

Name _____

The Magical Process of Hearing: How Our Ears Perceive and Process Sound

Short Answer Key

1. The eardrum in the middle ear plays a role in capturing sound waves and transmitting them to the ossicles (middle ear bones).
2. The middle ear amplifies sound vibrations by transmitting them from the eardrum to three bones: the malleus (hammer), incus (anvil), and stapes (stirrup).
3. Hair cells in the inner ear are responsible for converting vibrations into electrical signals that the brain can interpret as sound. They play a crucial role in hearing.
4. Once electrical signals from hair cells reach the auditory nerve, they are transmitted to the auditory cortex in the brain, where they are processed into the sounds we perceive.
5. A high-pitched sound has a high frequency, such as a bird's chirp. A low-pitched sound has a low frequency, like the deep tones of a tuba.

