

Brain Facts: Chapter 2 Senses and Perception Learn Your Semantics! Hearing

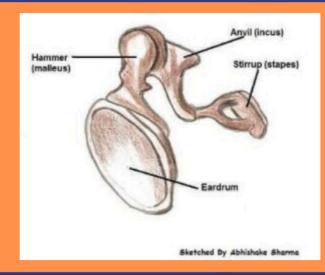
Tympanic Membrane

Also known as the **eardrum**. Vibrates when surrounding air pressure decreases and sends vibrations to the **amplification bones**.



Amplification Bones

Three bodies that improve the quality of the vibrations. They are:
The Malleus (also known as the hammer), The Incus (also known as the anvil), and the stapes (also known as the stirrup) which pushes vibrations to the Oval Window.



Oval Window

A membrane that separates the middle ear and the **cochlea**. It converts the vibrations given to it by the **stapes** to pressure waves it then sends to the **Cochlea**.

Cochlea

A fluid-filled, snail-shaped structure in the inner ear. It **transducts** the pressure waves from the **oval window** into **electrical potentials**, via the use of **hair cells**.

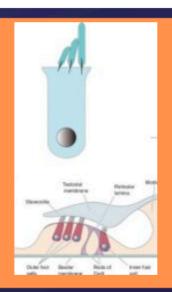


Baislar Membrane

The layer of cells spiraling the **Cochlea's** inner coil that differentiate between frequencies (high pitch to low pitch).

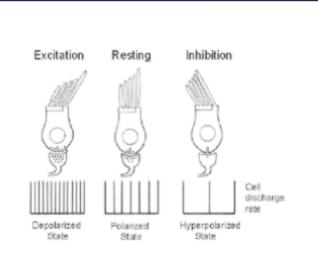
Hair Cells

Structures lining the **Baislar Membrane** that **transduct** frequencies into **electrical potentials.**



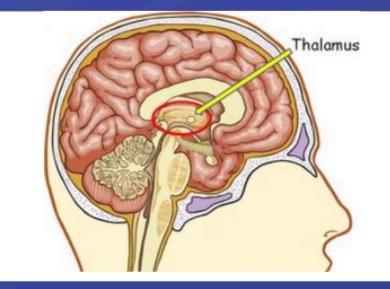
Sterocilia

Structures that extend from hair cells that facilitate ion migration in response to fluid movement in the Cochlea. Part of the system that allows the Cochlea to create electrical potentials.



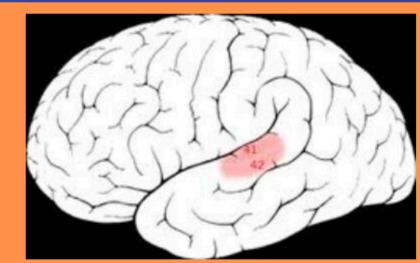
Thalamus

The brain's main sensory hub.



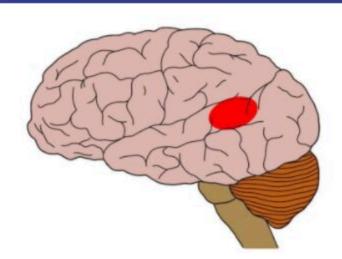
Primary Auditory Cortex

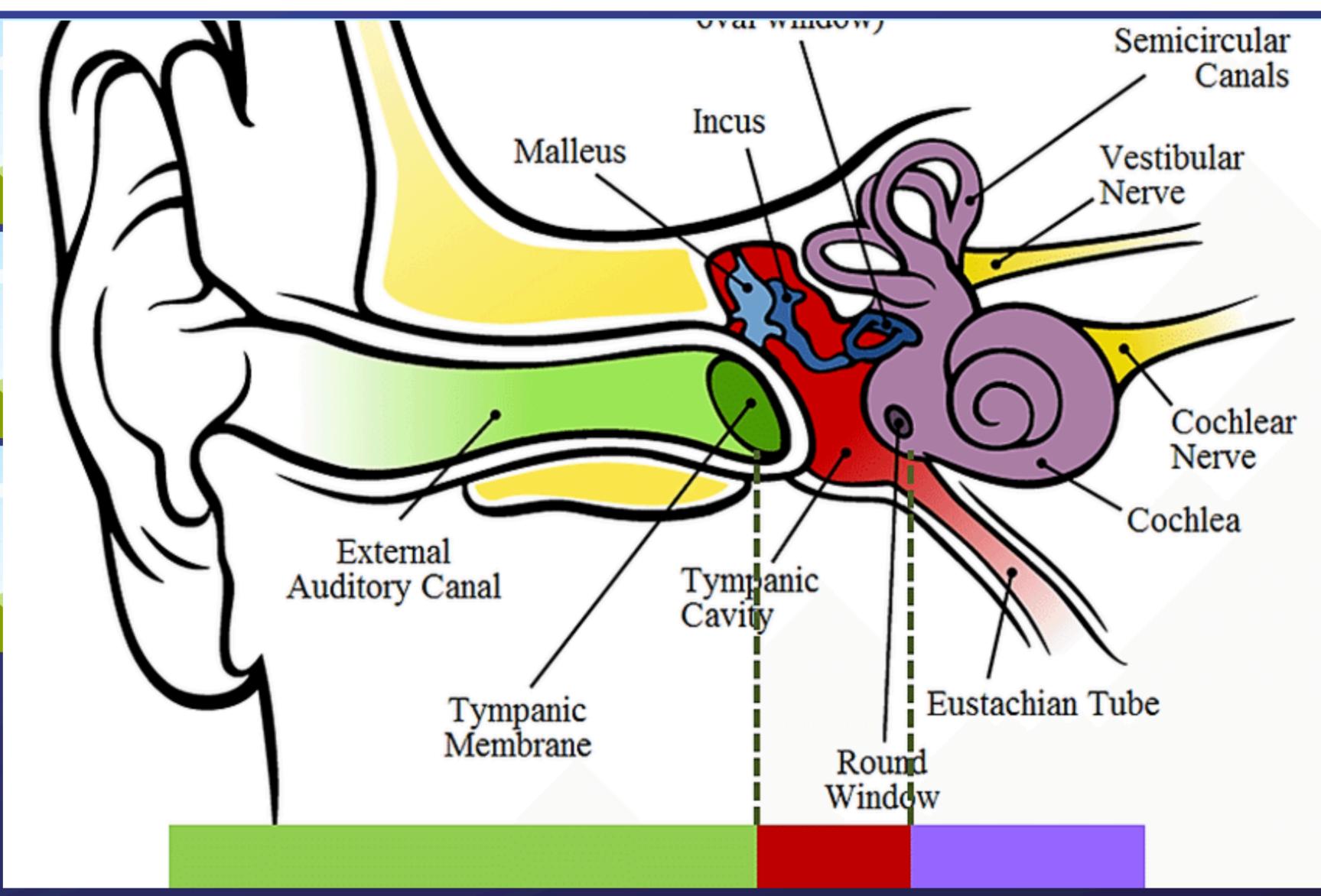
The first processing center for hearing that handles intensity, frequency, etc.



Wernicke's Area

A part of the brain that intereprets heard language.







Visit our website for more resources!:

https://simplyneuroscience.wixsite.com/official