

About the Book

Text Type: Nonfiction/Informational Page Count: 16 Word Count: 448

Book Summary

Sound All Around teaches readers about sound waves, vibrations, volume, and pitch. The book delves into the many forms of sound and describes how the human ear receives and perceives sound. Photographs and captions support the text.

About the Lesson

Targeted Reading Strategy

- Visualize

Objectives

- Use the reading strategy of visualizing to understand text
- Understand and identify cause-and-effect relationships
- Identify and use commas in a series
- Recognize and form compound words

Materials

Green text indicates resources available on the website

- Book—*Sound All Around* (copy for each student)
- Chalkboard or dry erase board
- [Visualize, cause and effect, compound words worksheets](#)
- Dictionaries
- [Discussion cards](#)



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting book on interactive whiteboard or completed with paper and pencil if books are reused.)

Vocabulary

- **Content words:** *communicate, pitch, pleasant, pluck, sensitive, sound waves, vibrates, vocal cords, volume*

Before Reading

Build Background

- Ask students to tell what they know about sound. Ask if anyone knows how sound travels from its source to our ears.
- Ask students to close their eyes and visualize, or picture in their mind, a guitar string vibrating back and forth as it is being plucked. Ask them to share what they see.

Preview the Book

Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is (genre, text type, fiction or nonfiction, and so on) and what it might be about.

- Show students the title page. Discuss the information on the page (title of book, author's name).
- Invite students to preview the rest of the book by looking at the photographs. Have them look at the glossary and index at the back of the book while you review their uses. Point out that the words are listed in alphabetical order and have page numbers after them to indicate where to go to find more information on each topic. Ask what page tells about vocal cords (page 8). Ask a volunteer to explain the difference between a glossary and an index (a glossary provides a definition for each word, whereas an index does not).

Introduce the Reading Strategy: **Visualize**

- Explain to students that good readers often visualize, or create pictures in their mind, while reading. Visualizing is based on the words used in the text and what a person already knows about a topic.
- Read page 8 aloud to students. Model how to visualize.
Think-aloud: Whenever I read a book, I always pause after a few pages to create a picture in my mind of the information I've read. Doing this helps me organize the important information and understand the ideas in the book. For example, on page 8, the author describes what happens when air passes through the back of the throat and over the vocal cords. When I read this explanation, I can picture the air moving over my vocal cords and vibrating so that you can hear the sound of my voice.
- Reread page 8 aloud to students and ask them to use the words on the page to visualize. Introduce and explain the [visualize worksheet](#). Have students draw on their worksheet what they visualized as they listened to the text on page 8. Invite students to share their drawings.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Cause and effect**

- **Discussion:** Discuss cause-and-effect relationships. Explain that a *cause* makes something happen, and the *effect* is what happens because of, or as a result of, the action or event. For example, if the temperature drops below 32 degrees Fahrenheit (0 degrees Celsius), a puddle will freeze. The *cause* is the temperature dropping; the *effect* is the puddle freezing.
- **Introduce and model:** To illustrate a cause-and-effect relationship from the text, have students turn to page 10. Read the page aloud as students follow along. Ask what the cause of the sound is (the air vibrating around the falling tree). Ask what the effect of the vibrating air is (the sound of a tree crashing to the ground).
- Explain to students that they will be looking for cause-and-effect relationships as they read the book.

Introduce the Vocabulary

- Remind students of the strategies they can use to work out words they don't know. For example, they can use what they know about letter and sound correspondence to figure out the word. They can look for base words, prefixes, and suffixes. They can use the context to work out meanings of unfamiliar words.
- Model how to apply word-attack strategies. Have students find the word *vibrates* on page 8. Explain that they can look at the letter the word begins with and then use what they know about syllables and vowels (one vowel sound per syllable), to sound out the rest of the word.
- Explain that to determine the meaning of an unfamiliar word, students can look for context clues or other information in the paragraph that explains the word's meaning. For example, the meaning of the word *vibrates* can be figured out by finding the context clue listed inside commas after the word (*or moves back and forth very quickly*). Further explain that the definition for bold words, such as *vibrates*, can be found in the glossary.
- Remind students that they should check whether a word makes sense by rereading the sentence in which it is found.


Set the Purpose

- Have students read the book to learn more about the sounds around them. Remind them to stop and visualize as they read to help them remember and understand what they're reading.

During Reading

Student Reading

- **Guide the reading:** Have students read to the end of page 8. Ask if they stopped to visualize, or create a picture in their mind, of any of the images the author described in the book.
- **Think-aloud:** *When I read about vocal cords vibrating in people's throats, I paused to picture in my mind how that would look. I used the guitar strings in the photograph on that page to help me visualize what it might look like inside a person's throat. I visualized a person opening her mouth to sing and the cords moving back and forth very quickly to create sound.*
- Have students read the remainder of the book. Encourage them to continue to visualize as they read the rest of the book. Remind them to continue thinking about the important information as they read.

 Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Reading Strategy

- Have students share any questions they had while they were reading. Ask how using the strategy of visualization helped them understand and remember what they read.
- **Think-aloud:** *When I read about sound volume, I paused to picture in my mind how much a lion's roar must vibrate. I envisioned a huge lion roaring very loudly and visible sound waves vibrating out from its mouth. This mental picture helped me understand what I had read and remember the information in the book.*
- **Independent practice:** Introduce, explain, and have students complete the visualize worksheet. If time allows, discuss their answers after they have finished.

Reflect on the Comprehension Skill

- **Check for understanding:** Have students review the text to find the cause of tiny bones in the inner ear vibrating (sound waves moving through the ear) and the effect of the vibration (the person hears a sound). Allow time for students to share their findings.
- **Independent practice:** Introduce, explain, and have students complete the [cause-and-effect worksheet](#). When they have finished, encourage them to discuss their work and explain their answers with references to the text.
- **Enduring understanding:** In this book, you learned how sounds are made and why some sounds are different from others. You also learned how your vocal cords make sounds and how your ears and brain allow you to recognize sounds. What are some of the sounds that you hear around you every day?

Build Skills

Grammar and Mechanics: Commas in a series

- Review or explain that whenever a list of three or more items is made, a comma must be placed between the items. Without the commas, the sentence would be difficult to read and understand. Listed items can be nouns, verbs, adjectives, or entire phrases or clauses. Remind students that this is only one of the many uses for a comma.

- Write the following sentence from page 6 on the board without commas: *They use sound to defend themselves attract a mate or signal warning.* Ask students to explain why this sentence doesn't make sense (as a run-on, this sentence is confusing to the reader). Direct students to page 6. Ask students to identify the location of the commas in the sentence. Ask a volunteer to come to the board and add commas in the correct places, separating the words in a list. Point out that the sentence makes much more sense with the correct punctuation.
- Have students turn to page 5 and ask them to follow along as a volunteer reads the last sentence aloud: *People, animals, and objects make sounds.* Point out that each of the nouns is separated by a comma. Talk about the location of the commas within the list. Point out that the last item (*objects*) is joined to the list by the word *and* following the comma.



Check for understanding: Have students turn to page 7. Ask them to find the series of words that is separated by commas (*drums, bagpipes, and stringed instruments*). Ask them to circle the commas and notice that the last item is added to the list after the word *and*.

- **Independent practice:** Ask students to work together to find another example of commas in a series in the book. Then ask them to write their own sentence describing at least three things that they brought to school today. (Example: *In my bag I have a book, an apple, and a juice box.*)

Word Work: **Compound words**

- Review or explain that two words can be combined to form a new word, called a *compound word*.
- Write the words *bagpipes*, *hard-working*, and *sound waves* on the board. Tell students that these are examples of different types of compound words. Each has two parts that make up one word meaning; some compound words are joined, some are separated by hyphens, and some are open.
- Ask students to identify the two separate words that make up each compound word. Write them on the board next to the corresponding compound word (*bag* and *pipes*, *hard* and *working*, *sound* and *waves*).
- Discuss how knowing the meanings of the words *bag* and *pipes* can help students understand the meaning of the word *bagpipes*. Remind students that they can use what they know about the words that make up a compound word to help them determine the meaning of an unfamiliar compound word.
- Have students turn to page 9 and find two compound words (*rubber band* and *shoebox*). Write the words on the board as well as the two parts that make up each compound word (*rubber* and *band*, *shoe* and *box*). Discuss the meanings of the word parts and the compound words.



Check for understanding: Have students turn to the glossary and find two entries that are compound words (*sound waves* and *vocal cords*). Tell them to circle the words and write the term *compound word* in the margin in order to help them remember the terminology.

- **Independent practice:** Introduce, explain, and have students complete the **compound words worksheet**. Discuss their answers aloud after they have finished.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, allow partners to take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have them practice visualizing how people hear sounds with someone at home.

Extend the Reading

Science Connection

Provide the necessary materials for students to perform the experiment described on page 9. After students have crafted their own shoebox instrument, have them work to create a song, either as a solo or a group. Have them perform their songs.

Informational Writing Connection

After completing the Science Connection exercise, have students write at least two paragraphs about the experience. One paragraph should be dedicated to answering the questions at the bottom of the experiment: *How are the sounds different? Why?*

Visit [Writing A-Z](#) for a lesson and leveled materials on informational report writing.

Skill Review

[Discussion cards](#) covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- use the reading strategy of visualizing to better comprehend and remember information in nonfiction text; complete a graphic organizer
- accurately recognize and explain cause-and-effect relationships in discussion and on a worksheet
- identify and accurately use commas in a series
- recognize and form compound words; identify compound words on a worksheet

Comprehension Checks

- [Book Quiz](#)
- [Retelling Rubric](#)