

Name _____

Date _____

Section _____

The _____ corresponds to the indicated Learning Outcome(s) listed at the beginning of the laboratory exercise.

Ear and Hearing

32

Part A Assessments

Match the terms in column A with the descriptions in column B. Place the letter of your choice in the space provided. **1 2**

Column A

- a. Auditory tube
- b. Ceruminous gland
- c. External acoustic meatus
- d. Malleus
- e. Membranous labyrinth
- f. Osseous (bony) labyrinth
- g. Scala tympani
- h. Scala vestibuli
- i. Stapes
- j. Tectorial membrane
- k. Tympanic cavity
- l. Tympanic membrane (eardrum)

Column B

- _____ 1. Auditory ossicle attached to tympanic membrane
- _____ 2. Air-filled space containing auditory ossicles
- _____ 3. Contacts hairs of hearing receptors
- _____ 4. Leads from oval window to apex of cochlea
- _____ 5. S-shaped tube leading to tympanic membrane
- _____ 6. Wax-secreting structure
- _____ 7. Cone-shaped, semitransparent membrane attached to malleus
- _____ 8. Auditory ossicle attached to oval window
- _____ 9. Contains endolymph
- _____ 10. Bony canal of inner ear in temporal bone
- _____ 11. Connects middle ear and pharynx
- _____ 12. Extends from apex of cochlea to round window

Part B Assessments

Label the structures indicated in the micrograph of the spiral organ (organ of Corti) in figure 32.8. **1**

Terms:

Basilar membrane
Cochlear duct
Hair cells
Scala tympani
Tectorial membrane

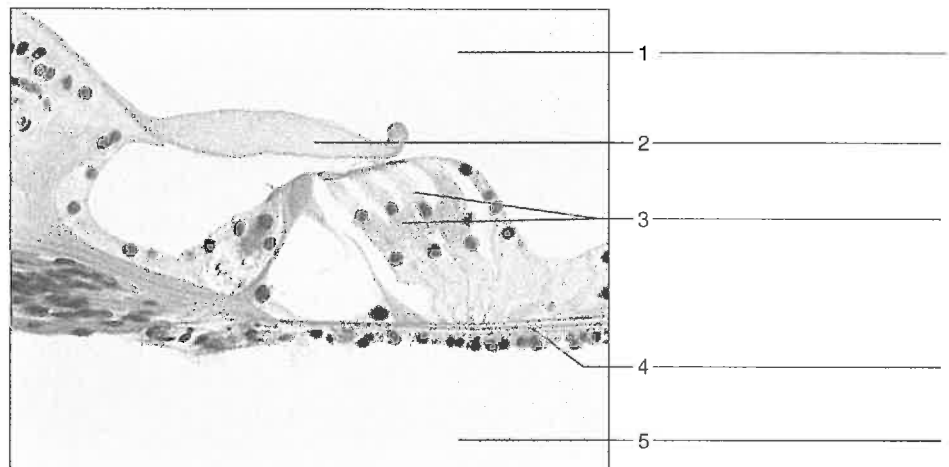


Figure 32.8 Label the structures associated with this spiral organ (organ of Corti) region of a cochlea, using the terms provided (75x micrograph enlarged to 300x).

Part C Assessments

1. Results of auditory acuity test: 4

| Ear Tested | Audible Distance (cm) |
|------------|-----------------------|
| Right | |
| Left | |

2. Results of sound localization test: 4

| Actual Location | Reported Location |
|------------------------|-------------------|
| Front of the head | |
| Behind the head | |
| Above the head | |
| Right side of the head | |
| Left side of the head | |

3. Results of experiments using tuning forks: 4

| Test | Left Ear (normal or impaired) | Right Ear (normal or impaired) |
|-------|-------------------------------|--------------------------------|
| Rinne | | |
| Weber | | |

4. Summarize the results of the hearing tests you conducted on your laboratory partner. 4
