

Feel the vibrations!



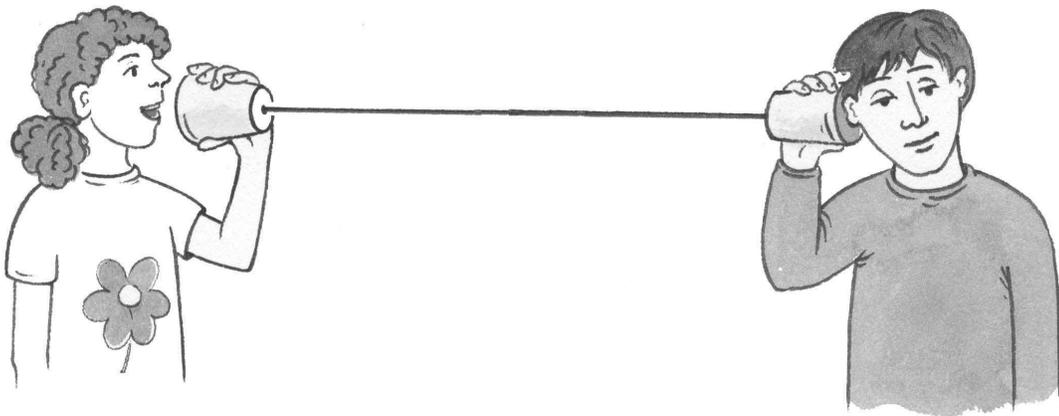
Background knowledge

When a person sings, the vocal cords in the throat make the air vibrate (move back and forth). These vibrations travel through the air to your ears. You hear the vibrating air as sounds. Try feeling the vibrations in your throat when you sing. *Sound* is a type of energy that always travels as vibrations.

Science activity

Here are two children using a string walkie-talkie. The sentences below explain how the boy can hear the girl speak, but they are not in the correct order. Write the numbers 1–5 in the boxes to show what the correct order should be.

- The string vibrates.
- The vibrations are heard by the ear.
- The girl's vocal cords vibrate.
- The air vibrates in the girl's container.
- The air vibrates in the boy's container.



Science investigation

⚠ Take extra care - ask an adult to supervise you.

Make your own walkie-talkie with two plastic cups or soup cans and some string or wire. Ask an adult to punch a hole in the cup or can. Pull the wire or string through the holes and then wrap the ends around small paper clips so they cannot slip back. Design and conduct an experiment to see if a person can hear you through the cup or can. Explain how the sound travels.



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Background knowledge

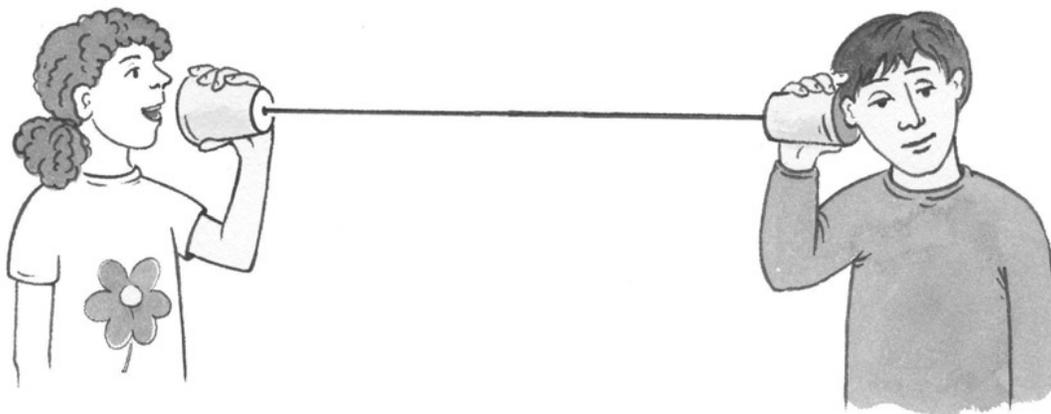
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Science activity

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Write the numbers 1–5 in the boxes to show what the correct order should be.

- 3 The string vibrates.
- 5 The vibrations are heard by the ear.
- 1 The girl's vocal cords vibrate.
- 2 The air vibrates in the girl's container.
- 4 The air vibrates in the boy's container.



Science investigation

❗ As the child talks into the can, the air vibrates, causing the can to vibrate. This then vibrates the string, transmitting sound across the string to the other can. As the second can vibrates, the air in the can vibrates and the other child hears the sound.

