

# COMMON CORE Lessons & Activities

# SOUND

Reading for Information

Higher-Order Thinking

Writing Prompts

Current Events Analysis

Vocabulary

Cause & Effect

Graphic Organizers

& More!

# REPRODUCIBLE

*One teacher is allowed to make copies for use in her/his classroom!*



## About this Book

This Common Core Lessons and Activities Book allows you to immediately meet new Common Core State Standards for English Language Arts, as well as Literacy and Writing in History/Social Studies. It is designed to supplement your Social Studies resources, adding new Common Core rigor, analysis, writing, inference, text-dependent questions, and more into your daily instruction.

## How to Use this Book:

- Work through the lessons and activities as a class to teach your students higher-order thinking, analysis, and 21<sup>st</sup> century skills necessary to meet new Common Core expectations.
- Allow students to work through the lessons independently to build and practice these new skills.
- Include technology, collaboration, presentation, and discussion in the activities as you desire—you can decide how in-depth to go.
- Watch your class develop new abilities to meet the rigor of Common Core State Standards, right before your eyes!

## Tips:

- Use some of the pages—or use them all—based on your grade, your students, your curriculum, and your needs.
- Use the pages at their current size, or if you prefer them to be 8-1/2" x 11", enlarge them 125% on your copy machine.
- Download graphic organizers labeled “GO” in the Table of Contents by going to:  
[www.gallopade.com/client/go](http://www.gallopade.com/client/go)
- Use the correlations grid to easily see which Common Core standards are covered in each lesson.

# Common Core Lessons & Activities: Sound

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**G:** Includes Graphic Organizer

**GO:** Graphic Organizer is also available 8½" x 11" online  
download at [www.gallopade.com/client/go](http://www.gallopade.com/client/go)

(numbers above correspond to the graphic organizer numbers online)

# Hearing Sound

Read the text and answer the questions.

Hearing is the ability to perceive sound by detecting vibrations. Hearing provides people with important information about the world around them. Hearing helps people to communicate more easily. Hearing helps people to stay safe by warning of danger. Hearing helps people know if someone else is in need of help. Hearing allows people to judge the distance and direction of moving objects. Hearing can also be a fun, relaxing activity, such as when listening to music or talking to a friend.

The ear is the primary organ used for hearing. The ear detects sound waves, and this allows people to hear sound. The ear is divided into three sections. The “outer ear” directs sound waves into the ear. The “middle ear” changes sound waves into vibrations of the eardrum, and the “inner ear” sends the vibrations as electrical signals to the brain.

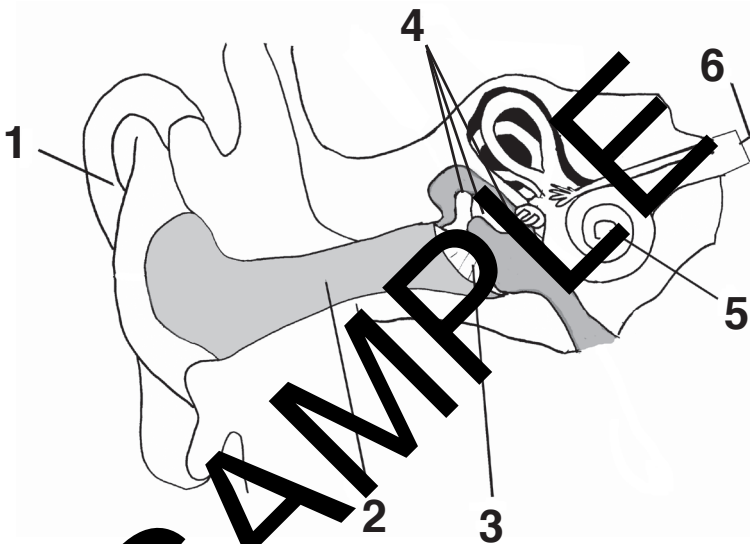
First, the pinna, the part of the ear that people can see, catches sound waves and directs them toward the ear canal. The sound waves then travel through the ear canal, a sound tube that leads inside the ear. At the end of the ear canal is the eardrum. The eardrum is a thin tissue that changes the sound waves into vibrations. Vibrations from the eardrum travel through three tiny bones, the hammer, anvil, and stirrup, to the cochlea. The cochlea, a small curled tube that looks like a snail’s shell, is filled with tiny hairs that detect vibrations and change the vibrations to electrical signals. Nerves carry the signals from the ear to the brain. The brain sorts and records the electrical signals and interprets them as sound. The electrical signals sent to your brain contain important information about the sound, including its pitch, loudness, the direction it came from, and distance it traveled.

1. A. Use the text to define hearing.  
B. What types of information does hearing provide?
2. A. What organ receives vibrations, turning them to electrical signals?  
B. What organ interprets the electrical signals as sound?
3. List three benefits of hearing described in the text.

4. Use the text to identify the function of each section of the ear.

Section	Function
Outer Ear	
Middle Ear	
Inner Ear	

5. Use the text to identify each part of the ear in the diagram.



- ☐ pinna
- ☐ cochlea
- ☐ nerve to the brain
- ☐ ear canal
- ☐ hammer, anvil, stirrup
- ☐ ear drum

6. A. Make a list of 6-10 different sounds you heard yesterday. Explain how that sound was useful to you.
- B. Imagine you are deaf (cannot hear). For each sound on your list, describe the possible results of not being able to hear that sound.

**Writing Prompt**

Describe the obstacles a deaf person faces. Use an online resource to research some of the tools that have been invented to help deaf people communicate and stay safe.

## CAUSE & EFFECT

# Sound

Complete the graphic organizer by identifying sources, characteristics, and effects of sound.

### Sources:

### Characteristics


--

**of Sound:**

**Effects:**

SAMPLE

## EXPERIMENT ANALYSIS

# A Sound Experiment

A variable is a factor in an experiment that is changed to affect the outcome of the experiment. A constant is a part of an experiment that stays the same.

Look at the data from each experiment and answer the questions.

Experiment 1	Object	Distance stretched	Pitch observed
(used finger to pluck objects)	Thick rubber band	5 centimeters	low pitch
	Thin rubber band	5 centimeters	medium pitch

1. A. What factor was constant in Experiment 1?
- B. What variable was tested in Experiment 1?
- C. Summarize the results of Experiment 1.

Experiment 2	Object	Distance stretched	Pitch observed
(used finger to pluck objects)	Thin rubber band	5 centimeters	medium pitch
	Thin rubber band	10 centimeters	high pitch

2. A. What factor was constant in Experiment 2?
- B. What variable was tested in Experiment 2?
- C. Summarize the results of Experiment 2.
- D. Compare and contrast Experiment 1 with Experiment 2.

Experiment 3	Object (volume)	Volume filled (water)	Pitch observed
(used metal fork to strike objects)	Glass bottle (100 ml)	10 milliliters	high pitch
	Glass bottle (100 ml)	50 milliliters	medium pitch
	Glass bottle (100 ml)	90 milliliters	

3. A. What variable was tested in Experiment 3?
- B. Describe how variable changes affected the pitch observed.
- C. Use the data to predict the pitch of the glass filled with 90ml.

Experiment 4	Object	Diameter	Length	Pitch observed
(used metal fork to strike objects)	Tin pipe	1 centimeter	10 centimeters	high pitch
	Tin pipe	1 centimeter	50 centimeters	
	Tin pipe	1 centimeter	90 centimeters	low pitch

4. A. List two constants in Experiment 4.
- B. What variable was tested in Experiment 4?
- C. Use the data to predict the pitch of a tin pipe with diameter of 1 centimeter and length of 50 centimeters.
- D. Summarize the results of Experiment 4.



# Common Core Lessons & Activities Books

## Social Studies Titles:

- Declaration of Independence
- U.S. Constitution
- Bill of Rights
- Road to the Civil War
- The Civil War: Key Battles & Events
- Jamestown
- Key Events of World War II
- Civil Rights Movement
- Branches of Government
- Basic Economic Concepts
- Women's Suffrage and the 19th Amendment
- The American Revolution
- Explorers
- The Olympics
- Underground Railroad
- Forms of Government: Democracy, Monarchy, & Oligarchy & More
- Ancient Greece
- Ancient Egypt
- Native Americans
- Indian Removal & the Trail of Tears
- Inventors & Inventions
- Map Skills
- Westward Expansion
- Communities

## Science Titles:

- Habitats
- States of Matter
- Cell Structure
- Weather
- Water Cycle
- Energy
- Solar System
- Sound
- Mammals
- Light
- Rocks and Minerals
- Oceans
- Heredity & Genetics
- Magnetism
- Natural Resources
- Ecosystems
- Force & Motion
- History of the Earth
- Life Cycles
- Wave Properties
- Landforms
- Classification of Organisms
- Electricity
- The Scientific Method

# COMMON CORE Lessons & Activities

Are you expected to change how you teach because of new CCSS for English Language Arts & new CCSS for Literacy and Writing in History/Social Studies and Science?

Are you expected to continue to meet existing science and social studies standards, AND integrate new, more rigorous expectations for reading, writing, analysis, inference, and more into your daily instruction?

This series of 48+ little books is a **HUGE** help!

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Uncommon  
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-Amy Johnson, Common Core Specialist

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