear!

**Pitch** is how high or low a sound is. High-pitched sounds (like a whistle or a bird) are made when something vibrates quickly. Low-pitched sounds (like a drum or a lion’s roar) are made by slower vibrations. Short, thin, or tight objects usually make higher-pitched sounds, while longer, thicker, or looser objects make lower-pitched ones.

**Sound can travel through:**

- **Solids** (like metal, wood, or walls) – fastest
- **Liquids** (like water) – medium speed
- **Gases** (like air) – slowest

**Diagram 2:** Sound is measured in decibels. Sounds are generally categorised into two categories, high and low.



**Experiments:** How can we change the volume of a sound?