

## 5<sup>th</sup> Grade Body Systems

### Learning Objectives

- I can identify the major the major structures and functions of the eyes and ears (SOL 5.1b).

5.1 The student will analyze the impact of positive health behaviors and risky behaviors on personal health.

### Body Systems

b. Identify the major structures and functions of the eyes and ears.

### Teacher Notes

- Visual aid diagram of eyes and ear
- Vocabulary – Eyes: choroid, ciliary body, cornea, fovea, iris, lens, optic nerve, pupil, retina, sclera, ear
- Internet access for videos
- Posters online, Images, Videos (see attached examples)

### Lesson Steps

#### *Step 1 (Engage learners/access prior knowledge)*

- Why is hearing and vision important to you?  
(Write answers on white board and then take turn to share answers with a partner) (e.g. think-pair-share)
  - ❖ Students will then share out aloud with whole group.

#### *Step 2 (New information – direct instruction/teacher-facilitated learning)*

- Teacher will explain to students using a diagram of ears and eyes. Explain to students that sound transfers into the ear canal and causes the eardrum to move. The eardrum will vibrate with vibrations from the different sounds. These sound vibrations make their way through the ossicles to the cochlea. Sound vibrations make the fluid in the cochlea travel like ocean waves.
- Tell students that the ears are organs that provide two main functions — hearing and balance — that depend on specialized receptors called hair cells.
- Share video such as how the ears work:  
<https://www.youtube.com/watch?v=HMxoHKwWmU8>
- Explain to students that their eye works in a similar way to a camera. When you look at an object, light reflected from the object enters the eyes through the pupil and is focused through the optical components within the eye. The front of the eye is made of the cornea, iris, pupil and lens, and focuses the image onto the retina.
- How the eyes work - <https://www.youtube.com/watch?v=syaQgmx5i0>

*Step 3 (Application – how student will apply/practice new learning)*

- Print diagram of ear for student to work on in class (see attached)

### Assessments

Questions:

1. Identify three ways to protect hearing.

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_

2. Identify 3 ways to protect sight.

- (a) \_\_\_\_\_
- (b) \_\_\_\_\_
- (c) \_\_\_\_\_

3. Quiz on the Ear (see attached)

### Extensions/Connections

- NEI Ask A Scientist - Eye Myths and Facts  
<https://www.youtube.com/watch?v=h83zPt2A-aU>
- Kids Health - Earbuds <http://kidshealth.org/en/teens/earbuds.html?WT.ac=t-ra>

### Resources/References

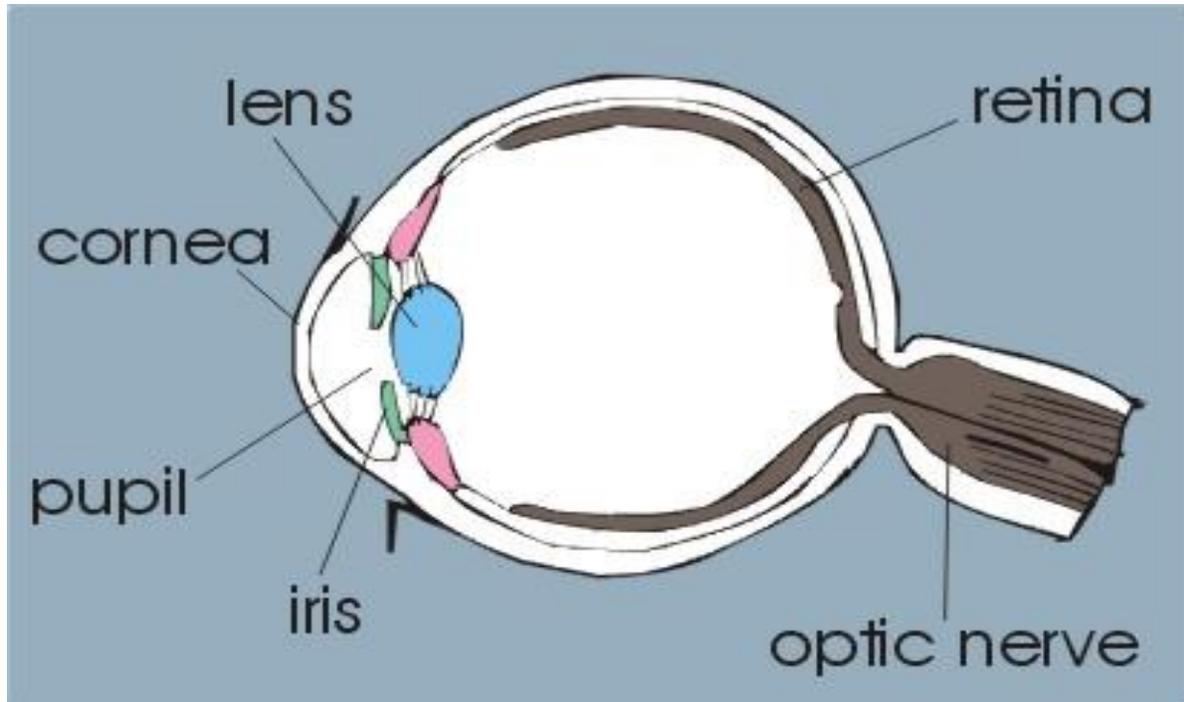
- Anatomy of the Eye- <https://www.umkelloggeye.org/conditions-treatments/anatomy-eye>
- Kids Health- Can Loud Music Hurt My Ears? <http://kidshealth.org/en/kids/rock-music.htm>
- Kids Health- Your Eyes <http://kidshealth.org/en/kids/eyes.htm>
- Kids Health- Ears <https://kidshealth.org/en/teens/ears.html?WT.ac=t-ra>

### Handout

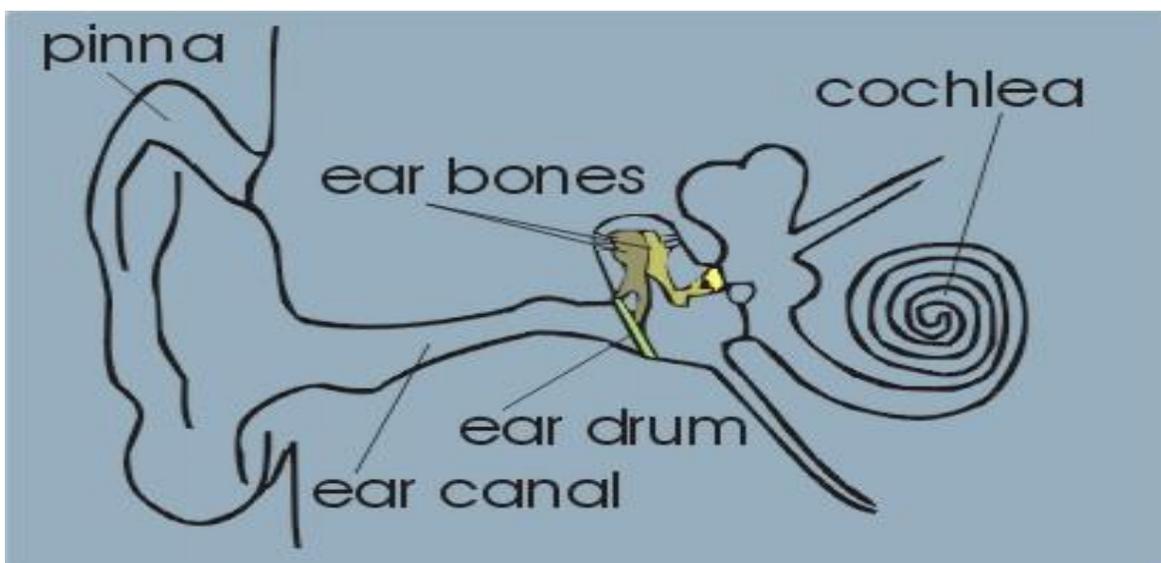
See next page(s) for any handout(s). Design for print and/or providing electronically.



## EYE



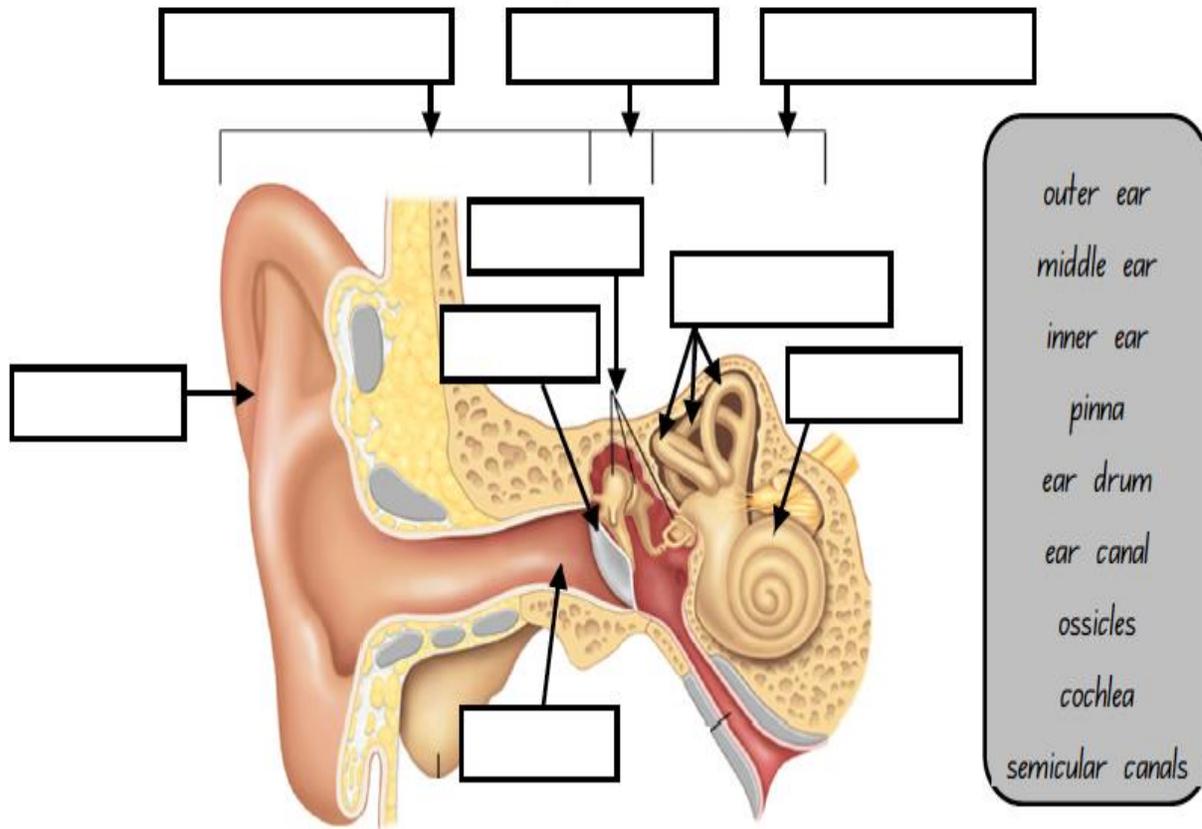
## EAR





# The Ear

Label all the parts of the ear.



Name \_\_\_\_\_

Grade \_\_\_\_\_

Quiz – Ear

1. The ear does which of the following job(s)? (a) collect sound (b) process sound (C) send sound signal to your brain (d) all of the above
  -
2. The ear helps you keep your balance. (a) true (b) false
  -
3. Which part of the ear takes in sound waves and turns them into vibration? (a) ear canal (b) inner ear (c) eardrum (d) middle ear
  -
4. Which of the following is a good way to take care of your ear?
  - (a) Wear an earplug at a loud music concert.
  - (b) Don't poke your ears with cotton swabs.
  - (c) Keep the volume down on your music player.
  - (d) All of the above
  
5. What separates the outer ear from inner ear?
  - (a) Auricle
  - (b) The ear wall
  - (c) Eardrum
  - (d) Cochlea