

Chapter: Chapter 2, 12th edition: Neuroscience and Biological Foundations, Multiple Choice, Short Answer/Fill-In, and Essay

Multiple Choice

1. Which name for a school of thought in psychology does not belong with the others?

- a) biopsychology
- b) psychobiology
- c) behavioral neuroscience
- d) evolutionary psychology

Ans: d

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

2. Which of the following would be considered the foundation of the human nervous system?

- a) the glial cell
- b) the neuron
- c) the brain
- d) the spinal cord

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

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Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

3. A neuron is _____.

- a) the part of a nerve cell that receives information.
- b) the part of a nerve cell that sends information.
- c) the part of a nerve cell that creates energy.
- d) a cell of the nervous system responsible for receiving and transmitting electrochemical information.

Ans: d

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

4. The basic units of the brain and spinal cord that receive, process, and transmit electrochemical information are the _____.

- a) neurons
- b) neurotransmitters
- c) synapses
- d) myelin sheaths

Ans: a

Section Ref: Neural and Hormonal Processes

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

5. The cells that provide structural, nutritional, and other support for neurons are called _____ cells.

- a) nervous
- b) axon
- c) glial
- d) dendritic

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

6. The branching fibers that receive neural impulses from other neurons and convey them toward the cell body are called _____.

- a) myelin sheaths
- b) axon buttons
- c) dendrites
- d) nerves

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

7. The branches of the neuron that receive neural impulses from other neurons are called _____, and the tube-like structure that conveys impulses toward other neurons is called the _____.

- a) somas; axon
- b) dendrites; axon
- c) axons; dendrite
- d) dendrites; soma

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

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APA: Goal 1: Knowledge Base in Psychology

8. As an impulse travels through the structures of the neuron in a specific order. Which of the following is the correct sequence of structures that would comprise that process?

- a) cell body, terminal buttons, axon, dendrites
- b) terminal buttons, axon, dendrites, cell body
- c) dendrites, cell body, axon terminal buttons,
- d) axon, cell body, terminal buttons, dendrites

Ans: c

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APA: Goal 1: Knowledge Base in Psychology

9. Which of the following is TRUE of the cell body?

- a) It cannot accept incoming information from dendrites.

- b) It determines whether the neuron should fire and pass on information to the axon.
- c) It is housed inside of the cellular nucleus.
- d) It is located outside of the cellular membrane.

Ans: b

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APA: Goal 1: Knowledge Base in Psychology

10. The long tube-like structure that conveys impulses away from the cell body toward other neurons, muscles, or glands is called a(n) _____.

- a) dendrite
- b) soma
- c) myelin sheath
- d) axon

Ans: d

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APA: Goal 1: Knowledge Base in Psychology

11. The _____ is another name for the cell body.

- a) ganglia
- b) soma
- c) myelin
- d) cell

Ans: b

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APA: Goal 1: Knowledge Base in Psychology

12. What part of the cell receives incoming messages?

- a) Axons
- b) glia
- c) dendrites
- d) terminal buttons

Ans: c

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APA: Goal 1: Knowledge Base in Psychology

13. The BEST definition of the myelin sheath is a _____.

- a) protein membrane that increases the electrical receptivity of axons
- b) fatty substance that collects inside axons, slowing the rate of an action potential
- c) fatty insulation wrapped around some axons that increases the rate at which impulse travel along the axon
- d) protein that converts food into energy within the nucleus of a neuron

Ans: c

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14. One important difference between a myelinated and unmyelinated axon is _____.

- a) the neural impulse is faster in the myelinated axon
- b) the neural impulse is faster in the unmyelinated axon
- c) only the myelinated axons have nodes
- d) the unmyelinated axons are heavier

Ans: a

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APA: Goal 2: Scientific Inquiry and Critical Thinking

15. Rosa has multiple sclerosis, a degenerative disorder that causes myelin sheath around some of her neurons to disintegrate. What effect will this have on Rosa's nerve impulses?

- a) They will slow down.
- b) They will be stopped in the soma.
- c) They will speed up.
- d) They will reverse polarity.

Ans: a

Section Ref: Neural and Hormonal Processes

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Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

16. Lynn has a disease called multiple sclerosis. This disease makes her muscle coordination difficult. Multiple sclerosis results from _____.

- a) a lack of electrolytes in the brain
- b) fatty mitochondria
- c) two nuclei in some neurons
- d) progressive deterioration of the myelin sheath

Ans: d

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Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

17. The ends of axons, from which neurotransmitters are eventually released, are called _____.

- a) dendrites
- b) terminal buttons
- c) soma
- d) mitochondria

Ans: b

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APA: Goal 1: Knowledge Base in Psychology

18. Neurotransmitters are _____.

- a) released from the terminal button of a cell
- b) responsible for electrical communication *within* a cell
- c) part of the "powerhouse" of a cell
- d) released into the bloodstream within the endocrine system.

Ans: a

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19. Among other behaviors, this neurotransmitter also affects sleep, appetite, and emotional states.

- a) acetylcholine
- b) dopamine
- c) norepinephrine
- d) serotonin

Ans: d

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APA: Goal 1: Knowledge Base in Psychology

20. Certain forms of depression are related to lowered levels of _____.

- a) acetylcholine
- b) dopamine
- c) GABA
- d) serotonin

Ans: d

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

21. Lowered levels of this neurotransmitter are suspected of playing a role in Alzheimer's disease.

- a) Acetylcholine
- b) Dopamine
- c) GABA
- d) Norepinephrine

Ans: a

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APA: Goal 2: Scientific Inquiry and Critical Thinking

22. Which of the following neurotransmitters is not known for playing a role in the functioning of memory?

- a) Acetylcholine
- b) Dopamine
- c) Norepinephrine
- d) Gamma-aminobutyric acid (GABA)

Ans: d

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Bloom's Level: Knowledge

APA: Goal 2: Scientific Inquiry and Critical Thinking

23. Too much of this neurotransmitter may be related to schizophrenia, whereas too little may be related to Parkinson's disease.

- a) Acetylcholine
- b) Dopamine
- c) Norepinephrine
- d) Serotonin

Ans: b

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Bloom's Level: Knowledge

APA: Goal 2: Scientific Inquiry and Critical Thinking

24. Actor Michael J. Fox has become an advocate for research helping to identify causes and treatments for Parkinson's disease. Parkinson's disease results from:

- a) too little serotonin
- b) too much dopamine
- c) too little dopamine
- d) too much serotonin

Ans: c

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Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

25. This neurotransmitter's major role is to inhibit neural transmissions in the central nervous system.

- a) Acetylcholine
- b) Dopamine
- c) GABA
- d) Norepinephrine

Ans: c

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26. A chemical substance in the nervous system that is involved in pain control, sexual activity, and memory is _____.

- a) morphine
- b) epinephrine
- c) endorphins
- d) acetylcholine

Ans: c

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Difficulty: Medium

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Bloom's Level: Knowledge

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27. Communication *within* a neuron is best described as _____.

- a) electrical
- b) antagonistic
- c) agonistic
- d) chemical

Ans: a

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Difficulty: Easy

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

28. When an axon is not stimulated, it is in a polarized state called _____.

- a) steady state
- b) homeostasis
- c) the resting potential
- d) super-polarized

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

29. Most poisons and drugs act at the _____ by replacing, decreasing, or enhancing the amount of neurotransmitters that are released or available between neurons.

- a) soma
- b) cell
- c) synapse
- d) dendrites

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

30. _____ help explain why soldiers and athletes continue to fight, sometimes without feeling any pain, despite horrific injuries.

- a) GABA
- b) Acetylcholine
- c) Endorphins
- d) Glutamate

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

31. Your textbook likens the depolarization and repolarization of a neuron that fires to _____.

- a) the wave done by the crowds at a sports event
- b) a door opening and closing
- c) a tree bending in the wind
- d) a car speeding up and slowing down

Ans: a

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

32. An action potential is most accurately defined as _____.
a) the likelihood that a neuron will take action when stimulated
b) the tendency for a neuron to be potentiated by neurotransmitters
c) a neural impulse that carries information along the axon of a neuron
d) the firing of a nerve, either toward or away from the brain

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

33. Communication within neurons is best described as _____, whereas communication between neurons is most correctly described as _____.
a) electrical; chemical
b) unmyelinated; myelinated
c) chemical; electrical
d) very slow; very fast

Ans: a

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

34. Chemical messengers that are released by axons and are received by dendrites on another neuron are called _____.
a) synaptic messengers
b) neurotransmitters
c) synaptic transmitters
d) neuromessengers

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.11

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

35. Neurotransmitters are _____.

- a) chemicals that cross the synaptic gap and bind to receptors on another neuron
- b) endocrine cells that are released into the bloodstream
- c) found only in the central nervous system (the brain and spinal cord)
- d) found only in the peripheral nervous system (outside of the brain and spinal cord)

Ans: a

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.11

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

36. What type(s) of messages can one neuron deliver to another?

- a) Excitatory
- b) Inhibitory
- c) Excitatory or inhibitory
- d) Compound

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.11

Objective Text: Describe the key features and functions of the nervous and endocrine systems.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

37. Your body has designed a traffic signal for action potentials traveling from one neuron to another. In this system, the red light represents _____.

- a) an excitatory neurotransmitter
- b) an inhibitory neurotransmitter
- c) a combination of excitatory and inhibitory neurotransmitters
- d) as an action potential can never stop, a "red light" could not occur

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.11

Objective Text: Describe the key features and functions of the nervous and endocrine systems.

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

38. When the neuron is at its resting potential, the fluid inside the axon:

- a) has more negatively charged ions than the fluid outside
- b) has more positively charged ions than the fluid outside
- c) has an equal number of negatively and positively charged ions outside
- d) does not have any negative or positive ions

Ans: a

Section Ref: Neural and Hormonal Processes

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

39. Excess neurotransmitters left in the synapse after an action potential _____.

- a) are absorbed back into the sending neuron
- b) stay in the synapse waiting for the next action potential
- c) remain and are used the next time a neuron fires
- d) can become dangerous if they build up too much over time

Ans: a

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Comprehension

APA: Goal 1: Knowledge Base in Psychology

40. A synapse is _____.

- a) the gap between the brain and the skull that contains cerebrospinal fluid
- b) the gap between neurons where neurotransmitters are released
- c) the vestibule that contains neurotransmitters
- d) the place where neurotransmitters exchange ionic molecules

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

41. Endogenous opioid peptides are called _____.

- a) neurotransmitters
- b) endorphins
- c) morphine
- d) curare

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

42. If you run a marathon, your body will release _____ to elevate your mood and reduce your pain.

- a) lactic acid
- b) epinephrine
- c) norepinephrine
- d) endorphins

Ans: d

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

43. The class of neurotransmitters known as endorphins function to _____.

- a) stimulate hunger
- b) inhibit motor functions

- c) affect memory and learning
- d) reduce the effects of alcohol in the bloodstream

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

44. Drugs act at the synapse by _____.

- a) causing the action potential to fire
- b) replacing, decreasing, or enhancing the amount of neurotransmitter
- c) initiating the graded potential
- d) acting to enhance the amount of neurotransmitters

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

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Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

45. A collection of glands found throughout the body that manufacture and secrete hormones into the bloodstream in order to effect behavioral change or maintain normal bodily functions is called the _____ system.

- a) nervous
- b) alimentary
- c) endocrine
- d) electrochemical

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

46. The _____ gland is generally thought of as the “master” gland of the endocrine system.

- a) pituitary
- b) thyroid
- c) thymus
- d) pineal

Ans: a

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

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Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

47. Chemicals that are manufactured by endocrine glands and circulated in the bloodstream to change or maintain bodily functions are called _____.

- a) vasopressors
- b) gonadotropins
- c) hormones
- d) steroids

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

48. Growth, reproduction, moods, and our responses to stress are all controlled by our _____.

- a) peripheral nervous systems
- b) endorphins
- c) hormones
- d) parasympathetic nervous system

Ans: c

Section Ref: Neural and Hormonal Processes

Difficulty: Easy

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

49. In your text, the analogy was presented that neurotransmission at the synapse is like _____, whereas hormonal communication is like _____.

- a) a drug; a vitamin
- b) an individual message; a global email
- c) a global email; an individual message
- d) a classroom; television

Ans: b

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

50. The central nervous system (CNS) has two main components. What are they?

- a) Local and non-local
- b) The endocrine and nervous systems
- c) The head and body
- d) The brain and spinal cord

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

51. The brain and the spinal cord together comprise the _____ system.

- a) peripheral nervous
- b) central nervous
- c) endocrine
- d) sympathetic nervous

Ans: b

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

52. The two major divisions of the nervous system are the _____ nervous systems.

- a) anterior and posterior
- b) central and peripheral
- c) chemical and mechanical
- d) autonomic and anomic

Ans: b

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

53. What is the main function of our nervous system?

- a) To send and receive information
- b) To keep us safe
- c) To regulate our heartbeat and respiration
- d) To help us communicate with others

Ans: a

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

54. The central nervous system _____.

- a) consists of the brain and spinal cord
- b) is the most important and best nervous system
- c) includes the automatic and other nervous systems
- d) is mediated by the endocrine system

Ans: a

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

55. The peripheral nervous system _____.

- a) is composed of the spinal cord and somatic nerves
- b) is less important than the central nervous system
- c) is contained within the skull and spinal column
- d) includes all the nerves and neurons outside the brain and spinal cord

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

56. The link between the brain and the spinal cord and the rest of the body's sense receptors, muscles, and glands is the _____ nervous system.

- a) peripheral
- b) autonomic
- c) somatic
- d) sympathetic

Ans: a

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

57. Sal had a severe stroke that left him unable to talk for a year. However, during the second year, he gradually regained his ability to speak. What is the *most probable explanation* for what happened?

- a) The neurons regenerated
- b) Neurons split to form new neurons
- c) Stem cells initiated the formation of new cells
- d) The brain rerouted the neurons around the damaged area

Ans: d

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

58. Neuroplasticity refers to the ability of the brain to change its _____ in response to environmental conditions.

- a) shape, weight, and size
- b) structure and function
- c) basic organization
- d) electrical conductivity

Ans: b

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

59. The finding that some functions are recovered more easily after brain injury than others suggests that the brain regions to which these functions are localized

- a) are more plastic than other regions.
- b) have an excessive amount of dopamine.
- c) have larger synapses between neurons.
- d) originate from more stem cells than other parts of the brain.

Ans: a

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

60. Replacing lost cells in the brain with new cells is called _____.

- a) neuroplasticity
- b) neuroformulation

- c) neurokinesis
- d) neurogenesis

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

61. In the future, _____ may be used to treat injury, eye disease, Alzheimer's, Parkinson's, epilepsy, stress, and strokes.

- a) dopamine
- b) neuroplasticity
- c) stem cells
- d) serotonin

Ans: c

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

62. A possible future treatment to help those paralyzed from spinal cord injuries to walk again is _____.

- a) neural transmission
- b) stem cell transplants
- c) split cell production
- d) neuroplastic implants

Ans: b

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

63. The creation of new neurons is called _____.

- a) split-brain genesis
- b) stem cell production
- c) neuroplasticity
- d) neurogenesis

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

64. _____ are the immature precursors that give birth to new, specialized cells.

- a) Stem cells
- b) Dendrites
- c) Axons
- d) Neurogenic cells

Ans: a

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

65. The spinal cord is found inside the spinal column, and is involved in all but *which* of the following?

- a) creativity and intelligence
- b) relaying neural information from the brain to the body
- c) reflexes
- d) relaying neural information from the body to the brain

Ans: a

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

66. You have just touched a hot mug of coffee. Your hand immediately and reflexively pulls away. This action was controlled by your _____.

- a) peripheral nervous system
- b) spinal cord
- c) brain
- d) parasympathetic nervous system

Ans: b

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

67. Movements that are initiated by an external stimulus and bypass input from your brain are called _____.

- a) neurogenesis
- b) neuroplasticity
- c) reuptake
- d) reflexes

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

68. An impulse that travels inward from a sensory fiber to the spinal cord then outward to a muscle fiber without involving the brain is called a(n) _____.

- a) inhibitory potential
- b) sensory-motor arc
- c) excitatory potential
- d) reflex arc

Ans: d

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

69. Lightly stroking the sole of an infant's feet and seeing the toes fan out and the foot turn in is initiating the _____ reflex.

- a) eagle
- b) Babinski
- c) rooting
- d) stepping

Ans: b

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

70. The peripheral nervous system is made up of the _____ nervous systems.

- a) sympathetic and autonomic
- b) central and somatic
- c) somatic and autonomic
- d) autonomic and parasympathetic

Ans: c

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

71. The somatic nervous system is made up of _____.

- a) nerves that connect to sensory receptors and control skeletal muscles
- b) the spinal cord and interneurons in the spine
- c) the nerves that maintain the functioning of the glands, heart muscles, and other smooth muscles
- d) the four cerebral cortices of the forebrain

Ans: a

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

72. Anna hears her teacher ask a question she knows the answer to, so she raises her hand so she can speak. In order for her to voluntarily raise her hand, the _____ nervous system would have to be employed.

- a) sympathetic
- b) autonomic
- c) somatic
- d) parasympathetic

Ans: c

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

73. The _____ nervous system is responsible for involuntary tasks, whereas the _____ nervous system is responsible for voluntary tasks.

- a) autonomic; somatic
- b) somatic; autonomic
- c) central; peripheral
- d) peripheral; central

Ans: a

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

74. The sympathetic and parasympathetic systems are branches of the _____ nervous system.

- a) somatic
- b) central

- c) cardinal
- d) autonomic

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

75. The _____ nervous system is responsible for fight or flight, whereas the _____ nervous system is responsible for calming us and conserving energy.

- a) central; peripheral
- b) parasympathetic; sympathetic
- c) sympathetic; parasympathetic
- d) autonomic; somatic

Ans: c

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

76. The autonomic nervous system is subdivided into two branches called the _____ and _____ systems.

- a) automatic; semi-automatic
- b) somatic; peripheral
- c) afferent; efferent
- d) sympathetic; parasympathetic

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

77. Sensory neurons carry messages _____ the central nervous system; motor neurons carry messages _____ the central nervous system.

- a) to; to
- b) away from; to
- c) away from; away from
- d) to; away from

Ans: d

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

78. Diane got very angry at Chris, and they argued over dinner. Afterward, Diane had a stomach ache. This was probably because:

- a) her sympathetic nervous system activated and shut down digestion during the argument
- b) her parasympathetic nervous system activated and shut down digestion during the argument
- c) her endocrine system sent out too many hormones to her stomach
- d) her central nervous system signaled for too much acid to be produced in her stomach

Ans: a

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

79. Dr. Prathma is working with rats to identify the function of a specific area of the brain. He systematically destroys this brain part to see which functions become deficient in his laboratory rats. What is the name of this type of procedure?

- a) neuromortality
- b) lesioning
- c) localizing
- d) lateralization

Ans: b

Section Ref: Tour Through the Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

80. Which neuroimaging technique involves placing electrodes on the scalp in order to assess the electrical activity in the brain?

- a) computed tomography (CT)
- b) positron emission tomography (PET)
- c) functional magnetic resonance imaging (fMRI)
- d) electroencephalogram (EEG)

Ans: d

Section Ref: Tour Through the Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

81. Dmitryi has a fear – a diagnosable phobia – of being exposed to radioactive substances. As such, if he ever has a need for a neuroimaging procedure, which would he want to avoid?

- a) PET
- b) MRI
- c) fMRI
- d) IER

Ans: A

Section Ref: Tour Through the Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

82. Which of the following findings supports localization of function?

- a) Removal of the parietal lobes of a laboratory dog results in a complete loss of function
- b) Removal of the entire brain of a laboratory dog results in only a visual deficit
- c) Electrically stimulating the motor area of a laboratory dog results in involuntary movements of the hind leg
- d) Electrically stimulating the motor area results in motor movements and bodily sensations

Ans: c

Section Ref: Tour Through the Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

83. This term refers to the fact that various parts of the brain are specialized for particular functions.

- a) localization of function
- b) specialized functioning
- c) functional ablation
- d) brain plasticity

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

84. Stimulating the _____ increases aggressive behavior.

- a) amygdala
- b) cerebellum
- c) fornix
- d) medulla

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

85. Three structures associated with the hindbrain are the _____.

- a) thalamus, amygdala, and hippocampus
- b) motor control, sensory, and projection areas
- c) pons, medulla, and cerebellum
- d) cerebrum, cerebellum, and corpus callosum

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

86. This part of the brain is responsible for survival functions such as heart rate and respiration.

- a) cerebellum
- b) corpus callosum
- c) medulla
- d) thalamus

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

87. A primary function of the medulla is to _____.

- a) control automatic bodily functions such as respiration and heart rate
- b) coordinate fine motor movement in the fingers and face
- c) regulate the functioning of the pons
- d) coordinate sensory information between the sensory organs and cerebral cortices.

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

88. This structure located in the hindbrain that is involved in respiration, movement, waking, sleep, and dreaming is the _____.

- a) medulla
- b) pons
- c) cerebellum
- d) reticular formation

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

89. This structure at the base of the brain, behind the brain stem, is responsible for maintaining fine muscle movements, balance, and some aspects of perception and cognition.

- a) frontal lobe
- b) motor control area
- c) cerebellum
- d) corpus callosum

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

90. The next time you see someone at a party who is having trouble walking properly, you might say, "He has had too much alcohol to drink, and it went right to his _____."

- a) reticular formation
- b) cerebellum

- c) frontal lobe
- d) parietal lobe

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

91. In addition to coordinating movement and maintaining balance, the cerebellum may also play a role in _____.

- a) breathing and blood pressure
- b) hunger and satiety
- c) hearing and vision
- d) perception and cognition

Ans: d

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

92. Which of the following structures is part of the forebrain?

- a) hypothalamus
- b) medulla
- c) cerebellum
- d) reticular Formation

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge
APA: Goal 1: Knowledge Base in Psychology

93. The _____ is involved in coordinating eye and body movement and works with the pons to coordinate sleep and arousal.

- a) cerebellum
- b) midbrain
- c) cortex
- d) medulla

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

94. The _____ is a diffuse set of neurons in the core of the brain stem that screens incoming sensory information and arouses the cortex.

- a) thalamus
- b) corpus callosum
- c) limbic system
- d) reticular formation

Ans: d

Section Ref: A Tour Through The Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

95. While reading your newspaper in the morning, you notice a crash in the street outside. The part of your brain that refocuses your attention from the paper to the crash is the _____.

- a) medulla
- b) cerebral cortex

- c) reticular formation
- d) auditory cortex

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

96. The largest and most prominent part of the human brain is the _____.

- a) cerebellum
- b) hindbrain
- c) midbrain
- d) forebrain

Ans: d

Section Ref: A Tour Through The Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

97. Which part of the brain is responsible for directing sensory information (except smell) from the sensory organs to the appropriate cerebral cortex for interpretation?

- a) hypothalamus
- b) thalamus
- c) cortex
- d) hindbrain

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 2: Scientific Inquiry and Critical Thinking

98. Yuri works as a switchboard operator at a busy company. He directs incoming calls from all over the world to appropriate departments for processing. His job can be compared to the job of the _____ in your brain.

- a) thalamus
- b) hypothalamus
- c) pons
- d) cerebral cortex

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

99. Injury to the thalamus could theoretically cause all except which of the following?

- a) deafness
- b) blindness
- c) anosmia (loss of smell)
- d) ageusia (loss of taste)

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

100. Many symptoms of schizophrenia – like hearing voices, misunderstanding social cues, and misinterpreting sensory information – could be due to abnormalities in the _____.

- a) reticular formation
- b) hypothalamus
- c) thalamus
- d) medulla

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

101. This is a small structure that maintains homeostasis. It also regulates emotions and drives, such as hunger, thirst, sex, and aggression.

- a) hypothalamus
- b) hippocampus
- c) pituitary gland
- d) thalamus

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

102. The hypothalamus's role in the brain is MOST similar to the role of a(n) _____.

- a) supervisor
- b) employee
- c) educator
- d) pianist

Ans: a

Section Ref: A Tour Through The Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

103. Regulation of all but *which* of the following functions is controlled by the hypothalamus?

- a) hunger and thirst
- b) fear
- c) aggression

d) sex

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

104. The hippocampus, amygdala, thalamus, and hypothalamus are all parts of the _____.

- a) brain stem
- b) reticular formation
- c) limbic system
- d) neocortical unit

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

105. An interconnected group of forebrain structures that are responsible for the arousal and regulation of emotion, motivation, memory, and other mental processes is the _____.

- a) brain stem
- b) limbic system
- c) reticular formation
- d) cerebral cortex

Ans: b

Section Ref: A Tour Through The Brain

Difficulty: Easy

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

106. This structure is part of the limbic system and helps regulate emotion, especially aggression and fear.

- a) fornix
- b) hippocampus
- c) amygdala
- d) thalamus

Ans: c

Section Ref: A Tour Through The Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

107. The cerebral cortex, with its estimated 30 billion neurons, is about ____ inch thick.

- a) 1/8
- b) 1/4
- c) 1/2
- d) 1

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

108. The cerebral cortex is about one-eighth of an inch thick and is comprised of about _____ neurons.

- a) 300 million
- b) 3 billion
- c) 30 billion
- d) 300 billion

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge
APA: Goal 1: Knowledge Base in Psychology

109. The frontal, parietal, temporal, and occipital lobes make up the _____.
a) subcortical area of the brain
b) reticular formation
c) cerebral cortex
d) association areas of the brain

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

110. In the cerebral cortex, we have a total of _____ lobes that are divided into two hemispheres.
a) 4
b) 2
c) 8
d) 6

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

111. The frontal lobes are primarily responsible for _____.
a) speech comprehension
b) motor control
c) reflexive motor responses
d) your processing of touch and taste

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

112. Motor control, speech production, thinking, personality, intelligence, and working memory are all governed by your _____ lobes.

- a) parietal
- b) occipital
- c) temporal
- d) frontal

Ans: d

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

113. Beverly had a stroke that has left her with Broca's aphasia, even though she can read and write. This suggests her _____ was damaged.

- a) left parietal lobe
- b) right temporal lobe
- c) left frontal lobe
- d) entire occipital lobe

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

114. The case of Phineas Gage suggests that the _____ lobes regulate our personality. These lobes are largely responsible for much of what makes us uniquely human.

- a) frontal
- b) temporal
- c) parietal
- d) occipital

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

115. The motor cortex in the _____ lobe is responsible for your ability to place your foot on the brake pedal and stop at a red light.

- a) occipital
- b) frontal
- c) parietal
- d) temporal

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

116. The part of the cerebral cortex that is the control center of bodily sensations is the _____ lobe.

- a) frontal
- b) occipital
- c) parietal
- d) temporal

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

117. The _____ lobes are involved with hearing, language comprehension, memory, and some emotional control.

- a) frontal

- b) occipital
- c) posterior
- d) temporal

Ans: d

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

118. _____ area is found in the temporal lobe, and is involved with language comprehension.

- a) Broca's
- b) The association
- c) Gage's
- d) Wernicke's

Ans: d

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

119. Vision and visual perception occur in the _____ lobes.

- a) occipital
- b) frontal
- c) temporal
- d) parietal

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

120. While roller blading without a helmet, Irena fell and hit the back of her head. She was taken to the hospital because she most likely injured her _____.

- a) frontal lobe and was paralyzed
- b) occipital lobe and had visual problems
- c) parietal lobe and lost bodily sensation
- d) temporal lobe and had auditory problems

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

121. This lobe is involved in the perception of shape, color, and motion.

- a) Frontal
- b) Parietal
- c) Temporal
- d) Occipital

Ans: d

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

122. These are the "quiet areas" of the brain that help interpret, integrate, and act on information processed in other areas of the brain.

- a) limbic system
- b) projection areas
- c) association areas
- d) the limbic systems

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

123. If your neighbor was abducted by aliens and they removed his right parietal lobe, he would be unable to _____.

- a) move the left side of his body
- b) move the right side of his body
- c) feel sensations from the left side of his body
- d) feel sensations from the right side of his body

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

124. The reason you can wiggle your fingers "better" than you can wiggle your toes is because the area of the _____ for your fingers than for your toes.

- a) motor cortex is larger
- b) somatosensory cortex is larger
- c) motor cortex is smaller
- d) somatosensory cortex is smaller

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Analysis

APA: Goal 2: Scientific Inquiry and Critical Thinking

125. This is a term for the specialization of the left and right hemisphere of the brain for particular operations.

- a) localization
- b) lateralization
- c) plasticity
- d) neurogenesis

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

126. You have a close friend who has undergone surgery to separate her brain hemispheres. It is MOST likely that, prior to surgery, she suffered from _____.

- a) schizophrenia
- b) dyslexia
- c) severe epilepsy
- d) bipolar disorder

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 2: Scientific Inquiry and Critical Thinking

127. "Split-brain" is the term used to describe which of the following conditions?

- a) A mental condition also known as schizophrenia
- b) Surgical separation of the brain hemispheres
- c) An intellectual condition also known as dyslexia
- d) Lateralization of hemispheres

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

128. What is the bundle of nerve fibers that carries information between the brain's right and left hemispheres?

- a) corpus callosum
- b) cerebral cortex
- c) cerebellum

d) brain stem

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Easy

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

129. Although the left and right hemispheres of the brain are specialized, they are normally in close communication through the _____.

- a) reciprocating circuits
- b) thalamus
- c) corpus callosum
- d) cerebellum

Ans: c

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

130. Your left brain doesn't know what your right brain is doing. It is MOST likely that your _____ has been severed.

- a) amygdala
- b) frontal lobe
- c) association cortex
- d) corpus callosum

Ans: d

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

131. Mandisa is blindfolded and asked to identify several objects. She cannot verbally identify objects placed in her left hand, which suggests that she has had _____.

- a) a dyslexic episode
- b) split-brain surgery
- c) too much to drink
- d) a neural episode

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

132. A split-brain patient is presented with the word "TENANT," with "TEN" presented to her right visual field and "ANT" presented to her left visual field. How does she respond when asked what word she sees?

- a) Tenant
- b) Ten
- c) Ant
- d) She reports she sees nothing

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

133. In most adults, the left hemisphere of the brain is specialized for _____.

- a) language
- b) nonverbal functions
- c) spatial perception
- d) visual perception

Ans: a

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

134. The case of Phineas Gage most clearly demonstrated that _____ is/are a function of the brain – especially the frontal lobe.

- a) thought disorders
- b) personality
- c) cognitive impairment
- d) dementia

Ans: b

Section Ref: The Cerebral Cortex

Difficulty: Medium

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

Short Answer/Fill-In

135. Which medical condition causes a breakdown of the myelin sheath that surrounds and coats axons?

Ans: Multiple sclerosis

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

136. A(n) _____ drug enhances or mimics the actions of a specific neurotransmitter.

ANs: agonist

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

137. When these types of cells can grow and develop into any other type of human cell?

Ans: stem cells

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's APA: Goal 1: Knowledge Base in Psychology

Level: Knowledge

138. _____ neurons are those that respond to sensory messages by transmitting signals that activate muscles or glands.

Ans: Motor

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

139. Which type of neuroimaging technique can produce a high-resolution three-dimensional picture of the brain?

Ans: Magnetic resonance imaging, or MRI

Section Ref: A Tour Through the Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

140. The small structure in the midbrain that secretes the neurotransmitter dopamine is called the _____.

Ans: substantia nigra

Section Ref: A Tour Through the Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

141. Located in the parietal lobe, the _____ cortex is responsible for processing information about bodily sensations, such as touch and temperature.

Ans: somatosensory

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

Essay

142. Diagram a neuron with all of its major parts. Describe the functions of each part. Note: Artistic ability will not be graded; accuracy will be.

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

143. Describe the electrochemical process that changes a resting potential into an action potential. Include a statement about how neurotransmitters act to excite or inhibit action potentials.

Section Ref: Neural and Hormonal Processes

Difficulty: Hard

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Comprehension

APA: Goal 2: Scientific Inquiry and Critical Thinking

144. Identify five different endocrine glands, the hormones that they produce, and the functions that they control.

Section Ref: Neural and Hormonal Processes

Difficulty: Medium

Objective: 2.1

Objective Text: Describe the key features and functions of the nervous and endocrine systems

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

145. Outline the organization of the nervous system, detailing the levels of structure/functional units.

Section Ref: Nervous System Organization

Difficulty: Medium

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

146. Describe recent research regarding neuroplasticity and neurogenesis. Include the role of stem cells in the treatment of various physical and neurological dysfunctions.

Section Ref: Nervous System Organization

Difficulty: Hard

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Application

APA: Goal 2: Scientific Inquiry and Critical Thinking

147. Define the major functions of the spinal cord.

Section Ref: Nervous System Organization

Difficulty: Easy

Objective: 2.2

Objective Text: Summarize the major divisions and functions of our nervous system

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

148. Describe the main functions and location of: the cerebellum, the three parts of the brain stem, and the reticular formation.

Section Ref: A Tour Through the Brain

Difficulty: Medium

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge
APA: Goal 1: Knowledge Base in Psychology

149. Describe the location and main functions of the subcortical areas of the brain: the thalamus, hypothalamus, and limbic system.

Section Ref: A Tour Through the Brain

Difficulty: Hard

Objective: 2.3

Objective Text: Review the tools used in biological research, along with the brain's key structures and functions

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

150. Define/describe the structure and function of the cerebral cortex. Diagram the left hemisphere of the brain; include its four lobes, the motor control area, somatosensory area, Broca's area, and Wernicke's area. Describe the main functions of each of these lobes and areas, including the "association" areas. Note: Artistic ability will not be graded; accuracy will be.

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology

151. What is a split brain procedure? What part of the brain is most notably involved and why would this surgery be undertaken? What are some deficits that might result from this operation?

Section Ref: The Cerebral Cortex

Difficulty: Hard

Objective: 2.4

Objective Text: Summarize the key features and major divisions of the cerebral cortex.

Bloom's Level: Knowledge

APA: Goal 1: Knowledge Base in Psychology