

Sound and Vibrations

READ ALOUD PASSAGE

All sound is caused by vibrations. A vibration is a rapid back- and-forth movement. When an object vibrates, it makes the air around it vibrate too, and those vibrations travel through the air to your ears. Without vibrations, there would be no sound.

The pitch of a sound tells us how high or low the sound is. Pitch depends on how fast something vibrates. When something vibrates very fast, it makes a high-pitched sound. When something vibrates slowly, it makes a low-pitched sound. You can see this with a rubber band. A tight rubber band vibrates fast and makes a higher pitch. A loose rubber band vibrates slowly and makes a lower pitch.

The loudness of a sound depends on how big the vibration is. A bigger, wider vibration makes a louder sound. A small, gentle vibration makes a soft, quiet sound.

You can feel vibrations too. If you place your fingertips lightly on your throat while you hum, you can feel the vibrations of your vocal cords. The vibrations of your vocal cords are what create your voice.

Activity 1

Fill in the blank with the correct word from the word box.

WORD BOX

vibrations pitch loudness fast slow

1. All sound is caused by _____.
 2. The _____ of a sound tells us how high or low it is.
 3. When something vibrates very _____, it makes a high-pitched sound.
 4. When something vibrates _____, it makes a low-pitched sound.
 5. The _____ of a sound depends on how big the vibration is.
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Activity 2

Because / But / So Complete each sentence three different ways.

Sound is caused by vibrations because

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Sound is caused by vibrations but

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Sound is caused by vibrations so

.....

Activity 3

Put the words in the correct order to make a complete sentence. Add correct capitalization and punctuation. 1. causes / sound / vibrates / an / object / when / it

2. pitch / how / fast / on / depends / something / vibrates

Activity 4

Circle True or False for each statement.

1. **True / False** All sound is caused by vibrations.
2. **True / False** A high-pitched sound vibrates more slowly than a low-pitched sound.
3. **True / False** Loud sounds are caused by stronger vibrations than soft sounds.
4. **True / False** Vibrations travel through air to reach your ears.