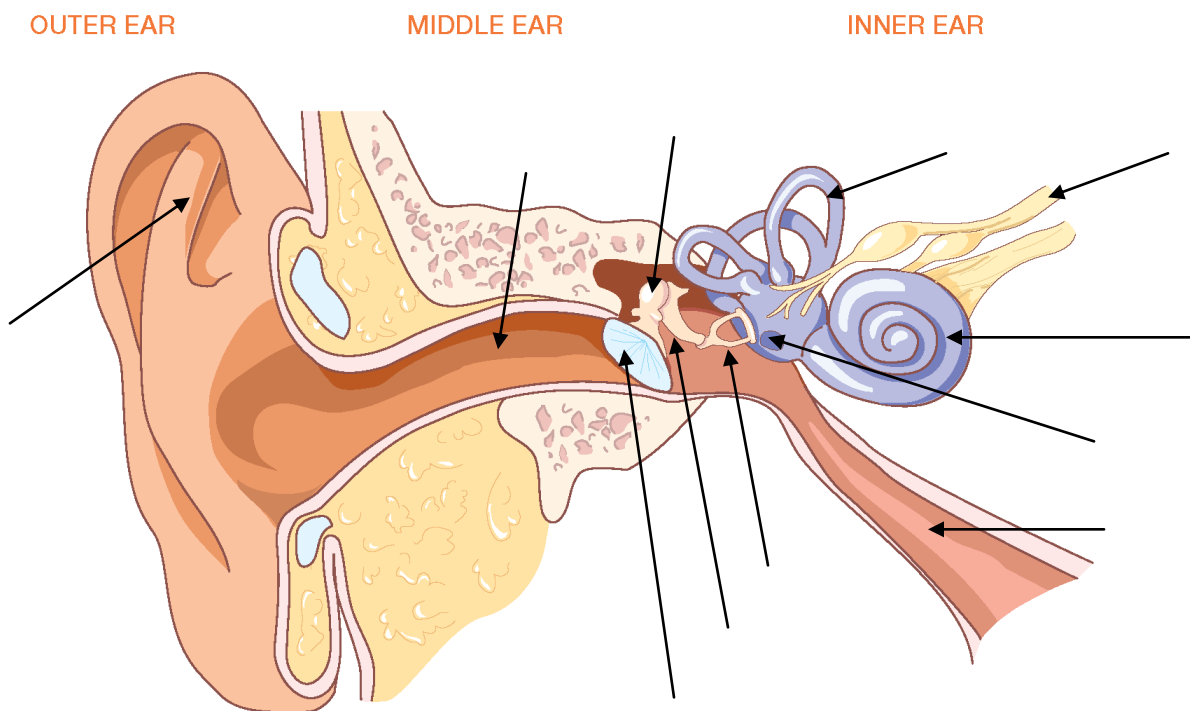


Auditory Senses Follow Up Questions:

(look these up using the two links on the website under "Auditory Background Information" labeled Hearing and Balance)

Label the following structures:

- Eustachian tube
- Pinna (auricle)
- External Auditory Meatus (canal)
- Tympanic membrane
- Malleus
- Incus
- stapes
- Cochlea
- Semicircular canal
- Round Window
- Auditory / Cochlear Nerves



- 1) You have specialized nerve cells called hair cells found in several places in your inner ear. They are involved with both hearing and balance. What has to happen to a hair cell to cause it to send nerve messages?
- 2) Trace the pathway that sound waves take from the air to the time when they are detected by the hair cells. (List the parts the waves travel through in order)

3) What are the three different types of balance related information you can detect with your inner ear? Describe each and name the structures of the inner ear that provide each type?

a) .

b) .

c) .

4) Explain how the semicircular canals function to achieve your sense of dynamic equilibrium (rotational).

5) What does spinning in circles do in the semicircular canals that cause the sensation of dizziness?

6) Explain 2 ways your sense of hearing allows you to figure out the location of a sound source. Why are humans unable to do the same thing under water?