

Name _____

Ears and Hearing

Today we are learning about the sense of hearing. Your ears work for you all day long. They tune into all kinds of sounds. They help you learn during school. They help you stay safe on the playground.

Your ears work like a drum. A drum is just a thin membrane, or skin, that's been pulled tight over a frame. When you hit a drum, the membrane begins to **vibrate**. To **vibrate** means to move back and forth rapidly. The vibrations of the drum create vibrations in the air. The vibrations in the air are called sound waves!



Now back to your ears. Your ears are made up of three parts: the **outer ear**, the **middle ear**, and the **inner ear**.

The part of your ear that you see on the side of your head is called the outer ear. The outer ear's shape is good for catching sounds. That's the outer ear's main job—to catch sounds and guide them into the middle ear.

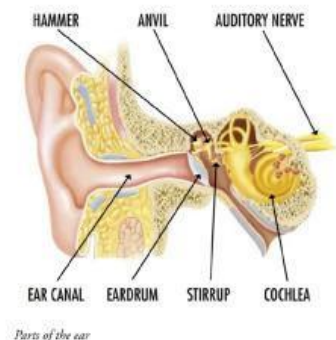
The outer ear has an opening in it called the ear canal. The ear canal is a tube that lets sound enter your skull.

The ear canal is lined with hairs and glands that produce ear wax. Ear wax helps to protect the ear. It also helps keep germs out of your ears. The ear canal leads to the eardrum.

The **eardrum** is a thin membrane that is stretched tightly across the ear canal. When sounds reach the eardrum, they make the eardrum vibrate.

The middle ear is made up of three small bones: the hammer, the anvil, and the stirrup. These bones are named for things they look like. They are very tiny. The stirrup is the size of a grain of sand. It is the smallest bone in the body. All three bones are very sensitive to sound waves. They vibrate when they are struck by sound waves and they pass vibrations to a part in the inner ear called the **cochlea**.

The cochlea is a fluid-filled coil, shaped like a snail's shell. It is lined with hairs, which are connected to nerves. Sound waves make these hairs vibrate. Then, the nerves connected to the hairs send messages to the brain through the auditory nerve. That's how your ears let you hear!



1. Why did the author include the diagram next to paragraph 6?
 - a. To show the reader how to clean their ears.
 - b. To show the reader the parts of an ear.
 - c. To show the reader why ears are important

2. What would be another good title for this selection?
 - a. "Ouch! My Ear Hurts!"
 - b. "Don't Believe Everything You Hear"
 - c. "Our Amazing Ears!"

3. What are vibrations in the air called?
- a. Eardrums
 - b. Sound waves
 - c. Cochlea
4. What is the central idea of this selection?
- a. How we hear sound waves
 - b. The ear is amazing!
 - c. The parts of the ear work together to enable hearing.