1. In thinking of the pathways taken by visual information within the association cortex, the ventral stream projects to the _________ and is involved in _________.
   a. Parietal association cortex; the analysis of “where” an object is located in space
   b. Primary motor cortex; object texture
   c. Temporal association cortex; object form
   d. Parietal association cortex; the analysis of object identity
   e. Inferior temporal cortex; the analysis of “what” an object is

2. Prosopagnosia is
   a. An inability to distinguish colors
   b. The inability to recognize faces
   c. A difficulty in recognizing objects
   d. A problem linking remote memories with new memories
   e. Usually accompanied by achromatopsia

3. In audition, one of the main functions of the ossicles is to...
   a. Amplify the sound waves
   b. Transduce sound information into neural information
   c. Convey sound information to the tympanic membrane
   d. Help us maintain balance
   e. Keep the popsicles company

4. The visual system is to retinotopic as the auditory system is to
   a. Homotopic
   b. Spatiotopic
   c. Tonotopic
   d. Timbre topic
   e. Audiotopic

5. What accounts for the auditory system being (answer to question 4)?
   a. The unfolding of the cochlea
   b. Hair cells vibrate with different frequencies in response to different frequencies of sound waves
   c. The hair cells at different points of the basilar membrane will be stimulated by different frequencies of sound waves
   d. The thalamus relays information to the cortex
   e. The tympanic membrane vibrates in response to sound waves

6. The formal name for “eardrum” is
   a. Tectorial membrane
   b. Basilar membrane
   c. Pinna
   d. Tympanic membrane
   e. “Dr.” eardrum
7. With regard to the two soundwaves depicted below, which of the following statements is true?
   a. The one on the left is louder and deeper than the one on the right
   b. The one on the right is softer and higher than the one on the left
   c. The one on the left is louder and higher than the one on the right
   d. The one on the right is softer and higher than the one on the left
   e. None of the above

![Soundwaves](image)

8. Which is the proper functional order of the anatomical structures of the ear?
   a. Oval window; ossicles, ear drum, hair cells, basilar and tectorial membranes
   b. Ear drum, ossicles, oval window, basilar and tectorial membranes, hair cells
   c. Ossicles, ear drum, oval window, hair cells, basilar and tectorial membranes
   d. Ear drum, oval window, ossicles, basilar and tectorial membranes, hair cells
   e. Oval window, ossicles, Ear drum, hair cells, basilar and tectorial membranes

9. Functional imaging studies of the human auditory association cortex suggest that judgments of sound _____ activate the _____.
   a. Timbre; ventral stream
   b. Location; ventral stream
   c. Timbre; dorsal stream
   d. Identity; ventral stream
   e. Identity; dorsal stream

10. Wanda is an aspiring fisherwoman but finds that she experiences extreme nausea when she is at sea. Her motion sickness is caused by unusual activity in her _______ system.
    a. Auditory
    b. Motor
    c. Vestibular
    d. Gustatory
    e. Olfactory

11. Which of the following structures is sensitive to rotational accelerations of the head?
    a. Organ of Corti
    b. Semicircular canals
    c. Eardrum
    d. Pinna
    e. Speedometer

12. Towards the base of the cochlea (the part closest to the oval window), the basilar membrane is most responsive to
    a. High-pitch tones
    b. Low-pitch tones
    c. Loud tones
    d. Soft tones
    e. Tectorial tones
13. If the cochlea were a fully closed system, there would be no ‘room’ for waves in the liquid medium. What is the outlet where energy from sound waves is dissipated?
   a. The oval window
   b. The round window
   c. The tympanic membrane
   d. The ear canal
   e. The stapes

14. Within the auditory system, hair cells transduce sound waves into nerve impulses by
   a. Tickling
   b. **Bending**
   c. Splitting
   d. Responding to inhibitory and excitatory post-synaptic potentials
   e. Responding to pressure from the ossicles

15. The Organ of Corti consists of
   a. The oval window, the ossicles, and the cochlea
   b. The malleus, the incus, and the stapes
   c. The basilar membrane, the tonotopic map, and the oval window
   d. **The basilar membrane, hair cells, and the tectorial membrane**
   e. The ear drum and the ossicles

16. Draw the Organ of Corti, and label the items from question 15, as well as tip links.