

## Chapter 17 Test

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_\_\_ 1. Papillae are
- bumps on the tongue containing taste buds.
  - cells in the nose that sense odors.
  - tiny bones in the ear.
  - the name for the four basic tastes.
- \_\_\_\_\_ 2. Receptors in your skin include all of these EXCEPT
- light touch.
  - pressure and heat.
  - deep pressure and vibration.
  - visible light.
- \_\_\_\_\_ 3. The correct sequence for structures that light passes through when entering the eye, from outside to inside, is
- cornea, retina, lens.
  - retina, cornea, pupil.
  - cornea, pupil, lens.
  - pupil, optic nerve, retina.
- \_\_\_\_\_ 4. A feedback mechanism is
- a cycle of events in which one step controls or affects a previous step.
  - a cycle of events in which each step is independent of all others.
  - the process by which a reflex occurs.
  - the mechanism that tells you that you are hungry.
- \_\_\_\_\_ 5. The correct sequence of structures involved in hearing a sound is
- auditory nerve, eardrum.
  - eardrum, ear bones, cochlea.
  - cochlea, outer ear.
  - olfactory cells, cochlea.
- \_\_\_\_\_ 6. Olfactory cells are
- bumps on the tongue containing taste buds.
  - cells in the nose that sense odors.
  - molecules that dissolve in the moist lining of the nasal cavity.
  - cells that trigger reflexes in the spinal cord.
- \_\_\_\_\_ 7. Which part of the brain is used for thinking and memory?
- medulla
  - cerebrum
  - cerebellum
  - thymus
- \_\_\_\_\_ 8. Which of the following carry information between the body and the central nervous system?
- skin cells
  - nerve
  - cells
  - tissues

- \_\_\_\_\_ 9. What body system connects all parts of the body to the central nervous system?
- a. peripheral nervous system
  - b. somatic nervous system
  - c. integumentary system
  - d. autonomic nervous system
- \_\_\_\_\_ 10. What structure includes dendrites and axons that receive and transmit information to the body's cells?
- a. brain
  - b. skin
  - c. neurons
  - d. spinal cord
- \_\_\_\_\_ 11. Besides enabling you to hear sound energy, what other function does the ear serve?
- a. smells
  - b. sees
  - c. maintains body temperature
  - d. maintains balance
- \_\_\_\_\_ 12. Long nerve fibers that convey electrical impulses to other cells are called
- a. axons.
  - b. dendrites.
  - c. organelles.
  - d. veins.
- \_\_\_\_\_ 13. Which of the following is NOT a function of the medulla?
- a. control of heart rate
  - b. maintenance of blood pressure
  - c. control of voluntary movement
  - d. regulation of muscle tone in blood vessels
- \_\_\_\_\_ 14. A nearly immediate, involuntary response to a stimulus is called a
- a. voluntary movement.
  - b. somatic response.
  - c. reflex.
  - d. feedback mechanism.
- \_\_\_\_\_ 15. A collection of axons through which impulses travel between the central nervous system and other parts of the body is called a
- a. dendrite.
  - b. receptor.
  - c. nerve.
  - d. gland.
- \_\_\_\_\_ 16. The clear membrane that protects the eye and allows light to enter is the
- a. cornea.
  - b. thymus.
  - c. iris.
  - d. retina.
- \_\_\_\_\_ 17. The brain and the spinal cord make up the
- a. somatic nervous system.
  - b. autonomic nervous system.
  - c. central nervous system.
  - d. peripheral nervous system.
- \_\_\_\_\_ 18. A collection of axons bundled with blood vessels and connective tissue is a
- a. retina.
  - b. cochlea.
  - c. dendrite.
  - d. nerve.

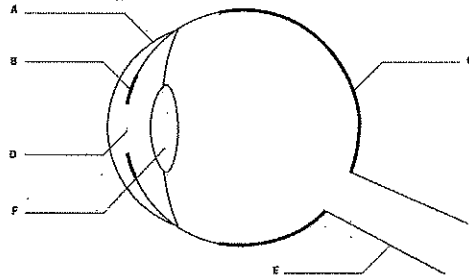
- \_\_\_\_\_ 19. Which of the following statements is NOT true of the somatic and autonomic nervous systems?
- The somatic nervous system controls voluntary movements.
  - The autonomic nervous system controls involuntary functions.
  - The somatic nervous system controls digestion.
  - The autonomic nervous system controls heart rate.
- \_\_\_\_\_ 20. In which order are neurons activated during a reflex response to a painful stimulus?
- sensory neuron, brain, motor neuron
  - motor neuron, brain, sensory neuron
  - motor neuron, sensory neuron, brain
  - sensory neuron, motor neuron, brain

**Matching**

Match each item with the correct statement below.

- |                             |                   |
|-----------------------------|-------------------|
| a. central nervous system   | c. sensory neuron |
| b. autonomic nervous system | d. motor neuron   |
- \_\_\_\_\_ 21. includes the spinal cord and brain
- \_\_\_\_\_ 22. controls body functions you don't think about
- \_\_\_\_\_ 23. carries nerve impulses to muscles or glands
- \_\_\_\_\_ 24. gathers information from inside or around the body

Match the labels to the drawing below.



- \_\_\_\_\_ 25. lens
- \_\_\_\_\_ 26. cornea
- \_\_\_\_\_ 27. retina
- \_\_\_\_\_ 28. pupil
- \_\_\_\_\_ 29. optic nerve
- \_\_\_\_\_ 30. iris

Match each item with the correct statement below.

- |               |                           |
|---------------|---------------------------|
| a. medulla    | e. homeostasis            |
| b. cerebellum | f. central nervous system |
| c. axon       | g. somatic nervous system |
| d. neuron     | h. receptor               |

- \_\_\_\_\_ 31. brain region controlling heart rate
- \_\_\_\_\_ 32. nerve cell specialized for transferring messages
- \_\_\_\_\_ 33. maintained by sympathetic and parasympathetic systems working together
- \_\_\_\_\_ 34. specialized nerve ending that detects changes inside and outside the body
- \_\_\_\_\_ 35. part of a neuron that carries impulses away from the cell body
- \_\_\_\_\_ 36. brain region that helps maintain balance

**Essay**

37. Why would an injury to the medulla be more life threatening than an injury to the cerebrum? (4POINTS)

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38. Describe what might happen to a person's hearing if the fluid were drained from his or her cochlea. (2 POINTS)

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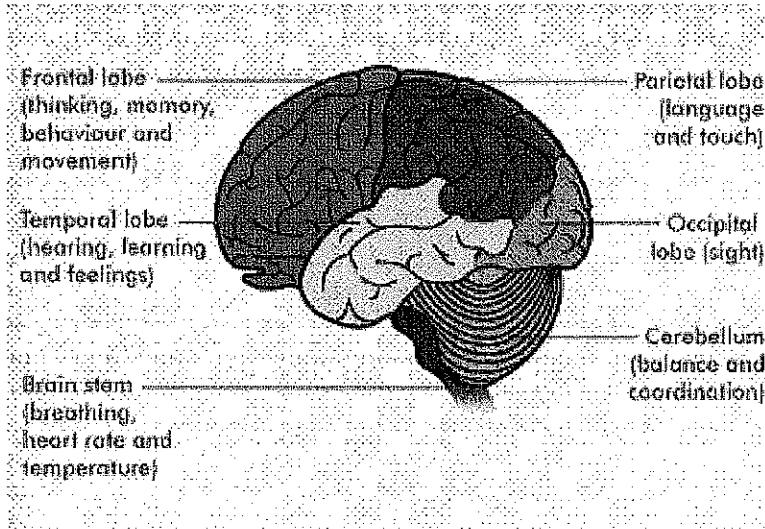
39. How is a sensory neuron originating in the skin similar to a sensory neuron originating in the retina? How are they different? (EC)

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40. Do you think loss of the retina or loss of the lens would have the greatest impact on the ability to see? Explain your answer. (EC)

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- 
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41. Match the labels to the drawing below (6 points). On the second blank state what functions occur in the region or lobe (EC)



\_\_\_\_\_ Frontal Lobe \_\_\_\_\_

\_\_\_\_\_ Pariatal Lobe \_\_\_\_\_

\_\_\_\_\_ Temperal Lobe \_\_\_\_\_

\_\_\_\_\_ Occipital Lobe \_\_\_\_\_

\_\_\_\_\_ Cerebellum \_\_\_\_\_

\_\_\_\_\_ Brain Stem/Medulla \_\_\_\_\_

Name: \_\_\_\_\_

ID: A

Other

42. Use the following terms to complete the concept map below.

