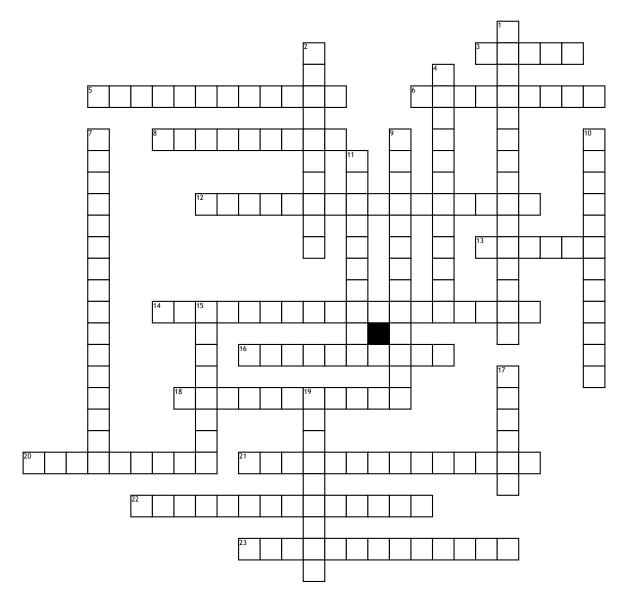
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## Middle Ear Crossword Review



## Across

- 3. T/F: Impedance due to stiffening of the ossicular chains has little or no effect on the low frequencies.
- 5. The three portions of the tympanic cavity from superior to inferior are: Epitympanic Recess or Attic, \_\_\_\_\_\_\_, and Hypotympanic.
- **6.** If the pressure in the middle ear is greater than ambient pressure, what will happen to the eardrum?
- **8.** The tympanic membrane is \_\_\_\_\_ times larger than the oval window. (Hint: Area advantage ratio)
- **12.** A middle ear disorder in which the Tympanic Membrane or the connective tissue around the ossicles becomes calcified.
- **13.** The stapedius is innervated by which cranial nerve?
- **14.** Which muscle is primarily involved in opening the eustachian tube during yawning and swallowing?
- **16.** The oval window, round window, prominence of facial canal, prominence of horizontal semicircular canal, and \_\_\_\_\_\_ are all part of the medial wall of the Tympanum

- **18.** An acquired middle ear disorder in which the middle ears fill with fluid that may or may not get infected and cause a conductive hearing loss; is the most common childhood illness.
- **20.** Resistance, mass reactance, and stiffness reactance are all types of what?
- 21. The action of the tensor tympani and stapedius muscles contracting, stiffening the ossicular chain and increasing the impedance of the middle ear system when presented with very loud sounds is called
- 22. One of the three mechanisms consistent to impedance transformation. (Hint: created because the length of the malleus is greater than the length of the incus.)
- 23. The malleus contains a facet to articulate with the incus creating the \_\_\_\_\_\_ joint.

## Down

- 1. The "L" in "SAL" stands for the of the malleus.
- **2.** The tensor tympani is innervated by which cranial nerve?

- **4.** A large groove that accommodates the jugular vein.
- **7.** Where does the manubrium of the malleus attach?
- **9.** A middle ear disorder that may be acquired or congenital; occurs when squamous epithelium becomes trapped behind the tympanic membrane; reduces ability to hear high and sometimes low frequencies.
- 10. A temporal bone disease in which spongy bone replaces normal bone and may cause akylosis; most commonly affects the oval window and the stapedius footplate.
- 11. The \_\_\_\_\_ tube connects the middle ear with the nasopharynx.
- **15.** If you go for a hike in the mountains, your eardrum could be pushed inward due to \_\_\_\_\_ pressure.
- 17. What is the smallest bone in the body?
- **19.** The three processes on the malleus are the anterior, lateral, and \_\_\_\_\_ processes.