

# **KNOWLEDGE ORGANISER**



ESSENTIAL VOCABULARY	
ear	The part of the body that is used for hearing
pitch	How high or low a sound is
volume	How loud or quiet a sound is
eardrum	A thin layer of tissue in the ear. Sound waves make the eardrum vibrate.
Amplitude	The size of a vibration. Larger amplitude mean louder sounds.
medium	What the sound wave travels through to get to our ears e.g. air, water
sound	Sound is a type of energy. It is created by vibrations. We hear sounds with our ears.
Vibration	A movement backwards and forwards
Soundwave	Vibrations travelling from a source of sound

## **What Sound Can Travel Through**

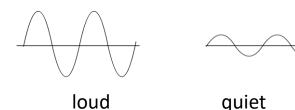
Sound travels through solids, liquids and gases. It travels as a wave, vibrating particles in the medium it is travelling in. Sound cannot travel through a vacuum (like space) as there are no particles there.

### **How is Sound Made?**

- When your hands clap, they vibrate which makes the air particles around them vibrate too.
- Those vibrations transfer to the next particles and so on. It continues until the air particles nearest the ear vibrates. This passes vibrations into the ear.
- Once in the ear, the vibrations hit the eardrum and are passed through to the inner ear.
- Here they are changed into electrical signals which are sent to the brain.

### Volume

The size of a vibration is called the amplitude. The louder the sound, the larger the amplitude will be.



loud

The closer the source of sound is, the louder it will be. Quieter sounds have a smaller amplitude.

#### Pitch

Pitch is how low or how high a sound is. Faster vibrations will have a higher pitch.



slower

vibrations = higher pitch

faster

vibrations = lower pitch

The pitch of sounds can be changed in different ways. With stringed instruments, the tighter the string, the higher the pitch of the sound.

MAKING LINKS TO PREVIOUS LEARNING - GOLDEN VOCABULARY		
Sound	A sound is a noise, that can be made in a variety of ways	
Senses	The five human senses are sight, taste, touch, smell and hearing	
Hearing	One of the five senses. Hearing is where we receive sound vibrations with our ears and our brain turns them into something we can understand.	