

Year 4 Knowledge Organiser Spring 1 - Sound

-Skills

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Classify sound sources

Explore making sounds with a range of objects such as musical instruments and other household objects

Explore how string telephones or ear gongs work

Explore using objects that change in feature to change pitch and volume such as length of guitar string, bottles of water or tuning forks

Measure sounds over different distances

Measure sounds through different insulation materials

Knowledge

Sounds are made by objects vibrating.

Vibrations travel from the source to the ear in waves.

Larger vibrating objects give a lower pitched sound. Smaller vibrating objects give a higher pitched sound.

Sounds get fainter as the distance from the source increases.

Some materials are better at insulating sounds than others.

Year 4 Knowledge Organiser: Spring 1 What is Sound?

Essential vocabulary

insulation	A material that can cover, line or surround a thing to stop the movement of sound, heat or electricity.
faint	A sound that is not strong or intense.
high pitch	A sound that vibrates quickly.
low pitch	A sound that vibrates slowly.
pitch	How high or low a note or sound is.
sound	Anything that people or animals can hear with their ears
source	Where a sound originally comes from.
travel	To go from one place to another.
vibrate	Move backwards and forwards very quickly.
vibration	Tiny, very fast movements forwards and backwards
volume	How loud or quiet a sound is
loud	Having a large amount of sound

Question/Vocabulary	Essential Knowledge
What is sound and how is it created?	Sound is a type of energy. It is created by vibrations. The bigger the vibration, the larger the sound.
What is the amplitude?	The amplitude is the size of the vibration. Louder sounds have large a amplitude. Quieter sounds have a smaller amplitude.
What is pitch? How can you create a higher-pitched note and lower note.	Pitch is a measure of how high or low a sound is. Faster vibrations create higher notes and slow vibrations create lower notes.
What can sound travel through?	Sound can travel through solids, liquids and gases. It travels as a wave and causes the particles to vibrate
What can sound not travel through?	Sound cannot travel through a vacuum
How does a sound travel to your ear?	The sound vibrates through the air particles. Until it reaches the closes air particles to your ear. The vibration is then passed through your ear to your eardrum.
How do we process sounds?	Once the vibration reach your eardrum, they are changed into electrical signals and sent to your brain. Your brain then tells you that you are hearing a sound.

Bridging backwards:

Year 3 – playing recorders
(Pitch, vibration)



Bridging forwards:

Year 5 – Earth and space
in science. How sound
travels.

