



## Summary

This book explains how sound travels, what determines pitch, volume, and how the human ear detects the vibration of sound waves.

Guided Reading Level	Lexile Level	100th word	Total Word Count
T	800	solid pg. 6	813

### Standards:

#### Common Core Language Arts

- Refer to details and examples in a text when explaining what the text says and when drawing inferences from the text
- Determine the meaning of general academic and domain-specific words or phrases
- Interpret information presented visually, orally, or quantitatively

#### Science

- Knows that the pitch of a sound depends on the frequency of the vibration
- Knows that vibrations move at different speeds in different materials
- Knows that waves have energy and interact with matter
- Understands that waves have characteristic properties

## Lesson Focuses for Guided Reading (Select lesson focus based on Student's needs)

Writing Craft	Comprehension	Reading Strategies Decoding, & Phonics	Academic Vocabulary	
Use specificity Use a variety of details to support main ideas Create and use informational text features	Summarizing Connecting text to self Using graphic features Asking questions	Self-monitoring and self-correcting Reading on for embedded definitions and supporting details Locating known and unknown words Reading text features	amplitude decibels eardrum echoes echolocation matter microscopic	molecules nerves particles pitch sound waves ultrasounds vibrations

## Lesson

1. Warm up for reading – Students read familiar books.
2. Introduction of **The Amazing Facts About Sound** – Introduce **The Amazing Facts About Sound** by looking at the cover photo and starting a discussion about the picture and what they already know about sound.  
Suggested questions to facilitate introductory conversation:
  - Look at the title of the book. What facts do you already understand about sound? (Students may understand about how the ear picks up vibrations. You can also talk about how sound can be loud/soft, high/low-pitched, or echoes.)
  - What questions do you have about sound?
  - How does the picture on the cover relate to sound?
3. Skimming and Scanning **The Amazing Facts About Sound** – Use this time to introduce or review your lesson focus strategies and/or skills.  
Suggested skimming and scanning prompts:
  - Look at the Table of Contents. Think about the questions you might have about sound. Which chapters would be a good place to look for answers?
  - Look at the words in bold print on pg. 6. Do you know what all these words mean? Where can you find more information about these words? Turn to the glossary and ask students about words that may be new to them.
  - Look at the diagram about sound waves on pg. 8. How can diagrams help you when you read? There are many diagrams and fact boxes in this book. Be sure to use them as you read.
  - Sometimes when you come to a word you don't know you can read on and use clues from the rest of the sentence. This is called using context clues. You can also get additional information or embedded information that might help you with that word.

4. Reading **The Amazing Facts About Sound** – Students read independently or with a partner.
5. After reading **The Amazing Facts About Sound** – Open the conversation with a question that relates to the comprehension strategy of summarizing. After a brief conversation about the contents of the book move to questions that support your lesson focus.  
Suggested after reading content connection questions:
  - Describe how sound travels. Explain why it travels differently in a solid, liquid, or gas. Why do animals hear sound better in water than in the air?
  - How does the human ear work?
  - What is the sound barrier?
  - Explain what pitch is and what determines pitch. What is ultrasound?
  - What determines loud and soft sounds? How is the loudness of a sound measured? Which sounds are harmful to people? Why?
  - Summarize how an echo works. How is this principle used in theaters?
 Suggested after reading lesson focus prompts:
  - I noticed (student's name) using (reading strategy) while you were reading. Did it help you with your reading? (Repeat this question to highlight different reading strategies or skills used by students.)
  - Did you think about what you knew about sound while you were reading? How did it help? Tell me about it.
  - Did you think about what questions you had before reading? How does this help?
  - Did you continue reading on for context clues or more information when you were stuck on a word? Tell me about it.
6. After Reading Application for **The Amazing Facts About Sound** – Have students complete the KWL reproducible.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**The Amazing Facts About Sound**

Directions: Think about the book \_\_\_\_\_ . What do you already know about this subject? What would you like to learn? Before reading the book, fill in the first two columns on the chart. After reading, fill in the third column with some things you have learned. Include page numbers where you found your information in the book.

What I Know	What I Wonder	What I Learned