

1. Which of the following are parts of the outer ear?

- (A) Auricle (Pinna)**
 - (B) Oval Window**
 - (C) Eardrum**
 - (D) External Acoustic Meatus**
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2. What is the function of the eardrum in the ear?

- (A) Contains the bones necessary for hearing**
 - (B) Changes the pressure from sound waves entering the ear**
 - (C) Cohesively binds Outer and Middle Ear structures**
 - (D) Carries sound directly to the brain**
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3. Which bones are found in the middle ear?

- (A) Sphenoid, Ethmoid**
 - (B) Temporal, Frontal, Occipital**
 - (C) Cranial bones**
 - (D) Malleus, Incus, Stapes**
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4. What is the primary function of the auricle?

- (A) Directly senses auditory signals**
- (B) Supports the structure of the middle ear**
- (C) Produces sound**
- (D) Helps to collect sound waves and directs them into the external acoustic meatus**

5. What is true about the tympanic cavity and its connections?

- (A) It is an air-filled space within the temporal bone**
 - (B) It connects directly to the cochlea**
 - (C) It is located outside the temporal bone**
 - (D) It contains the oval window and the round window**
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6. Where do the facial nerve fibers emerge to reach the face?

- (A) Eustachian tube**
 - (B) Stylomastoid foramen**
 - (C) External acoustic meatus**
 - (D) Internal acoustic meatus**
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7. What is the sensory function of the facial nerve?

- (A) Temperature regulation on the face**
 - (B) Sensation from the back of the head**
 - (C) Pressure sensation from the ear**
 - (D) Taste from the anterior two-thirds of the tongue**
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8. Which nerve nucleus is located in the medulla oblongata?

- (A) Spinal trigeminal nucleus**
- (B) Superior salivary nucleus**
- (C) Nucleus solitarius**
- (D) Motor nucleus**

9. Which nerve supplies the stapedius muscle?

- (A) Greater petrosal nerve**
 - (B) Chorda tympani**
 - (C) Nerve to stapedius**
 - (D) Facial nerve**
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10. What structure is located beneath the lateral semicircular canal?

- (A) Round window**
 - (B) Geniculate ganglion**
 - (C) Horizontal segment**
 - (D) Oval window**
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11. Which branches of the facial nerve are present in the intra-temporal region?

- (A) All of the above**
 - (B) Chorda tympani**
 - (C) Greater superficial petrosal nerve**
 - (D) Nerve to stapedius**
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12. What do the greater superficial petrosal nerve fibers consist of?

- (A) Mixed fibers carrying both sound and balance information**
- (B) Parasympathetic fibers to the lacrimal gland**
- (C) Motor fibers to facial muscles**
- (D) Sensory fibers exclusively from the tongue**

13. What anatomical location does the stylomastoid foramen represent?

- (A) The point where the facial nerve emerges to innervate the face**
 - (B) A passage for the cochlea within the temporal bone**
 - (C) A place where the vestibule and semicircular canals join**
 - (D) A connection between the middle ear and the mastoid air cells**
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14. Which structures provide a sense of equilibrium in the inner ear?

- (A) Eardrum and ossicles**
 - (B) Vestibule and semicircular canals**
 - (C) Cochlea only**
 - (D) Oval and round windows**
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15. What role do the semicircular canals play?

- (A) Filter sound frequencies**
 - (B) Perceive a sense of equilibrium**
 - (C) Resist force during head movement**
 - (D) Transmit sound waves to the brain**
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16. What is the fluid called perilymph found in?

- (A) External ear canal**
- (B) Brain ventricles**
- (C) Membranes of semicircular canals and vestibule**
- (D) Eustachian tube**

17. What do the utricle and saccule pertain to?

- (A) **Vestibulocochlear nerve**
 - (B) **Cochlear**
 - (C) **Vestibule**
 - (D) **Outer ear**
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18. What forms the first part of the auditory pathway after the cochlear nerve?

- (A) **Superior olivary nucleus**
 - (B) **Dorsal and ventral cochlear nuclei**
 - (C) **Medial geniculate nuclei**
 - (D) **Inferior colliculi**
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19. Which cranial nerve is the vestibulocochlear nerve?

- (A) **CNVII**
 - (B) **CNIX**
 - (C) **CNVIII**
 - (D) **CNX**
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20. In the auditory pathway, where do 2nd order neurons ascend into the pons?

- (A) **Cochlear nuclei**
- (B) **Inferior olivary nuclei**
- (C) **Superior olive**
- (D) **Lateral lemniscus**

21. What is the primary sensory function of the cochlear part of the vestibulocochlear nerve?

- (A) Movement of the head**
 - (B) Position**
 - (C) Balance**
 - (D) Hearing**
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22. Where are the cell bodies of cochlear nerve fibers located?

- (A) Vestibular “Scarpa's” ganglion**
 - (B) Spiral ganglion of the cochlea**
 - (C) Medial geniculate nucleus**
 - (D) Lateral vestibular nucleus**
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23. Where do central processes of cochlear nerve fibers terminate?

- (A) Dorsal and ventral cochlear nuclei**
 - (B) Medial geniculate nuclei**
 - (C) Inferior olivary nucleus**
 - (D) Superior olivary nucleus**
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24. What ends in the nucleus of the trapezoid body?

- (A) Some fibers from the cochlear nuclei**
- (B) Fibers from the superior olivary nucleus**
- (C) Fibers from the inferior colliculi**
- (D) Central processes from the lateral lemniscus**

25. Which nerve fibers arise from hair cells of the organ of Corti?

- (A) Cochlear nerve fibers**
 - (B) Ocular nerve fibers**
 - (C) Trigeminal nerve fibers**
 - (D) Vestibular nerve fibers**
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26. What brain region is associated with conscious awareness of vestibular sensation?

- (A) Vestibular cortex in the lower part of the post-central gyrus**
 - (B) Superior olivary nucleus**
 - (C) Medial geniculate nucleus**
 - (D) Primary auditory cortex**
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27. The axons from which nucleus form the auditory radiation?

- (A) Inferior colliculus**
 - (B) Medial geniculate nucleus**
 - (C) Superior olivary nucleus**
 - (D) Cochlear nuclei**
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28. What is the function of fibers innervating the tensor tympani and stapedius muscles?

- (A) Control balance and equilibrium**
- (B) Reflective muscle contraction in response to loud noise**
- (C) Enhance cochlear sensitivity**
- (D) Convey sound information to the brain**

29. A lesion of which nerve can lead to both hearing and balance disturbances?

- (A) Vestibulocochlear nerve**
 - (B) Glossopharyngeal nerve**
 - (C) Trigeminal nerve**
 - (D) Facial nerve**
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30. What condition often arises from compression of the 8th cranial nerve?

- (A) Trigeminal neuralgia**
- (B) Acoustic neuroma**
- (C) Multiple sclerosis**
- (D) Bell's palsy**



- 1.A Auricle (Pinna)
- 2.B Changes the pressure from sound waves entering the ear
- 3.D Malleus, Incus, Stapes
- 4.D Helps to collect sound waves and directs them into the external acoustic meatus
- 5.A It is an air-filled space within the temporal bone
- 6.D Internal acoustic meatus
- 7.B Sensation from the back of the head
- 8.D Motor nucleus
- 9.B Chorda tympani
- 10.C Horizontal segment
- 11.B Chorda tympani
- 12.B Parasympathetic fibers to the lacrimal gland
- 13.A The point where the facial nerve emerges to innervate the face
- 14.B Vestibule and semicircular canals
- 15.B Perceive a sense of equilibrium
- 16.C Membranes of semicircular canals and vestibule
- 17.C Vestibule
- 18.B Dorsal and ventral cochlear nuclei
- 19.C CNVIII
- 20.A Cochlear nuclei
- 21.D Hearing
- 22.B Spiral ganglion of the cochlea
- 23.A Dorsal and ventral cochlear nuclei
- 24.A Some fibers from the cochlear nuclei
- 25.A Cochlear nerve fibers
- 26.A Vestibular cortex in the lower part of the post-central gyrus
- 27.B Medial geniculate nucleus
- 28.B Reflective muscle contraction in response to loud noise
- 29.A Vestibulocochlear nerve

30.B Acoustic neuroma

