



[KidsHealth.org/classroom](http://KidsHealth.org/classroom)

## Teacher's Guide

This guide includes:

- Standards
- Related Links
- Discussion Questions
- Activities for Students
- Reproducible Materials

## Standards

This guide correlates with the following National Health Education Standards:

Students will:

- Comprehend concepts related to health promotion and disease prevention to enhance health.
- Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
- Demonstrate the ability to access valid information and products and services to enhance health.
- Demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- Demonstrate the ability to use decision-making skills to enhance health.
- Demonstrate the ability to use goal-setting skills to enhance health.
- Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- Demonstrate the ability to advocate for personal, family, and community health.

National Health Education Standards: [www.cdc.gov/healthyschools/sher/standards/index.htm](http://www.cdc.gov/healthyschools/sher/standards/index.htm)

We listen to sounds and interpret their meanings all day, but how does your body do it? These activities will help your students understand their sense of hearing and learn how to protect their ears.

## Related KidsHealth Links

### Articles for Kids:

**Movie: Ears**

[KidsHealth.org/en/kids/ears-movie.html](http://KidsHealth.org/en/kids/ears-movie.html)

**Your Ears**

[KidsHealth.org/en/kids/ears.html](http://KidsHealth.org/en/kids/ears.html)

**Quiz: Ears**

[KidsHealth.org/en/kids/earquiz.html](http://KidsHealth.org/en/kids/earquiz.html)

**Taking Care of Your Ears**

[KidsHealth.org/en/kids/ear-care.html](http://KidsHealth.org/en/kids/ear-care.html)

**What's Hearing Loss?**

[KidsHealth.org/en/kids/hearing-impairment.html](http://KidsHealth.org/en/kids/hearing-impairment.html)

**Can Loud Music Hurt My Ears?**

[KidsHealth.org/en/kids/rock-music.html](http://KidsHealth.org/en/kids/rock-music.html)

**What Is an Ear Infection?**

[KidsHealth.org/en/kids/ear-infection.html](http://KidsHealth.org/en/kids/ear-infection.html)

**What's Earwax?**

[KidsHealth.org/en/kids/earwax.html](http://KidsHealth.org/en/kids/earwax.html)

**Swimmer's Ear**

[KidsHealth.org/en/kids/swimmers-ear.html](http://KidsHealth.org/en/kids/swimmers-ear.html)

**Going to the Audiologist**

[KidsHealth.org/en/kids/hearing-test.html](http://KidsHealth.org/en/kids/hearing-test.html)

**Senses Experiment: Do You Hear What I Hear?**

[KidsHealth.org/en/kids/experiment-hear.html](http://KidsHealth.org/en/kids/experiment-hear.html)

**Senses Experiment: Model Eardrum**

[KidsHealth.org/en/kids/experiment-eardrum.html](http://KidsHealth.org/en/kids/experiment-eardrum.html)

### Special Needs Factsheet for Teachers:

**Hearing Impairments**

[KidsHealth.org/en/parents/hearing-factsheet.html](http://KidsHealth.org/en/parents/hearing-factsheet.html)

## Discussion Questions

*Note: The following questions are written in language appropriate for sharing with your students.*

1. What parts of our bodies help us to hear and understand sound?
2. What kinds of things can damage your hearing? What causes hearing loss for some people?
3. Name some kinds of sounds you like. Name some sounds that get on your nerves. Why do you think some noises appeal to you more than others?
4. What are some ways you can take care of your ears?
5. "Are you listening?" is a common question teachers ask. But are listening and hearing the same thing?
6. What do your ears do beside help you hear?



## Activities for Students

*Note: The following activities are written in language appropriate for sharing with your students.*

### The Ins and Outs of Your Ears

#### Objectives:

Students will:

- Explore their sense of hearing
- Learn the parts of the ear and how ears transmit sound

#### Materials:

- Computer with Internet access
- “The Ins and Outs of Your Ears” handout

#### Class Time:

- 1 hour

#### Activity:

Just like a storybook, your ears have three parts: a beginning, middle, and end. These parts are called the outer ear, the middle ear, and the inner ear, and each part has a specific function. To find out more about how your ears detect and interpret sounds, read the KidsHealth articles related to hearing, then take the online quiz on ears ([KidsHealth.org/en/kids/earquiz.html](http://KidsHealth.org/en/kids/earquiz.html)) to see how much you learned. Next, label a diagram of the ear on “The Ins and Outs of Your Ears” handout.

#### Extensions:

1. Have students read the KidsHealth.org articles about hearing, then create posters for the classroom or hallways promoting safety tips related to their ears and hearing.
2. Try the two KidsHealth.org Senses Experiments related to hearing and write down the results.
3. The next time you’re in a pool, put your head under the water and listen to how things sound different. Try snapping your fingers out of the water, then underwater. Try tapping the ladder. Try talking to someone. Discuss how traveling through air or water affects sounds we hear.
4. Research how bats, dolphins, whales, and other animals use echolocation to “hear” what’s around them. Then choose one animal and write a brief report explaining how it uses echolocation.



## Sounds of Silence

### Objectives:

Students will:

- Identify everyday sounds and background noises
- Compare indoor sounds and outdoor sounds

### Materials:

- Paper, pencil or pen

### Class Time:

- 30 minutes

### Activity:

What does silence sound like? Is there a place or time when there is absolutely no sound? What are background noises? Let's investigate. First, let's be quiet for 2 minutes. Put your head down and really listen to the sounds of a quiet classroom. Now, without making a sound, jot down every noise you heard in the 2 minutes. What does a quiet classroom sound like? What background noises do we hear now that usually are drowned out by voices and other activities in class? When everyone is done, we'll share your findings. Now let's do the same activity outside. For the next 5 minutes, silently jot down all of the sounds you hear, then we'll compare notes. How does your brain figure out which sounds to listen to and which ones to drown out?

### Extensions:

1. For 5 minutes before you go to sleep tonight, listen to all of the sounds you hear inside and outside. When you wake up, do the same thing. Are the sounds the same or different?
2. Some hearing-impaired kids use sign language to communicate. Check out books or online resources on American Sign Language (ASL) and learn a few signs.

## Reproducible Materials

### Handout: The Ins and Outs of Your Ears

[KidsHealth.org/classroom/3to5/body/functions/hearing\\_handout1.pdf](http://KidsHealth.org/classroom/3to5/body/functions/hearing_handout1.pdf)

### Quiz: Hearing

[KidsHealth.org/classroom/3to5/body/functions/hearing\\_quiz.pdf](http://KidsHealth.org/classroom/3to5/body/functions/hearing_quiz.pdf)

### Answer Key: Hearing

[KidsHealth.org/classroom/3to5/body/functions/hearing\\_quiz\\_answers.pdf](http://KidsHealth.org/classroom/3to5/body/functions/hearing_quiz_answers.pdf)

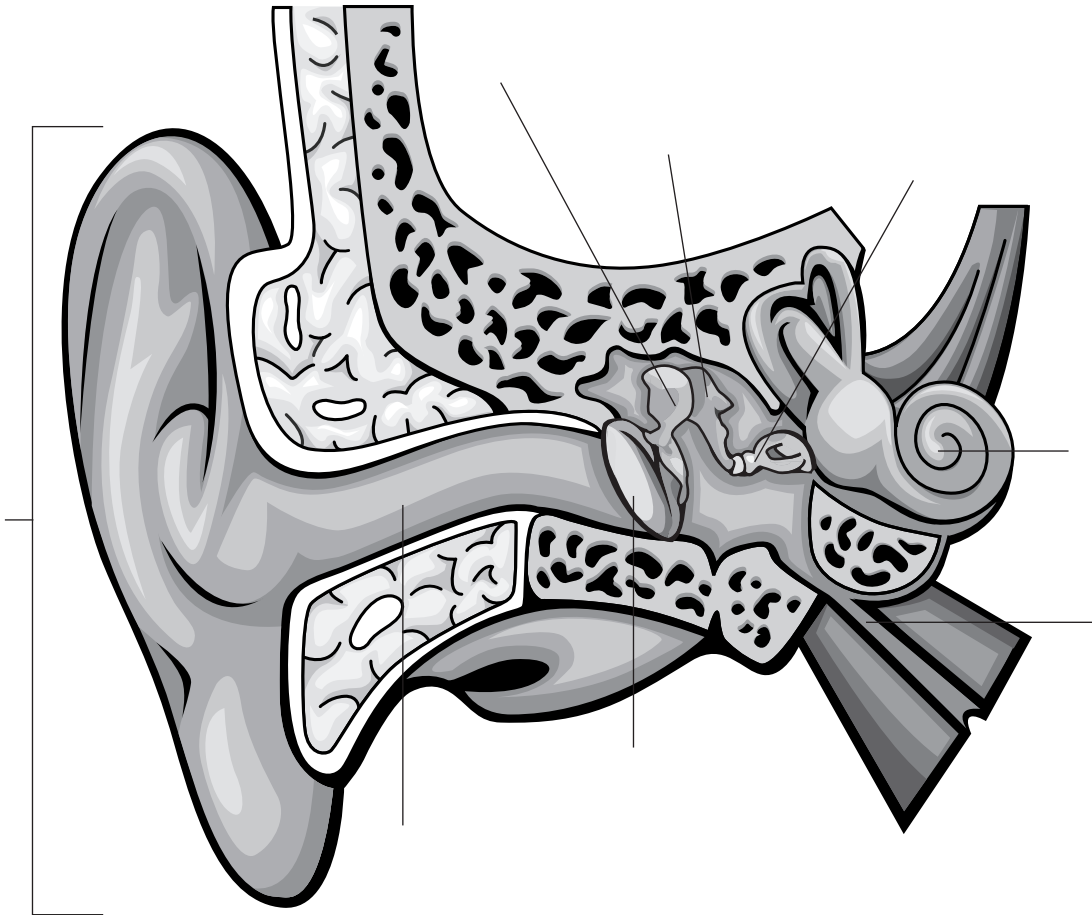


Name: \_\_\_\_\_

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

## Ins and Outs of Your Ears

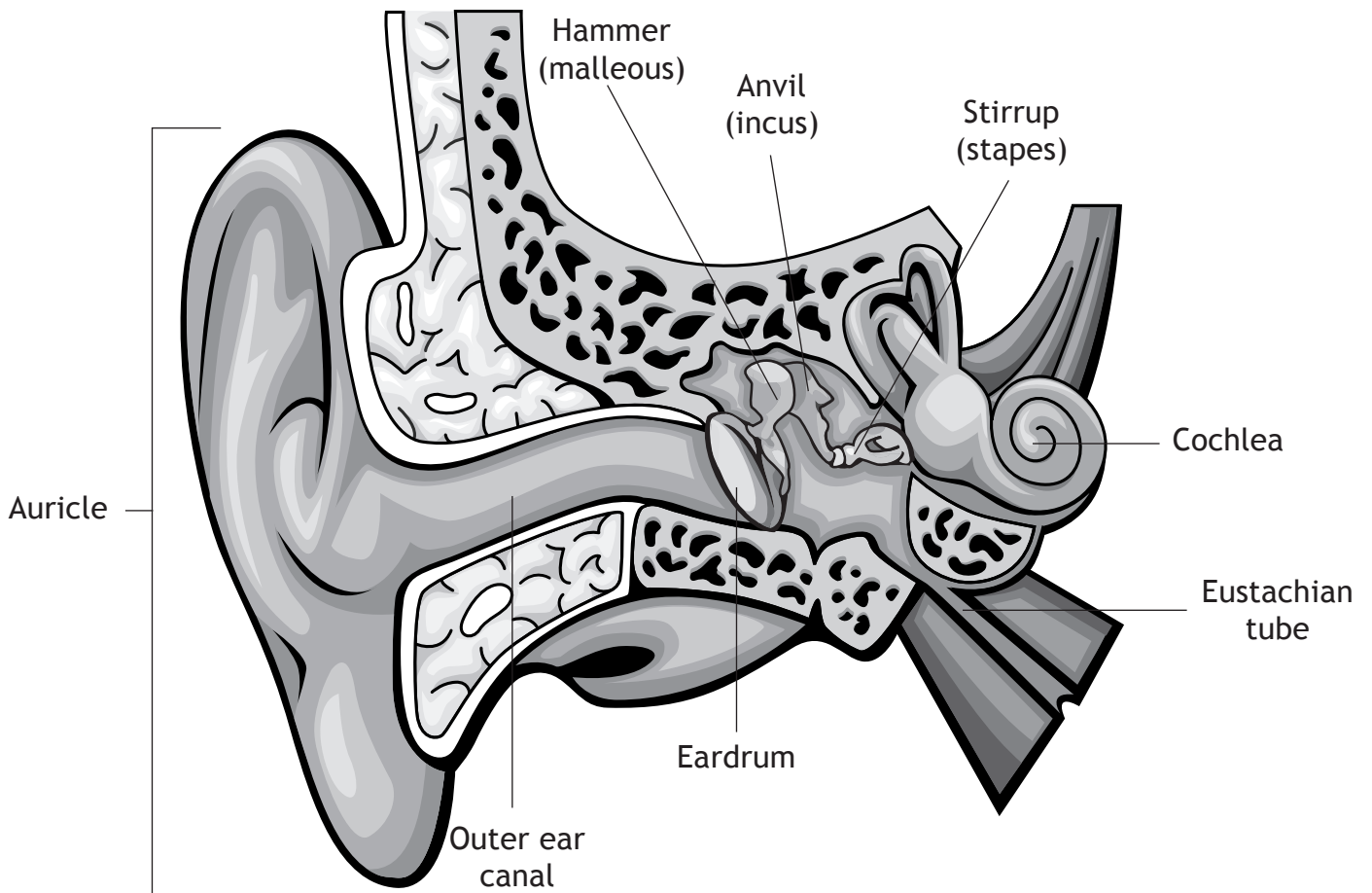
Directions: Label the ear, referring to the KidsHealth.org article "Your Ears." Then draw two lines to divide the ear into outer, middle, and inner parts, and label the three parts.





## Ins and Outs of Your Ears Answer Key

Directions: Label the ear, referring to the KidsHealth.org article "Your Ears." Then draw two lines to divide the ear into outer, middle, and inner parts, and label the three parts.





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

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

## Quiz

Instructions: Answer each question.

1. Your ears:
  - a. collect and process sounds
  - b. send signals to your brain
  - c. help you keep your balance
  - d. all of the above
2. True or false: Earwax contains chemicals that fight off infections (germs) that could hurt the skin inside the ear canal.
3. True or false: People who are exposed to loud noises over long periods of time might lose their hearing permanently.
4. True or false: Listening to loud music using earbuds can damage your hearing.
5. Fill in the blanks using the word bank at the bottom of the page:

The main job of the outer ear is to collect \_\_\_\_\_. The middle ear takes sound \_\_\_\_\_ and turns them into \_\_\_\_\_ that are delivered to the inner ear. When sound reaches the inner ear, the vibrations (sounds) cause tiny \_\_\_\_\_ on the cells to move, creating \_\_\_\_\_ signals that the \_\_\_\_\_ understands as sound. The brain puts it all together and that's how you hear and process sounds.

*brain*

*hairs*

*nerve*

*sound*

*vibrations*

*waves*



## Quiz Answer Key

1. Your ears:
  - a. collect and process sounds
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4. True or false: Listening to loud music using earbuds can damage your hearing.
5. Fill in the blanks using the word bank at the bottom of the page:

The main job of the outer ear is to collect sound. The middle ear takes sound waves and turns them into vibrations that are delivered to the inner ear. When sound reaches the inner ear, the vibrations (sounds) cause tiny hairs on the cells to move, creating nerve signals that the brain understands as sound. The brain puts it all together and that's how you hear and process sounds.

*brain*

*hairs*

*nerve*

*sound*

*vibrations*

*waves*