

Chapter 2

Student: _____

1. Psychologists who specialize in considering the ways in which the biological structures and functions of the body affect behavior are known as _____.

A.
B.
C.
D.
2. Alison has developed an interest in the ways in which the biological structures and functions of the body affect behavior. She will most likely become a(n):

A.
B.
C.
D.
3. The basic elements of the nervous system are called:

A.
B.
C.
D.
4. As many as _____ neurons throughout the body are involved in the control of behaviour.

A.
B.
C.
D.

5. Neurons are physically held in place by _____.
A.
B.
C.
D.
6. Which of the following is NOT one of the functions of glial cells?
A.
B.
C.
D.
7. A cluster of fibers at one end of a neuron that receives messages from other neurons is called:
A.
B.
C.
D.
8. An axon is a(n):
A.
B.
C.
D.
9. Which of the following structures is especially important for carrying messages received by the dendrites to other neurons?
A.
B.
C.
D.
10. Terminal buttons are found at the end of:
A.
B.
C.
D.

11. Which of the following sequences correctly arranges nervous system structures from the most general to the most specific?
- A.
 - B.
 - C.
 - D.
12. Dendrite is to axon what _____ is to _____.
- A.
 - B.
 - C.
 - D.
13. Which of the following sequences accurately reflects the route followed by nerve impulses when one neuron communicates with another?
- A.
 - B.
 - C.
 - D.
14. Electrical wires are generally protected by a tube of plastic. A similar insulating function is performed in the nervous system by the:
- A.
 - B.
 - C.
 - D.
15. _____ is a protective coat of fat and protein that wraps around the axon.
- A.
 - B.
 - C.
 - D.

16. You cannot fire a gun softly, or flush a toilet halfway. Like an action potential, gun fire and a toilet's flush follow the _____ law.
- A.
 - B.
 - C.
 - D.
17. The rule that neurons are either on or off is known as the _____ law.
- A.
 - B.
 - C.
 - D.
18. The state in which there is a negative electrical charge of about -70 millivolts within a neuron is known as the _____ state.
- A.
 - B.
 - C.
 - D.
19. Regarding action potentials, which of the following statements is TRUE?
- A.
 - B.
 - C.
 - D.
20. As an action potential occurs, the neuron's electrical charge:
- A.
 - B.
 - C.
 - D.

21. _____ are specialized neurons that fire not only when a person enacts a particular behavior, but also when a person simply observes another individual carrying out the same behavior.
- A.
B.
C.
D.
22. Regarding mirror neurons, which of the following statements is ACCURATE?
- A.
B.
C.
D.
23. A synapse is a(n):
- A.
B.
C.
D.
24. _____ is the space between two neurons where the axon of a sending neuron communicates with the dendrites of a receiving neuron by using chemical messages.
- A.
B.
C.
D.
25. Which of the following statements regarding inhibitory messages is TRUE?
- A.
B.
C.
D.

26. The reabsorption of neurotransmitters by a terminal button is termed as:
- A.
 - B.
 - C.
 - D.
27. Which neurotransmitter is described INCORRECTLY?
- A.
 - B.
 - C.
 - D.
28. The neurotransmitter dopamine is involved in:
- A.
 - B.
 - C.
 - D.
29. Which neurotransmitter is CORRECTLY matched with a psychological function?
- A.
 - B.
 - C.
 - D.
30. Which disorder is CORRECTLY paired with an associated neurotransmitter?
- A.
 - B.
 - C.
 - D.
31. Inhibitory is to excitatory what _____ is to _____.
- A.
 - B.
 - C.
 - D.

32. Which expression below most closely approximates the number of neural connections in the brain?
- A.
B.
C.
D.
33. The nervous system is divided into the _____ and the _____ nervous systems.
- A.
B.
C.
D.
34. The brain and the spinal cord constitute the _____ nervous system.
- A.
B.
C.
D.
35. _____ is an automatic, involuntary response to an incoming stimulus.
- A.
B.
C.
D.
36. The _____ is the main means for transmitting messages between the brain and the body.
- A.
B.
C.
D.

37. Which of the following is TRUE of the spinal cord's control of behavior?
- A.
 - B.
 - C.
 - D.
38. The central nervous system is composed of _____. The peripheral nervous system comprises _____.
- A.
 - B.
 - C.
 - D.
39. Sensory is to motor what _____ is to _____.
- A.
 - B.
 - C.
 - D.
40. _____ are neurons that connect sensory and motor neurons, carrying messages between the two.
- A.
 - B.
 - C.
 - D.
41. The two major divisions of the peripheral nervous system are the _____ and _____ divisions.
- A.
 - B.
 - C.
 - D.

42. _____ is the part of the peripheral nervous system that specializes in the control of voluntary movements and the communication of information to and from the sense organs.
- A.
B.
C.
D.
43. Somatic is to autonomic what _____ is to _____.
- A.
B.
C.
D.
44. The part of the autonomic division of the nervous system that acts to prepare the body for action in stressful situations, engaging all the organism's resources to respond to a threat is known as the _____.
- A.
B.
C.
D.
45. The "fight-or-flight" response is associated with the _____ division.
- A.
B.
C.
D.
46. The part of the autonomic division of the nervous system that acts to calm the body after an emergency has ended is known as the _____ division.
- A.
B.
C.
D.

47. The _____ division also directs the body to store energy for use in emergencies.
- A.
 - B.
 - C.
 - D.
48. Which of the following situations is most likely to involve the action of the parasympathetic nervous system?
- A.
 - B.
 - C.
 - D.
49. With respect to its potential basis in nervous system activity, "voodoo death" has been attributed to:
- A.
 - B.
 - C.
 - D.
50. Izzy sees a leopard in her backyard. Her pupils are dilated and her heart is pounding; her breathing is shallow and rapid. Her _____ nervous system is active.
- A.
 - B.
 - C.
 - D.
51. Which of the following terms best describes the organization of the nervous system today?
- A.
 - B.
 - C.
 - D.

52. The branch of psychology that seeks to identify behavior patterns that are a result of our genetic inheritance from our ancestors is known as _____.
A.
B.
C.
D.
53. Evolutionary psychologists have spawned a new and increasingly influential field:
A.
B.
C.
D.
54. The study of the effects of heredity on how people conduct themselves is known as _____.
A.
B.
C.
D.
55. Dr. Schilling is investigating the potential genetic basis of antisocial personality disorder by examining the relative prevalence of the disorder among either identical or fraternal twins, raised either together or in different families. Dr. Schilling is best described as a _____.
A.
B.
C.
D.
56. Which of the following statements best expresses the relationship between the nervous system and the endocrine system?
A.
B.
C.
D.

57. A key component of the endocrine system is the tiny _____ gland, which is found near—and regulated by—the _____ in the brain.
- A.
B.
C.
D.
58. The _____ gland is a major component of the endocrine system which secretes hormones that control growth and other parts of the endocrine system.
- A.
B.
C.
D.
59. The _____ gland has sometimes been called the "master gland" because it controls the functioning of the rest of the endocrine system.
- A.
B.
C.
D.
60. The hormone oxytocin has been implicated in each of the following behaviors EXCEPT the:
- A.
B.
C.
D.
61. Which of the following glands or structures is CORRECTLY matched with the hormone it produces?
- A.
B.
C.
D.

62. Which of the following hormones is CORRECTLY matched with its function?
- A.
 - B.
 - C.
 - D.
63. Which of the following statements is TRUE regarding hormone replacement therapy as a treatment for menopausal symptoms?
- A.
 - B.
 - C.
 - D.
64. Which of the following is NOT a brain scanning technique?
- A.
 - B.
 - C.
 - D.
65. Which brain imaging technique below is CORRECTLY matched with its description?
- A.
 - B.
 - C.
 - D.
66. Which brain imaging technique below is INCORRECTLY matched with its diagnostic use?
- A.
 - B.
 - C.
 - D.

67. Brent is taking part in an experiment in the cognitive neuroscience lab on campus. Silently, he reads rapid sequences of words flashed on a computer screen. Simultaneously, the electrical activity of his brain is recorded through skull electrodes. The brain scanning technique used in this study is:
- A.
 - B.
 - C.
 - D.
68. The newest brain scanning technique which is popularly used is:
- A.
 - B.
 - C.
 - D.
69. Marisol is trying a new treatment for severe depression. Brief magnetic pulses are sent through her brain. Marisol is undergoing:
- A.
 - B.
 - C.
 - D.
70. Soon, it may be possible to view the activity of individual neural circuits, due to the emerging field of:
- A.
 - B.
 - C.
 - D.
71. Which of the following structures is NOT part of the brain's central core?
- A.
 - B.
 - C.
 - D.

72. The hindbrain includes each of the following structures EXCEPT the:
- A.
 - B.
 - C.
 - D.
73. The part of the brain closest to the spinal cord is the ____; it is important for such functions as ____.
- A.
 - B.
 - C.
 - D.
74. The pons serves to:
- A.
 - B.
 - C.
 - D.
75. The part of the brain that controls bodily balance is the ____.
- A.
 - B.
 - C.
 - D.
76. Yves has been drinking. He has difficulty walking a straight line when asked to do so by a police officer. Apparently, Yves' ____ is functioning poorly.
- A.
 - B.
 - C.
 - D.

77. The part of the brain extending from the medulla through the pons and made up of groups of nerve cells that can immediately activate other parts of the brain to produce general bodily arousal is known as the _____.

A.
B.
C.
D.
78. The thalamus may be likened to a(n):

A.
B.
C.
D.
79. The _____ is the part of the brain that is located in the middle of the central core and acts primarily to relay information about the senses.

A.
B.
C.
D.
80. The _____ is a tiny part of the brain that maintains homeostasis and produces and regulates vital behavior, such as eating, drinking, and sexual behavior.

A.
B.
C.
D.
81. Pizza! Beer! Sex! Our motivation or drive for such things is based on the activity of the brain region known as the:

A.
B.
C.
D.

82. The _____ maintains a steady internal environment for the body.
- A.
B.
C.
D.
83. The _____ in the brain contributes to the body's maintenance of a steady internal physiological state, called _____.
- A.
B.
C.
D.
84. The limbic system contains which of the following structures?
- A.
B.
C.
D.
85. The structures of the _____ jointly control a variety of basic functions relating to emotions and self-preservation such as eating, aggression, and reproduction.
- A.
B.
C.
D.
86. Darnell underwent surgery to control his severe epilepsy. Now, however, Darnell cannot form new memories of his experiences, although he does remember events in the past. Most likely, the surgery destroyed a portion of the _____ in Darnell's brain.
- A.
B.
C.
D.

87. The _____ is referred to as the "new brain."
- A.
 - B.
 - C.
 - D.
88. Which of the following sequences correctly identifies the orders of the lobes of the cortex, from anterior to posterior?
- A.
 - B.
 - C.
 - D.
89. In which lobe is the motor area located?
- A.
 - B.
 - C.
 - D.
90. The _____ area is part of the cortex that is largely responsible for the body's voluntary movement.
- A.
 - B.
 - C.
 - D.
91. In a neurophysiological investigation, a monkey makes an involuntary gesture when a portion of its brain is electrically stimulated. The area of the brain that was most likely stimulated is the:
- A.
 - B.
 - C.
 - D.

92. The _____ area is the site in the brain of the tissue that corresponds to each of the senses, with the degree of sensitivity related to the amount of tissue.
- A.
B.
C.
D.
93. The somatosensory area is to the auditory area what the _____ lobe is to the _____ lobe.
- A.
B.
C.
D.
94. The visual area in the cortex is located in the _____.
- A.
B.
C.
D.
95. The brain injury suffered by 19th-century railroad worker Phineas Gage allowed psychologists to learn about the functions of the brain's:
- A.
B.
C.
D.
96. The _____ areas are considered to be the site of higher mental processes such as thinking, language, memory, and speech.
- A.
B.
C.
D.

97. Which of the following is NOT an executive function?
- A.
 - B.
 - C.
 - D.
98. Violet's speech is slow and labored; however, she can understand others' speech. Violet has:
- A.
 - B.
 - C.
 - D.
99. Warren suffers from Wernicke's aphasia. Which of the following will he experience in thought or behavior?
- A.
 - B.
 - C.
 - D.
100. The process by which the brain reorganizes itself throughout development is termed:
- A.
 - B.
 - C.
 - D.
101. _____ is the creation of new neurons.
- A.
 - B.
 - C.
 - D.

102. Neurogenesis is especially evident in brain areas related to learning and memory. Based on this statement, you might expect neurogenesis to be particularly prevalent in the brain's:
- A.
 - B.
 - C.
 - D.
103. Which of the following is TRUE about the brain?
- A.
 - B.
 - C.
 - D.
104. The use of stem cells in research and treatment remains controversial because stem cells come from:
- A.
 - B.
 - C.
 - D.
105. Which of the following statements is most accurate with respect to the lateralization of language?
- A.
 - B.
 - C.
 - D.
106. Trevor is scratching his head, trying desperately to solve a verbal analogy as part of a standardized entrance examination; Sienna, meanwhile, is giving an oral presentation in a political science class. Of the brain's hemispheres, Trevor's _____ hemisphere is most active; Sienna's _____ hemisphere is most active.
- A.
 - B.
 - C.
 - D.

107. Kate has suffered right-hemisphere damage. Which of the following processes is LEAST likely to be affected?
- A.
 - B.
 - C.
 - D.
108. The hemispheres of the brain are connected by a bundle of fibers called the:
- A.
 - B.
 - C.
 - D.
109. Ramona is a woman. Stefan is a man. Which of the following statements is TRUE regarding potential differences in the corpus callosum between these two individuals?
- A.
 - B.
 - C.
 - D.
110. Which of the following generalizations is probably most accurate regarding potential gender differences in the lateralization of language?
- A.
 - B.
 - C.
 - D.
111. People whose corpus callosum has been surgically cut to stop seizures are called ____.
- A.
 - B.
 - C.
 - D.

112. Mrs. Simon has learned to lessen the pain associated with her migraine headaches by voluntarily relaxing specific muscles and reducing her blood pressure. This example illustrates:
- A.
B.
C.
D.
113. The _____ is an insulating coat of fat and protein wrapped around an axon.
-
114. According to the _____ law neurons are either on or off.
-
115. At the cellular level, our ability to empathize with others may reflect the activity of _____ neurons.
-
116. _____ is a chemical message that prevents or decreases the likelihood that a receiving neuron will fire.
-
117. After a long run, Aaron sometimes experiences a feeling of euphoria, a "runners' high" reflecting the activity of neurotransmitters called _____.
-
118. _____ neurons transmit information from the perimeter of the body to the central nervous system.
-
119. The somatic nervous system regulates voluntary movement; in contrast, the _____ nervous system underlies involuntary movement.
-

120. Arif's heart rate and respiration are slowing, and his dilated pupils are contracting. His _____ nervous system has become active.
-
121. _____ is the branch of psychology that seeks to identify how behavior is influenced and produced by our genetic inheritance from our ancestors.
-
122. The tiny _____ gland is known as the "master gland."
-
123. A technique called _____ records the brain's electrical activity through electrodes.
-
124. Wilma has been experiencing memory difficulties, and her doctor is concerned that Wilma may have a brain tumor. He recommends a(n) _____ to confirm his diagnosis.
-
125. Extending from the medulla, through the midbrain, into the forebrain is the _____, which serves to regulate general bodily arousal.
-
126. Information travels from our sensory receptors to the _____ in the brain, which relays it to higher association areas.
-
127. The amygdala and hippocampus are found within the brain's _____ system.
-
128. Epileptics have sometimes had portions of their limbic system removed. Subsequent memory problems may reflect damage to the _____.
-

129. The cortex has four major sections called _____.

130. The _____ area in the parietal lobe encompasses specific locations associated with the ability to perceive touch and pressure in a particular area of the body.

131. New neurons are created even during adulthood, in a process called _____.

132. Vance has learned to voluntarily control the activation of his autonomic nervous system as part of the treatment for an anxiety disorder. This is an example of _____.

133. Draw a typical neuron and label its major parts accurately. Briefly identify the functions of the parts labeled on your diagram.

134. Briefly discuss what mirror neurons are, how they work and what implications this recent discovery may hold for future research. What are the evolutionary implications for mirror neurons existence?
135. Outline the sequence of events that occurs at the synapse when a neural message is communicated.
136. What are neurotransmitters?

137. Identify and describe any three neurotransmitters, using specific examples.
138. Identify how abnormal levels of specific neurotransmitters may be involved in each of these disorders: Alzheimer's disease, Parkinson's disease, and schizophrenia.
139. Diagram and describe the peripheral nervous system. Make sure to include descriptions or examples that illustrate understanding.

140. Distinguish between the sympathetic and the parasympathetic divisions of the autonomic nervous system. For each division, provide an example of a situation in which the division would become active. Describe the effects on several bodily processes of the activity of each division.
141. Define what evolutionary psychology. Using language as an example, describe how an evolutionary psychologist would explain, describe and study this function.
142. Identify six components of the endocrine system. State the hormone(s) each component produces. Identify the functions of these hormones.

143. List and describe the brain imaging techniques.
144. Identify and describe the "old brain" structures or areas. Illustrate the function of each area.
145. Review recent research investigating the effects of gender and culture on brain structure and function.

146.

What is biofeedback? Describe the procedure and identify some of the physical and psychological disorders where it is applied.

Chapter 2 Key

1.
(p. 50)

Psychologists who specialize in considering the ways in which the biological structures and functions of the body affect behavior are known as _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 10.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #1
Learning Outcome: 5-1

2.
(p. 50)

Alison has developed an interest in the ways in which the biological structures and functions of the body affect behavior. She will most likely become a(n):

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 10.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #2
Learning Outcome: 5-1

3.
(p. 51)

The basic elements of the nervous system are called:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #3
Learning Outcome: 5-2

4.
(p. 51)

As many as _____ neurons throughout the body are involved in the control of behaviour.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #4
Learning Outcome: 5-2

5.
(p. 51)

Neurons are physically held in place by _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #5
Learning Outcome: 5-2

6.
(p. 51)

Which of the following is NOT one of the functions of glial cells?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #6
Learning Outcome: 5-2

7.
(p. 51)

A cluster of fibers at one end of a neuron that receives messages from other neurons is called:

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #7
Learning Outcome: 5-2

8.
(p. 51)

An axon is a(n):

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #8
Learning Outcome: 5-2

9.
(p. 51)

Which of the following structures is especially important for carrying messages received by the dendrites to other neurons?

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #9
Learning Outcome: 5-2

10.
(p. 51)

Terminal buttons are found at the end of:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #10
Learning Outcome: 5-2

11.
(p. 51)

Which of the following sequences correctly arranges nervous system structures from the most general to the most specific?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #11
Learning Outcome: 5-2

12.
(p. 51)

Dendrite is to axon what _____ is to _____.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #12
Learning Outcome: 5-2

13.
(p. 52)

Which of the following sequences accurately reflects the route followed by nerve impulses when one neuron communicates with another?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #13
Learning Outcome: 5-2

14.
(p. 52)

Electrical wires are generally protected by a tube of plastic. A similar insulating function is performed in the nervous system by the:

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #14
Learning Outcome: 5-2

15.
(p. 52)

_____ is a protective coat of fat and protein that wraps around the axon.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy

16.
(p. 52)

You cannot fire a gun softly, or flush a toilet halfway. Like an action potential, gun fire and a toilet's flush follow the _____ law.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #16
Learning Outcome: 5-2

17.
(p. 52)

The rule that neurons are either on or off is known as the _____ law.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #17
Learning Outcome: 5-2

18.
(p. 52)

The state in which there is a negative electrical charge of about -70 millivolts within a neuron is known as the _____ state.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #18
Learning Outcome: 5-2

19.
(p. 53)

Regarding action potentials, which of the following statements is TRUE?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #19
Learning Outcome: 5-2

20.
(p. 53)

As an action potential occurs, the neuron's electrical charge:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #20
Learning Outcome: 5-2

21.
(p. 54)

_____ are specialized neurons that fire not only when a person enacts a particular behavior, but also when a person simply observes another individual carrying out the same behavior.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #21
Learning Outcome: 5-2

22.
(p. 54)

Regarding mirror neurons, which of the following statements is ACCURATE?

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand

23.
(p. 55)

A synapse is a(n):

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #23
Learning Outcome: 5-2

24.
(p. 55)

_____ is the space between two neurons where the axon of a sending neuron communicates with the dendrites of a receiving neuron by using chemical messages.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #24
Learning Outcome: 5-2

25.
(p. 56)

Which of the following statements regarding inhibitory messages is TRUE?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #25
Learning Outcome: 5-3

26.
(p. 56)

The reabsorption of neurotransmitters by a terminal button is termed as:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #26
Learning Outcome: 5-3

27.
(p. 57)

Which neurotransmitter is described INCORRECTLY?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #27
Learning Outcome: 5-3

28.
(p. 58)

The neurotransmitter dopamine is involved in:

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #28
Learning Outcome: 5-3

29.
(p. 58)

Which neurotransmitter is CORRECTLY matched with a psychological function?

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #29
Learning Outcome: 5-3

30.
(p. 58)

Which disorder is CORRECTLY paired with an associated neurotransmitter?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #30
Learning Outcome: 5-3

31.
(p. 57)

Inhibitory is to excitatory what _____ is to _____.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #31
Learning Outcome: 5-3

32.
(p. 60)

Which expression below most closely approximates the number of neural connections in the brain?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 7.3
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #32
Learning Outcome: 6-1

33.
(p. 60)

The nervous system is divided into the _____ and the _____ nervous systems.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #33
Learning Outcome: 6-1

34.
(p. 60)

The brain and the spinal cord constitute the _____ nervous system.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #34
Learning Outcome: 6-1

35.
(p. 60)

_____ is an automatic, involuntary response to an incoming stimulus.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #35
Learning Outcome: 6-1

36.
(p. 60)

The _____ is the main means for transmitting messages between the brain and the body.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Difficult
Feldman - Chapter 02 #36
Learning Outcome: 6-1

37.
(p. 60)

Which of the following is TRUE of the spinal cord's control of behavior?

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #37

38.
(p. 60, 61)

The central nervous system is composed of _____. The peripheral nervous system comprises _____.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #38
Learning Outcome: 6-1

39.
(p. 62)

Sensory is to motor what _____ is to _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #39
Learning Outcome: 6-1

40.
(p. 62)

_____ are neurons that connect sensory and motor neurons, carrying messages between the two.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #40
Learning Outcome: 6-1

41.
(p. 62)

The two major divisions of the peripheral nervous system are the _____ and _____ divisions.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember

42.
(p. 62)

_____ is the part of the peripheral nervous system that specializes in the control of voluntary movements and the communication of information to and from the sense organs.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #42
Learning Outcome: 6-1

43.
(p. 62)

Somatic is to autonomic what _____ is to _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #43
Learning Outcome: 6-1

44.
(p. 62)

The part of the autonomic division of the nervous system that acts to prepare the body for action in stressful situations, engaging all the organism's resources to respond to a threat is known as the _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #44
Learning Outcome: 6-1

45.
(p. 62)

The "fight-or-flight" response is associated with the _____ division.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #45
Learning Outcome: 6-1

46.
(p. 62)

The part of the autonomic division of the nervous system that acts to calm the body after an emergency has ended is known as the _____ division.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #46
Learning Outcome: 6-1

47.
(p. 62)

The _____ division also directs the body to store energy for use in emergencies.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #47
Learning Outcome: 6-1

48.
(p. 62)

Which of the following situations is most likely to involve the action of the parasympathetic nervous system?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.4

49.
(p. 62)

With respect to its potential basis in nervous system activity, "voodoo death" has been attributed to:

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 1.3, 3.1, 4.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #49
Learning Outcome: 6-1

50.
(p. 62)

Izzy sees a leopard in her backyard. Her pupils are dilated and her heart is pounding; her breathing is shallow and rapid. Her _____ nervous system is active.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Apply
Difficulty: Easy
Feldman - Chapter 02 #50
Learning Outcome: 6-1

51.
(p. 63)

Which of the following terms best describes the organization of the nervous system today?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #51
Learning Outcome: 6-1

52.
(p. 63)

The branch of psychology that seeks to identify behavior patterns that are a result of our genetic inheritance from our ancestors is known as _____.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #52
Learning Outcome: 6-1

53.
(p. 64)

Evolutionary psychologists have spawned a new and increasingly influential field:

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #53
Learning Outcome: 6-1

54.
(p. 64)

The study of the effects of heredity on how people conduct themselves is known as _____.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 10.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #54
Learning Outcome: 6-1

55.
(p. 64)

Dr. Schilling is investigating the potential genetic basis of antisocial personality disorder by examining the relative prevalence of the disorder among either identical or fraternal twins, raised either together or in different families. Dr. Schilling is best described as a _____.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.2, 10.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #55
Learning Outcome: 6-1

56.
(p. 64)

Which of the following statements best expresses the relationship between the nervous system and the endocrine system?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #56
Learning Outcome: 6-2

57.
(p. 64)

A key component of the endocrine system is the tiny _____ gland, which is found near—and regulated by—the _____ in the brain.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #57
Learning Outcome: 6-2

58.
(p. 64)

The _____ gland is a major component of the endocrine system which secretes hormones that control growth and other parts of the endocrine system.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #58
Learning Outcome: 6-2

59.
(p. 64)

The _____ gland has sometimes been called the "master gland" because it controls the functioning of the rest of the endocrine system.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #59
Learning Outcome: 6-2

60.
(p. 64)

The hormone oxytocin has been implicated in each of the following behaviors EXCEPT the:

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #60
Learning Outcome: 6-2

61.
(p. 65)

Which of the following glands or structures is
CORRECTLY matched with the hormone it
produces?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #61
Learning Outcome: 6-2

62.
(p. 65)

Which of the following hormones is CORRECTLY
matched with its function?

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #62
Learning Outcome: 6-2

63.
(p. 65)

Which of the following statements is TRUE
regarding hormone replacement therapy as a
treatment for menopausal symptoms?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #63
Learning Outcome: 6-2

64.
(p. 68)

Which of the following is NOT a brain scanning
technique?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Remember

65.
(p. 69)

Which brain imaging technique below is
CORRECTLY matched with its description?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #65
Learning Outcome: 7-1

66.
(p. 69)

Which brain imaging technique below is
INCORRECTLY matched with its diagnostic use?

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #66
Learning Outcome: 7-1

67.
(p. 69)

Brent is taking part in an experiment in the
cognitive neuroscience lab on campus. Silently, he
reads rapid sequences of words flashed on a
computer screen. Simultaneously, the electrical
activity of his brain is recorded through skull
electrodes. The brain scanning technique used in
this study is:

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #67
Learning Outcome: 7-1

68.
(p. 69)

The newest brain scanning technique which is popularly used is:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #68
Learning Outcome: 7-1

69.
(p. 70)

Marisol is trying a new treatment for severe depression. Brief magnetic pulses are sent through her brain. Marisol is undergoing:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #69
Learning Outcome: 7-1

70.
(p. 70)

Soon, it may be possible to view the activity of individual neural circuits, due to the emerging field of:

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #70
Learning Outcome: 7-1

71.
(p. 70)

Which of the following structures is NOT part of the brain's central core?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember

72.
(p. 70)

The hindbrain includes each of the following structures EXCEPT the:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #72
Learning Outcome: 7-2

73.
(p. 70)

The part of the brain closest to the spinal cord is the ____; it is important for such functions as ____.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #73
Learning Outcome: 7-2

74.
(p. 70)

The pons serves to:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #74
Learning Outcome: 7-2

75.
(p. 70)

The part of the brain that controls bodily balance is the ____.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2

76.
(p. 70)

Yves has been drinking. He has difficulty walking a straight line when asked to do so by a police officer. Apparently, Yves' _____ is functioning poorly.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #76
Learning Outcome: 7-2

77.
(p. 70)

The part of the brain extending from the medulla through the pons and made up of groups of nerve cells that can immediately activate other parts of the brain to produce general bodily arousal is known as the _____.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #77
Learning Outcome: 7-2

78.
(p. 72)

The thalamus may be likened to a(n):

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #78
Learning Outcome: 7-2

79.
(p. 72)

The _____ is the part of the brain that is located in the middle of the central core and acts primarily to relay information about the senses.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #79
Learning Outcome: 7-2

80.
(p. 72)

The _____ is a tiny part of the brain that maintains homeostasis and produces and regulates vital behavior, such as eating, drinking, and sexual behavior.

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #80
Learning Outcome: 7-2

81.
(p. 72)

Pizza! Beer! Sex! Our motivation or drive for such things is based on the activity of the brain region known as the:

- A.
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Apply
Difficulty: Easy
Feldman - Chapter 02 #81
Learning Outcome: 7-2

82.
(p. 72)

The _____ maintains a steady internal environment for the body.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #82
Learning Outcome: 7-2

83.
(p. 72)

The _____ in the brain contributes to the body's maintenance of a steady internal physiological state, called _____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #83
Learning Outcome: 7-2

84.
(p. 73)

The limbic system contains which of the following structures?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #84
Learning Outcome: 7-2

85.
(p. 73)

The structures of the _____ jointly control a variety of basic functions relating to emotions and self-preservation such as eating, aggression, and reproduction.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2

86.
(p. 73)

Darnell underwent surgery to control his severe epilepsy. Now, however, Darnell cannot form new memories of his experiences, although he does remember events in the past. Most likely, the surgery destroyed a portion of the _____ in Darnell's brain.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #86
Learning Outcome: 7-2

87.
(p. 73)

The _____ is referred to as the "new brain."

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #87
Learning Outcome: 7-2

88.
(p. 74)

Which of the following sequences correctly identifies the orders of the lobes of the cortex, from anterior to posterior?

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #88
Learning Outcome: 7-2

89.
(p. 74)

In which lobe is the motor area located?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #89
Learning Outcome: 7-2

90.
(p. 75)

The _____ area is part of the cortex that is largely responsible for the body's voluntary movement.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #90
Learning Outcome: 7-2

91.
(p. 75)

In a neurophysiological investigation, a monkey makes an involuntary gesture when a portion of its brain is electrically stimulated. The area of the brain that was most likely stimulated is the:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #91
Learning Outcome: 7-2

92.
(p. 75)

The _____ area is the site in the brain of the tissue that corresponds to each of the senses, with the degree of sensitivity related to the amount of tissue.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2

93.
(p. 75-76)

The somatosensory area is to the auditory area
what the _____ lobe is to the _____ lobe.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #93
Learning Outcome: 7-2

94.
(p. 76)

The visual area in the cortex is located in the
_____.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #94
Learning Outcome: 7-2

95.
(p. 76)

The brain injury suffered by 19th-century railroad
worker Phineas Gage allowed psychologists to
learn about the functions of the brain's:

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #95
Learning Outcome: 7-2

96.
(p. 76)

The _____ areas are considered to be the site of higher mental processes such as thinking, language, memory, and speech.

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #96
Learning Outcome: 7-2

97.
(p. 76)

Which of the following is NOT an executive function?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #97
Learning Outcome: 7-2

98.
(p. 76)

Violet's speech is slow and labored; however, she can understand others' speech. Violet has:

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #98
Learning Outcome: 7-2

99.
(p. 76)

Warren suffers from Wernicke's aphasia. Which of the following will he experience in thought or behavior?

- A.
- B.
- C.
- D.**

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply

100.
(p. 77)

The process by which the brain reorganizes itself throughout development is termed:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #100
Learning Outcome: 7-2

101.
(p. 77)

_____ is the creation of new neurons.

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #101
Learning Outcome: 7-2

102.
(p. 73, 77)

Neurogenesis is especially evident in brain areas related to learning and memory. Based on this statement, you might expect neurogenesis to be particularly prevalent in the brain's:

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #102
Learning Outcome: 7-2

103.
(p. 77)

Which of the following is TRUE about the brain?

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2, 3.1

104.
(p. 78)

The use of stem cells in research and treatment remains controversial because stem cells come from:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 4.4, 4.5
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #104
Learning Outcome: 7-2

105.
(p. 79)

Which of the following statements is most accurate with respect to the lateralization of language?

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2, 8.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #105
Learning Outcome: 7-3

106.
(p. 79)

Trevor is scratching his head, trying desperately to solve a verbal analogy as part of a standardized entrance examination; Sienna, meanwhile, is giving an oral presentation in a political science class. Of the brain's hemispheres, Trevor's _____ hemisphere is most active; Sienna's _____ hemisphere is most active.

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #106
Learning Outcome: 7-3

107.
(p. 79)

Kate has suffered right-hemisphere damage.
Which of the following processes is LEAST likely
to be affected?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #107
Learning Outcome: 7-3

108.
(p. 80)

The hemispheres of the brain are connected by a
bundle of fibers called the:

- A.**
- B.
- C.
- D.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #108
Learning Outcome: 7-3

109.
(p. 80)

Ramona is a woman. Stefan is a man. Which of
the following statements is TRUE regarding
potential differences in the corpus callosum
between these two individuals?

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 5.5, 8.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #109
Learning Outcome: 7-3

110.
(p. 80)

Which of the following generalizations is probably most accurate regarding potential gender differences in the lateralization of language?

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2, 5.5, 8.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #110
Learning Outcome: 7-3

111.
(p. 80)

People whose corpus callosum has been surgically cut to stop seizures are called _____.

- A.
- B.
- C.**
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #111
Learning Outcome: 7-4

112.
(p. 82)

Mrs. Simon has learned to lessen the pain associated with her migraine headaches by voluntarily relaxing specific muscles and reducing her blood pressure. This example illustrates:

- A.
- B.**
- C.
- D.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Easy
Feldman - Chapter 02 #112
Learning Outcome: 7-4

113.
(p. 52)

The _____ is an insulating coat of fat and protein wrapped around an axon.

myelin sheath

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #113
Learning Outcome: 5-2

114.
(p. 52)

According to the _____ law neurons are either on or off.

all-or-none

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #114
Learning Outcome: 5-2

115.
(p. 54)

At the cellular level, our ability to empathize with others may reflect the activity of _____ neurons.

mirror

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #115
Learning Outcome: 5-2

116.
(p. 56)

_____ is a chemical message that prevents or decreases the likelihood that a receiving neuron will fire.

Inhibitory message

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #116
Learning Outcome: 5-3

117.
(p. 58)

After a long run, Aaron sometimes experiences a feeling of euphoria, a "runners' high" reflecting the activity of neurotransmitters called _____.

endorphins

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #117
Learning Outcome: 5-3

118.
(p. 62)

_____ neurons transmit information from the perimeter of the body to the central nervous system.

Afferent

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Difficult
Feldman - Chapter 02 #118
Learning Outcome: 6-1

119.
(p. 62)

The somatic nervous system regulates voluntary movement; in contrast, the _____ nervous system underlies involuntary movement.

autonomic

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #119
Learning Outcome: 6-1

120.
(p. 62-63)

Arif's heart rate and respiration are slowing, and his dilated pupils are contracting. His _____ nervous system has become active.

parasympathetic

APA Goal Outcome: 1.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #120
Learning Outcome: 6-1

121.
(p. 63)

_____ is the branch of psychology that seeks to identify how behavior is influenced and produced by our genetic inheritance from our ancestors.

Evolutionary psychology

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #121
Learning Outcome: 6-1

122.
(p. 64)

The tiny _____ gland is known as the "master gland."

pituitary

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #122
Learning Outcome: 6-2

123.
(p. 69)

A technique called _____ records the brain's electrical activity through electrodes.

EEG (electroencephalogram)

APA Goal Outcome: 1.2, 2.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #123
Learning Outcome: 7-1

124.
(p. 69)

Wilma has been experiencing memory difficulties, and her doctor is concerned that Wilma may have a brain tumor. He recommends a(n) _____ to confirm his diagnosis.

PET (positron emission tomography)

*APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #124
Learning Outcome: 7-1*

125.
(p. 70)

Extending from the medulla, through the midbrain, into the forebrain is the _____, which serves to regulate general bodily arousal.

reticular formation

*APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #125
Learning Outcome: 7-2*

126.
(p. 72)

Information travels from our sensory receptors to the _____ in the brain, which relays it to higher association areas.

thalamus

*APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #126
Learning Outcome: 7-2*

127.
(p. 73)

The amygdala and hippocampus are found within the brain's _____ system.

limbic

*APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #127
Learning Outcome: 7-2*

128.
(p. 73)

Epileptics have sometimes had portions of their limbic system removed. Subsequent memory problems may reflect damage to the _____.

hippocampus

*APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #128
Learning Outcome: 7-2*

129.
(p. 74)

The cortex has four major sections called _____.

lobes

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #129
Learning Outcome: 7-2

130.
(p. 75)

The _____ area in the parietal lobe encompasses specific locations associated with the ability to perceive touch and pressure in a particular area of the body.

somatosensory

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #130
Learning Outcome: 7-2

131.
(p. 77)

New neurons are created even during adulthood, in a process called _____.

neurogenesis

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #131
Learning Outcome: 7-2

132.
(p. 82)

Vance has learned to voluntarily control the activation of his autonomic nervous system as part of the treatment for an anxiety disorder. This is an example of _____.

biofeedback

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Apply
Difficulty: Medium
Feldman - Chapter 02 #132
Learning Outcome: 7-4

133.
(p. 51-52)

Draw a typical neuron and label its major parts accurately. Briefly identify the functions of the parts labeled on your diagram.

The drawing should contain: (a) dendrites, which should appear as clusters of branchlike extensions from the cell body; (b) the cell body, which should appear as a roundish structure in the center of the diagram; (c) the axon, which should appear as a long tube extending from the cell body; and (d) myelin, which should appear bracketing portions of the axon. The diagram should also include a terminal button, a bulblike ending to the axon. The function of the following structures should be described. Dendrites—receive information from other neurons. Axon—sends message to another neuron. Myelin—insulates one axon from another and speeds neural transmission.

APA Goal Outcome: 1.2, 7.1
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #133
Learning Outcome: 5-2

134.
(p. 54)

Briefly discuss what mirror neurons are, how they work and what implications this recent discovery may hold for future research. What are the evolutionary implications for mirror neurons existence?

Mirror neurons are neurons that fire not only when a person enacts a particular behavior but also when a person simply observes another individual carrying out the same behavior. Mirror neurons may help explain how (and why) humans have the capacity to understand others' intentions. Specifically, mirror neurons may fire when we view someone doing something, helping us to predict what their goals are and what they may do next. The discovery of mirror neurons suggests that the capacity of even young children to imitate others may be an inborn behavior. Furthermore, mirror neurons may be at the root of empathy—those feelings of concern, compassion, and sympathy for others—and even the development of language in humans.

APA Goal Outcome: 1.2, 7.1
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #134
Learning Outcome: 5-2

135.
(p. 56-57)

Outline the sequence of events that occurs at the synapse when a neural message is communicated.

The answer should include the following steps in the sequence: (1) neurotransmitters are produced and stored in the axon. An action potential reaches the end of the axon, or the terminal button; (2) If an action potential arrives, the potential stimulates the release of neurotransmitter molecules from vesicles within the terminal button; (3) the neurotransmitter molecules float passively across the gap between the terminal button of the sending neuron and the dendrites of the receiving neuron; (4) the molecules fit into specialized receptor sites on the dendrites of the receiving neuron; making (5) the receiving neuron either more or less likely to produce its own action potential, depending on the neurotransmitter.

APA Goal Outcome: 1.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #135
Learning Outcome: 5-2

What are neurotransmitters?

Neurotransmitters are chemicals that carry messages across the synapse to a dendrite (and sometimes the cell body) of a receiving neuron. The chemical mode of message transmission that occurs between neurons is strikingly different from the means by which communication occurs inside neurons: Although messages travel in electrical form within a neuron, they move between neurons through a chemical transmission system. There are several types of neurotransmitters, and not all neurons are capable of receiving the chemical message carried by a particular neurotransmitter. In the same way that a jigsaw puzzle piece can fit in only one specific location in a puzzle, each kind of neurotransmitter has a distinctive configuration that allows it to fit into a specific type of receptor site on the receiving neuron. It is only when a neurotransmitter fits precisely into a receptor site that successful chemical communication is possible. If a neurotransmitter does fit into a site on the receiving neuron, the chemical message it delivers is basically one of two types: excitatory or inhibitory.

APA Goal Outcome: 1.2
Blooms Taxonomy: Understand
Difficulty: Easy
Feldman - Chapter 02 #136
Learning Outcome: 5-3

137.
(p. 57-58)

Identify and describe any three neurotransmitters, using specific examples.

Students' answers may vary.

The answer should include three of the following neurotransmitters. At least one of the functions or domains listed for each of the three neurotransmitters should be mentioned, ideally in a personalized example.

Acetylcholine—movement of skeletal muscles; memory

Glutamate—memory

GABA—eating and aggression; affected by alcohol

Dopamine—involved in movement, attention, learning and reinforcement

Serotonin—regulates sleep, mood, eating, depression

Endorphins—the brain's natural painkiller; may produce euphoric feelings

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #137
Learning Outcome: 5-3

138.
(p. 57-58)

Identify how abnormal levels of specific neurotransmitters may be involved in each of these disorders: Alzheimer's disease, Parkinson's disease, and schizophrenia.

The answer should include the following:

Alzheimer's disease - diminished production of acetylcholine

Parkinson's disease - abnormally low levels of dopamine

Schizophrenia - abnormally high levels of dopamine

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Easy
Feldman - Chapter 02 #138
Learning Outcome: 5-3

Diagram and describe the peripheral nervous system. Make sure to include descriptions or examples that illustrate understanding.

Students' examples may vary.

The peripheral nervous system branches out from the spinal cord and brain and reaches the extremities of the body. Made up of neurons with long axons and dendrites, the peripheral nervous system encompasses all the parts of the nervous system other than the brain and spinal cord. There are two major divisions—the somatic division and the autonomic division—both of which connect the central nervous system with the sense organs, muscles, glands, and other organs.

The somatic division specializes in the control of voluntary movements—such as the motion of the eyes to read this sentence or those of the hand to turn this page—and the communication of information to and from the sense organs. The autonomic division controls the parts of the body that keep us alive—the heart, blood vessels, glands, lungs, and other organs that function involuntarily without our awareness.

APA Goal Outcome: 1.2, 4.4
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #139
Learning Outcome: 6-1

Distinguish between the sympathetic and the parasympathetic divisions of the autonomic nervous system. For each division, provide an example of a situation in which the division would become active. Describe the effects on several bodily processes of the activity of each division.

Students' examples may vary.
The answer should contain the following information:

The sympathetic nervous system acts to prepare the body for action in stressful situations by mobilizing the organism's resources to "fight" or "flee."

The parasympathetic nervous system acts to calm the body once a stressful situation or emergency has ended. It allows the body to store energy.

The sympathetic nervous system becomes active in such "fight-or-flight" situations as spotting a threatening stranger in a desolate parking garage, being involved in a near-accident on the road, and so on.

The parasympathetic nervous system becomes active in calm, restful situations such as relaxing after dinner or resting in bed before falling asleep. Signs of sympathetic nervous system activity are increased heart rate, inhibited digestion, dilated pupils, shallow breathing.

Signs of parasympathetic nervous system activity are decreased heart rate, facilitated digestion, constricted pupils, slowed respiration.

Define what evolutionary psychology. Using language as an example, describe how an evolutionary psychologist would explain, describe and study this function.

Evolutionary psychology is the branch of psychology that seeks to identify how behavior is influenced and produced by our genetic inheritance from our ancestors. Evolutionary psychologists argue that the course of evolution is reflected in the structure and functioning of the nervous system and that evolutionary factors consequently have a significant influence on our everyday behavior. Their work, in conjunction with the research of scientists studying genetics, biochemistry, and medicine, has led to an understanding of how our behavior is affected by heredity, our genetically determined heritage. Evolutionary psychologists have spawned a new and increasingly influential field: behavioral genetics. Consistent with the evolutionary perspective, behavioral genetics researchers are finding increasing evidence that cognitive abilities, personality traits, sexual orientation, and psychological disorders are determined to some extent by genetic factors.

APA Goal Outcome: 1.2, 4.2, 4.5
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #141
Learning Outcome: 6-1

Identify six components of the endocrine system.
State the hormone(s) each component produces.
Identify the functions of these hormones.

Students' answers may vary.
The answer should mention several of the following:

Adrenal medulla: produces epinephrine and norepinephrine, which underlie the fight-or-flight response

Adrenal cortex: makes aldosterone, which regulates sodium and potassium balance in the blood

Pancreas: produces insulin

Posterior pituitary gland: secretes oxytocin, which facilitates birthing, bonding, and the development of trust

Pineal gland: produces melatonin, which regulates daily rhythms

Parathyroid gland: produces parathyroid hormone, which increases blood calcium

Thyroid gland: produces thyroid hormone, which regulates metabolism and growth

Ovaries: produce progesterone, which controls reproduction in females

Testes: produce testosterone, which controls reproduction in males

143.
(p. 69-70)

List and describe the brain imaging techniques.

Three of the following techniques should be identified; a description of the diagnostic utility of each technique should follow.

Electroencephalogram (EEG)—facilitates the diagnosis of epilepsy and learning disabilities
Positron emission tomography (PET)—may help identify the presence of brain tumors
Functional magnetic resonance imaging (fMRI)—has improved the diagnosis of many ailments, including strokes, multiple sclerosis, and Alzheimer's disease
Transcranial magnetic stimulation (TMS) imaging—may allow the treatment of certain psychological disorders, such as depression and schizophrenia

APA Goal Outcome: 1.2, 2.2, 4.2
Blooms Taxonomy: Remember
Difficulty: Medium
Feldman - Chapter 02 #143
Learning Outcome: 7-1

Identify and describe the "old brain" structures or areas. Illustrate the function of each area.

The "old brain" is the brain's central core. Three of the following structures should be identified. Damage or deterioration should lead to impairment of the function listed for a given area.

Medulla regulates breathing and heart rate.

Pons regulates sleep; coordinates movement between the right and left sides of the body.

Cerebellum controls body balance; coordinates movement.

Reticular formation—regulates alertness; when awake, produces arousal to outside stimulation; when asleep, filters out distracting background stimuli.

Thalamus—acts as a relay station for information from the senses.

Hypothalamus—maintains homeostasis, a steady internal state for the body; produces and regulates survival-related behavior, such as eating, self-protection, and sex.

APA Goal Outcome: 1.2, 4.2
Blooms Taxonomy: Understand
Difficulty: Medium
Feldman - Chapter 02 #144
Learning Outcome: 7-2

Review recent research investigating the effects of gender and culture on brain structure and function.

Young girls show earlier development in the frontal lobes, which control aggressiveness and language development. On the other hand, boys' brains develop faster in the visual region that facilitates visual and spatial tasks such as geometry. Furthermore, most males tend to show greater lateralization of language in the left hemisphere. For them, language is clearly relegated largely to the left side of the brain. In contrast, women display less lateralization, with language abilities apt to be more evenly divided between the two hemispheres. Such differences in brain lateralization may account, in part, for the superiority often displayed by females on certain measures of verbal skills, such as the onset and fluency of speech. Other research suggests that men's brains are somewhat bigger than women's brains even after taking differences in body size into account. In contrast, part of the corpus callosum, a bundle of fibers that connects the hemispheres of the brain, is proportionally larger in women than in men.

Culture also gives rise to differences in brain lateralization. Native speakers of Japanese seem to process information regarding vowel sounds primarily in the brain's left hemisphere. In contrast, North and South Americans, Europeans, and individuals of Japanese ancestry who learn Japanese later in life handle vowel sounds principally in the right hemisphere. One explanation for this difference is that certain characteristics of the Japanese language, such as the ability to express complex ideas by using only vowel sounds, result in the development of a specific type of brain lateralization in native speakers

What is biofeedback? Describe the procedure and identify some of the physical and psychological disorders where it is applied.

Biofeedback is a procedure in which a person learns to control through conscious thought internal physiological processes such as blood pressure, heart and respiration rate, skin temperature, sweating, and the constriction of particular muscles. Although it traditionally had been thought that the heart rate, respiration rate, blood pressure, and other bodily functions are under the control of parts of the brain over which we have no influence, psychologists have discovered that these responses are actually susceptible to voluntary control.

In biofeedback, a person is hooked up to electronic devices that provide continuous feedback relating to the physiological response in question. For instance, someone trying to control headaches through biofeedback might have electronic sensors placed on certain muscles on her head and learn to control the constriction and relaxation of those muscles. Later, when she felt a headache starting, she could relax the relevant muscles and abort the pain.

Although the control of physiological processes through the use of biofeedback is not easy to learn, it has been employed with success in a variety of ailments, including emotional problems (such as anxiety, depression, phobias, tension headaches, insomnia, and hyperactivity), physical illnesses with a psychological component (such as asthma, high blood pressure, ulcers, muscle spasms, and migraine headaches), and physical problems.

Chapter 2 Summary