Nervous System Auditory/Vestibular Quiz A (3 Images)
WITH ANSWERS

1. The middle ear cavity is filled with
A.) air.
B.) cerebrospinal fluid.
C.) endolymph.
D.) perilymph.

2. This is the
A.) left labyrinth, seen from above.
B.) lateral surface of the left labyrinth.
C.) right labyrinth, seen from above.
D.) lateral surface of the right labyrinth.

3. The membranous labyrinth
A.) is filled with perilymph.
B.) includes the vestibule.
C.) includes the saccule.
D.) (a) and (c).
E.) none of the above.

4. An interface between air outside your head and the fluids of the labyrinth is located at the
A.) footplate of the stapes.
B.) lateral end of the incus.
C.) medial end of the malleus.
D.) origin of the tensor tympani.
E.) tympanic membrane.
5. The greatest loss of high-frequency hearing would be caused by destruction of _____ hair cells near the _____ of the cochlea.
   A.) inner, apex
   B.) inner, base
   C.) outer, apex
   D.) outer, base

6. The pathways involved in efferent control of the stapedius and of outer hair cell function BOTH involve neurons in the
   A.) facial motor nucleus.
   B.) inferior colliculus.
   C.) superior olivary nucleus.
   D.) trigeminal motor nucleus.

7. The gelatinous material most important for coupling head movements to hair cells in a semicircular duct is located in the
   A.) basilar membrane.
   B.) crista.
   C.) cupula.
   D.) otolithic membrane.
   E.) tectorial membrane.

8. One of Todd's favorite things to do is go to the zoo and watch zebras run by, because he enjoys the nystagmus it causes. Zebras running from Todd's right to his left would most likely cause nystagmus with its fast phase to the
   A.) left.
   B.) right.

9. What kind of cells are located here?
   A.) primary afferents (auditory)
   B.) primary afferents (vestibular)
   C.) 2nd-order sensory (auditory)
   D.) 2nd-order sensory (vestibular)
10. Most of these fibers will terminate in the

A.) cochlear nuclei (contralateral)
B.) cochlear nuclei (ipsilateral)
C.) inferior colliculus (contralateral)
D.) inferior colliculus (ipsilateral)
E.) medial geniculate nucleus (contralateral)
F.) medial geniculate nucleus (ipsilateral)
G.) superior olivary nucleus (contralateral)
H.) superior olivary nucleus (ipsilateral)