

Section 35-4 The Senses (pages 906-909)

Key Concept

- What are the five types of sensory receptors?

Introduction (page 906)

1. What are sensory receptors? _____

2. List the five general categories of sensory receptors.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
3. Which category of sensory receptors are sensitive to touch, sound, and motion?

Vision (pages 906-907)

4. Circle the letter of each sentence that is true about the structures of the eye.
 - a. Light enters the eye through the cornea.
 - b. The chamber behind the cornea is filled with vitreous humor.
 - c. The pupil changes in size to let more or less light enter the eye.
 - d. The lens focuses light on the retina.
5. Is the following sentence true or false? The function of the iris is to adjust the size of the pupil. _____
6. Where are the photoreceptors located in the eye? _____

7. What do photoreceptors do? _____

8. Is the following sentence true or false? Cones are extremely sensitive to light, but they do not distinguish different colors. _____
9. How do impulses travel from the eyes to the brain? _____

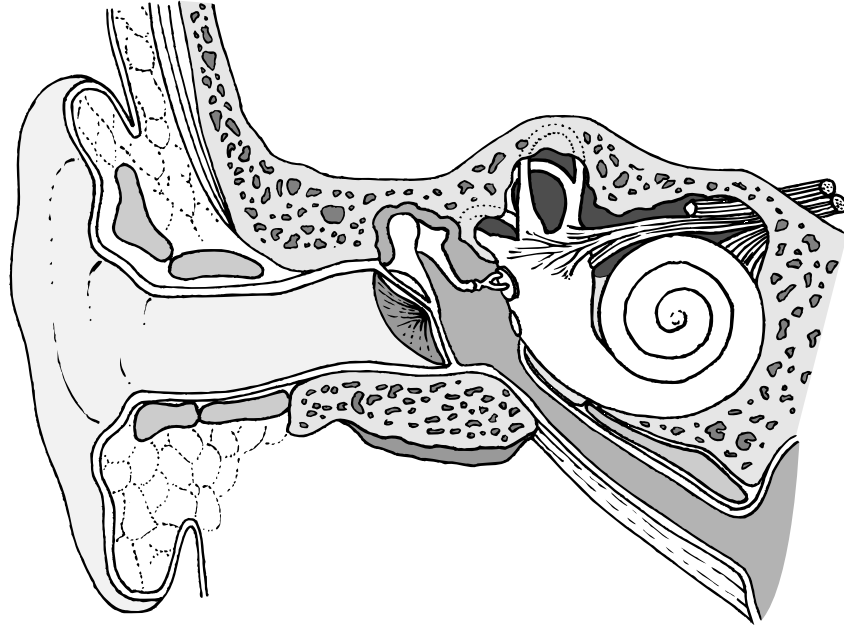
10. What are the two types of photoreceptors? _____

Hearing and Balance (pages 908–909)

11. List the two sensory functions of the ear.

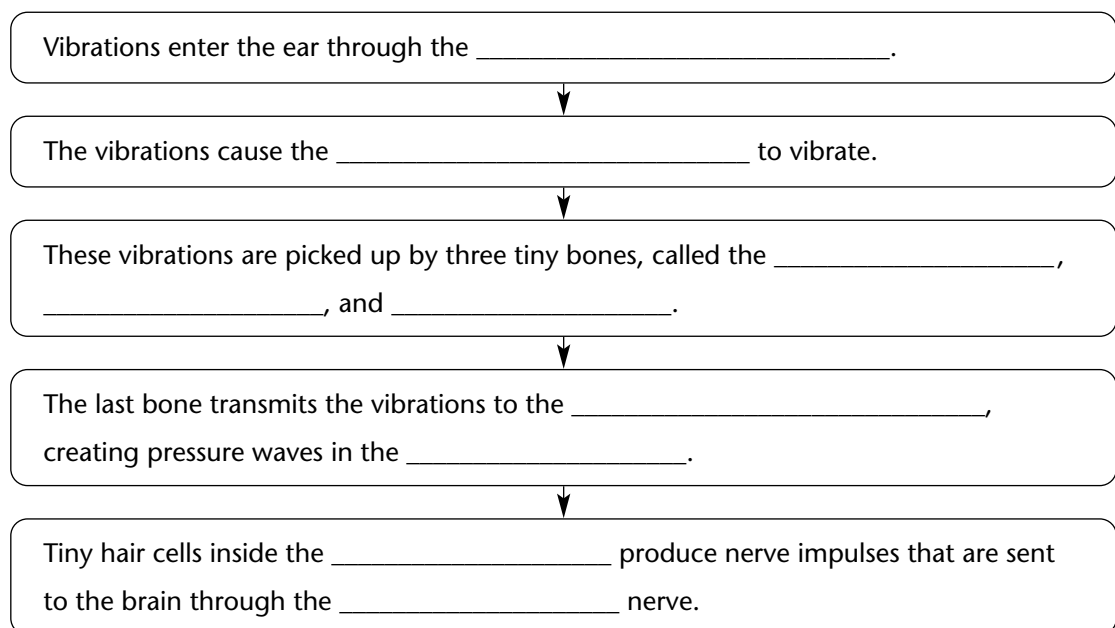
- a. _____
b. _____

12. Label each of the following structures in the drawing of the ear: auditory canal, tympanum, semicircular canals, and cochlea.



13. Is the following sentence true or false? The tympanum sends nerve impulses to the brain. _____

14. Complete the flowchart.



15. What is the role of hair cells in the cochlea? _____

16. How do the semicircular canals help maintain balance? _____

Smell and Taste (page 909)

17. Is the following sentence true or false? Your sense of smell is actually an ability to detect pressure. _____

18. How does the body detect smell? _____

19. Is the following sentence true or false? Much of what we commonly call the “taste” of food and drink is actually smell. _____

20. The sense organs that detect taste are the _____.

21. List the four different categories of tastes.

- a. _____
- b. _____
- c. _____
- d. _____

Touch and Related Senses (page 909)

22. What is the largest sense organ? _____

23. Is the following sentence true or false? The skin contains sensory receptors that respond to temperature, touch, and pain. _____

24. Circle the letter of each choice that is true about the sense of touch.

- a. Unlike the other senses, the sense of touch is not found in one particular place.
- b. All parts of the body are equally sensitive to touch.
- c. The greatest density of touch receptors is found on the arms and legs.
- d. Touch is detected by mechanoreceptors.

25. Where is the greatest density of touch receptors found on the body? _____

