



Waves: Light and Sound

Name: _____

Date: _____

Grade: Grade 4

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: Sound is made when objects stay perfectly still and quiet.

Rewrite: _____

2. Fix the sentence: Faster vibrations always make a sound quieter and lower.

Rewrite: _____

3. Fix the sentence: Sound can only travel through empty space and never through water.

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. When an object _____, it makes the air around it move and creates a sound wave.
2. A sound with a very high pitch comes from vibrations that happen _____ each second.
3. When you bang a drum hard, the bigger vibration makes the sound _____.
4. Sound cannot travel in outer space because there are no _____ to vibrate.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain how a guitar string makes a sound that you can hear.

2. Why can two friends talking underwater still hear each other a little?

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: Sound is made when objects stay perfectly still and quiet.

Rewrite: Sound is made when objects vibrate and create waves in the air.

2. Fix the sentence: Faster vibrations always make a sound quieter and lower.

Rewrite: Faster vibrations make a sound have a higher pitch.

3. Fix the sentence: Sound can only travel through empty space and never through water.

Rewrite: Sound can travel through air, water, and solid materials.

Part B: Fill in the Blank

Write the missing word or number on each line.

1. When an object vibrates, it makes the air around it move and creates a sound wave.
2. A sound with a very high pitch comes from vibrations that happen many times each second.
3. When you bang a drum hard, the bigger vibration makes the sound louder.
4. Sound cannot travel in outer space because there are no particles to vibrate.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. Explain how a guitar string makes a sound that you can hear.

When a Grade 4 student plucks a guitar string, the string vibrates back and forth very fast. Those vibrations push the air around the string, creating sound waves. The waves travel through the air to our ears, and we hear the note.

2. Why can two friends talking underwater still hear each other a little?

Sound waves can travel through water because water is made of tiny particles that pass the vibration along. When a Grade 4 friend talks underwater, the vibrations of their voice move through the water particles to the other friend's ears.
