Vibrating Sounds

**What You Need**

- 1 meter of string
- wire coat hanger
- spoon

**Find Out**

Do this activity to see how sound moves.

**Process Skills**

Observing
Communicating

**Time**

- 20–30 minutes to get started
- 10 minutes a day for one week

Note that students should work in small groups or with a partner.
4. Have your partner tap the hanger with the spoon.

5. **Record** what you **hear**.

6. Repeat, tapping the hanger with a different object each day.
<table>
<thead>
<tr>
<th>Object Name</th>
<th>Draw the Object</th>
<th>What did it sound like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>spoon</td>
<td></td>
<td></td>
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</tbody>
</table>

Student data will vary.
Conclusions

1. What did you hear for each object?

Answers will vary based on the objects used to strike the hanger, but each should have produced a vibrating sound.

2. How were the sounds different?

Answers will vary based on the objects used to strike the hanger, but may indicate differences in pitch or volume.

New Questions

1. What would you hear if you changed the length of the string?

Answers will vary but should indicate an understanding that the length of the string does affect the sound.

2. Write a question you still have about sound.

Accept all reasonable questions.
Hearing Sounds

Draw the things that made loud sounds.

Students should draw the things that sounded loud to them when shaken.
Draw the things that made soft sounds.

Students should draw the things that sounded soft to them when shaken.
Making Different Sounds

Draw the instrument you made.

Answers will vary. Accept all reasonable answers.
Name ____________________________

Draw each rubber band.

Tell what sound each rubber band made.

Write high or low.

Answers will vary. Students should note that the thinnest rubber band makes the highest sound.
How Sounds Travel

Draw a picture of something that makes a loud sound.

Draw a picture of something that makes a soft sound.
Stand in front. **Tell** about the sound. Circle the word that best describes it.

**loud**  **soft**

Stand behind. **Tell** about the sound. Circle the word that best describes it.

**loud**  **soft**

Answers will vary. Accept all reasonable answers.

Stand far away. **Tell** about the sound. Circle the word that best describes it.

**soft**