



KNOWLEDGE

1. How are sounds made?
Sounds are made when objects vibrate. The vibrations enter your ear and you hear them as a sound.

 Questioning and Enquiry Planning


KNOWLEDGE

2. How do sounds change over distance?
As the distance increases or decreases between the sound source and your ear, the sound becomes quieter or louder.

 Investigating
Observing, Measuring and Pattern Seeking


KNOWLEDGE

2. Can sound travel through an empty space of matter (vacuum space)?
Sound cannot pass through a empty space of matter because sound waves need something (medium) to vibrate through such as air or water.

 Research


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4. What is pitch?
Pitch is the highness or lowness of a sound.

 Investigating


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5. How can the pitch of a sound be changed?
The pitch of a sound is affected by the size and features of the sound source. Smaller/ shorter objects usually produce higher pitch sounds, whilst larger objects produce a lower sounds.

 Investigating


KNOWLEDGE

6. What is volume?
Volume is the loudness or quietness of a sound.

 Investigating


KNOWLEDGE

7. How can the volume of a sound be reduced effectively? (Part 1)
The distance between the sound source and ear can be increased OR a sound source can be surrounded by a sound insulator (a material which blocks sound effectively).

 Questioning and Enquiry Planning
Observing, Measuring and Pattern Seeking

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8. How can the volume of a sound be reduced effectively? (Part 2)
The distance between the sound source and ear can be increased OR a sound source can be surrounded by a sound insulator (a material which blocks sound effectively).

 Recording and Reporting
Making Conclusions

Prior Understanding

- Where is sound around us?
- Knowledge of instruments
- Independent observation of environmental sounds in their own life (prior observational skills)

Links

- Music: pitch, volume
- Art/ DT: creating a musical instrument

Experience

- Creating an instrument
- Investigation: using different materials to soundproof a shaker.