

Ear Anatomy

We hear with our ears. When people have trouble hearing speech or sounds of daily life, they are hearing impaired. They have a hearing loss. Hearing impaired people are like hearing people. They have the same feelings and can learn.

Hearing loss happens when parts of the ear aren't working right. Let's look at the parts of the ear.

Outer Ear

The **outer ear** is part of the ear we can see. It helps gather sounds that move down the **ear canal**. At the end of the outer ear is a thin piece of skin called the **eardrum**. The eardrum moves when sound hits it.

Middle Ear

The **middle ear** is a very small space filled with air. It holds 3 small bones. They each have a special name. The names of the bones are the **hammer**, the **anvil**, and the **stirrup**. When the eardrum moves, the 3 small bones move back and forth against each other. If the outer or middle ear is not working right, a person has a **conductive hearing loss**.

Inner Ear

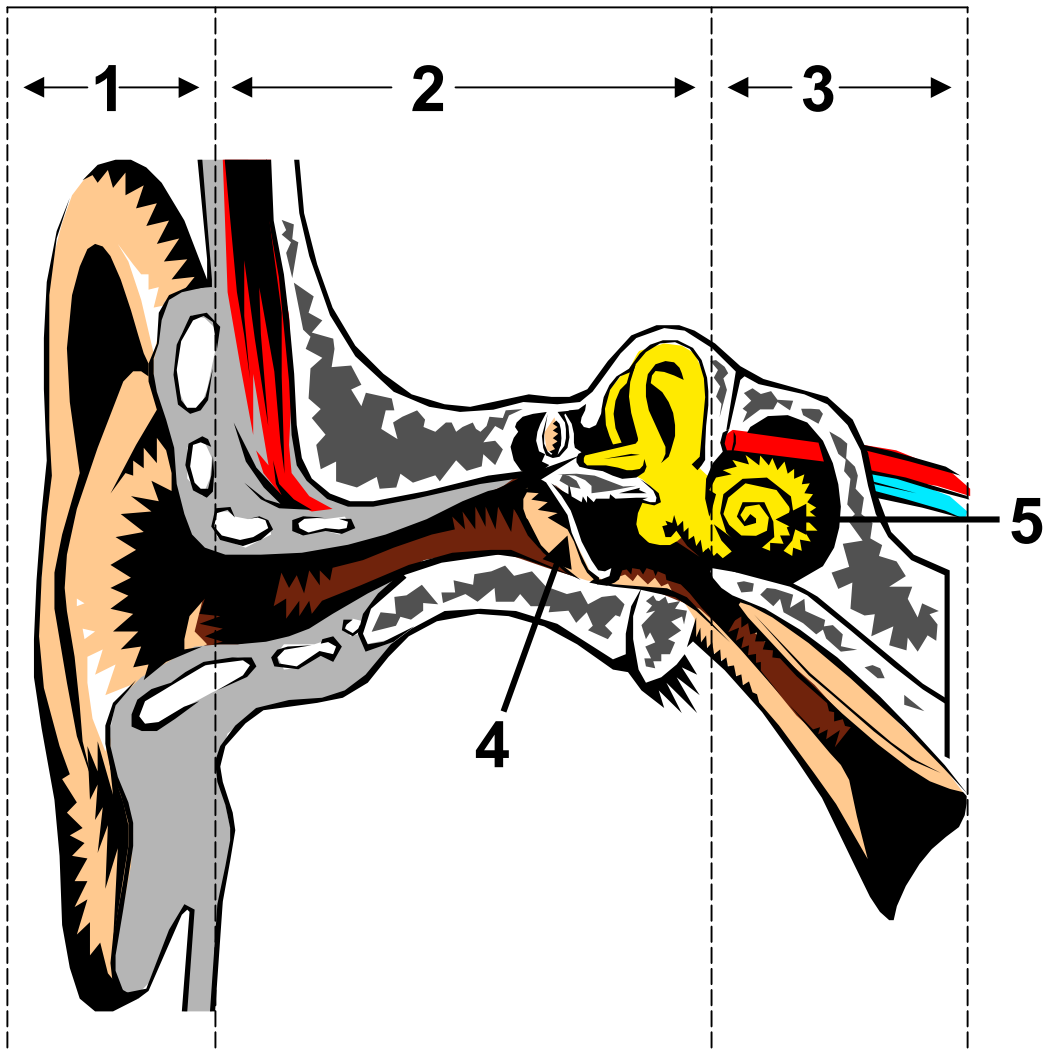
The **cochlea** is one of the two main parts of the inner ear. The cochlea looks like a snail shell. The cochlea has small hair cells that help us hear. The other main part of the inner ear helps with balance. The sound moves from the cochlea to the brain. The brain helps us understand what we have heard. If any part of the inner ear is not working right, a person has a **sensory-neural hearing loss**.

Name _____

Date _____

Ear Anatomy

Directions: Name the 5 parts of the ear indicated below.



1. _____
2. _____
3. _____
4. _____
5. _____

How Noisy Is It?

Directions: Estimate the noise level of the following sounds and record your response in the first column. Some clues are given for comparison.

<i>Sound</i>	<i>Estimate Decibel Level (dB)</i>	<i>Actual Decibel Level (dB)</i>
Leaves rustling	10 dB	
Soft whisper		
Refrigerator		
Ordinary speech	60-65 dB	
Window air conditioner		
Blender		
Noisy restaurant		
Busy traffic		
Alarm clock		
Screaming child		
Live rock music		
Jackhammer		
Motorcycles (driver's seat)		
Rifle firing		
Rocket launching	180 dB	



Rules of Thumb

Sounds could be a noise hazard if:

- at arm's length from someone, you have to speak loudly for someone to hear you over the noise or music



- you have ringing or buzzing sounds in your ears after exposure and sounds seem muffled



Always protect hearing when around loud sounds!