$\qquad$ Date: $\qquad$

## Sound Student Pre- or Posttest (Answer Key)

1. You're sitting on a dock at the lake. You hear your mom call you for dinner. Your mom is far away. Explain how you can hear the sound of her voice. Use pictures and words.

Here are some words you can use:

- air
- vibrate
- ear
- big
- eardrum
- small
- loud
- brain
- quiet
- message


You don't have to use all of these words. You may use other words, too.

## Ideal response:

Students may use a combination of words and pictures as follows:

1. Show/explain that sound is coming from the mom and spreading out in all directions.
2. Show/explain that the soundmaker causes the air and the boy's eardrums to
vibrate.
3. Show/represent the sound as a wave.
4. Show/explain that the boy's eardrums send a message to the brain that the
vibrations are sound.
5. This soundmaker makes a loud sound.

## Loud Sound



This soundmaker makes a quiet sound.

Quiet Sound



Draw pictures under the soundmakers to show how the sounds are different. Then use words to explain your pictures in the space below.

## Ideal response:

The loud sound will have a taller (bigger) wave, and the quiet sound will have a shorter (smaller) wave.
6. You're sitting in your house when a storm comes. You hear very loud thunder. You also hear your windows rattle. Why do you hear your windows rattle? Use pictures and words to explain your answer.


## Ideal response:

Students may use a combination of words and pictures that show/describe the

> energy waves from the thunder hitting the windows and making them rattle

## (vibrate).

