

Experience Psychology 4th edition King Test Bank

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Experience Psychology, 4e (King)
Chapter 2 The Brain and Behavior

- 1) The _____ system is the body's electrochemical communication circuitry.
- A) pulmonary
 - B) nervous
 - C) endocrine
 - D) respiratory

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 2) The field that studies the nervous system is called
- A) neuroscience.
 - B) immunology.
 - C) physiology.
 - D) ethnosience.

Answer: A

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

3) Amelia, a scientist, studies the body's electrochemical communication circuitry. Amelia is most likely a(n)

- A) geoscientist.
- B) neuroscientist.
- C) physiologist.
- D) orthodontist.

Answer: B

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

4) Ashley, a secretary at Plato Inc., is typing on her computer, talking on the phone, and handing some papers to her colleague simultaneously. Which of the following characteristics of the nervous system is best illustrated in this scenario?

- A) complexity
- B) resting potential
- C) polarization
- D) plasticity

Answer: A

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

5) Liam is able to sing, play the guitar, and play the harmonica simultaneously. Which of the following characteristics of the nervous system most likely is represented by Liam's ability to carry out the multitude of tasks?

- A) complexity
- B) adaptability
- C) polarization
- D) plasticity

Answer: A

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

6) Which of the following characteristics of the brain refers to the brain's ability to pull information together?

- A) integration
- B) complexity
- C) adaptability
- D) plasticity

Answer: A

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 42

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 7) The term "plasticity" refers to the
- A) flexibility of the endocrine system.
 - B) lack of ability to adapt to new surroundings.
 - C) ability to connect electrical impulses and chemical messengers.
 - D) brain's special capacity for modification and change.

Answer: D

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 8) Plasticity best reflects which of the following characteristics of the nervous system?
- A) complexity
 - B) integration
 - C) adaptability
 - D) electrochemical transmission

Answer: C

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

- 9) Stand-up comedians who improvise constantly while on stage are demonstrating their ability to change according to the environment. Which of the following characteristics of the nervous system is most likely playing a predominant role?
- A) resting potential
 - B) reuptake
 - C) polarization
 - D) adaptability

Answer: D

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

10) You are listening to a lecture. Then the bell rings in the hallway. In order to hear this stimulus, _____ nerves must carry electrochemical messages from your ears to your brain.

- A) afferent
- B) olfactory
- C) efferent
- D) pyramidal

Answer: A

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

11) The lecture you were listening to is over. The bell that rang in the hall signaled the end of class. You get up, pick up your things, and walk out the classroom door. Which kind of nerves sent the signals from your brain to your muscles to initiate your physical movements?

- A) afferent
- B) pyramidal
- C) efferent
- D) olfactory

Answer: C

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

12) Martin is riding his motorcycle to his office. When he hears the honking of a truck trying to overtake him, he gives way to the truck. In the context of the pathways in the nervous system, in this scenario, which type of nerves communicated information from Martin's brain to his muscles and made him move his motorcycle?

- A) efferent
- B) pyramidal
- C) afferent
- D) olfactory

Answer: A

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

13) _____ carry information out of the brain and spinal cord to other areas of the body.

- A) Afferent nerves
- B) Auditory nerves
- C) Efferent nerves
- D) Sensory nerves

Answer: C

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

14) Information from the brain and spinal cord to the muscles is sent through _____, thus enabling the body to move.

- A) afferent nerves
- B) efferent nerves
- C) auditory nerves
- D) olfactory nerves

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 43

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Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

15) Your brain has instructed your body muscles to move so that you avoid burning your hand on a hot stove. Which type of nerves carried the information from your brain to your muscles so that you could avoid getting burned?

- A) efferent nerves
- B) afferent nerves
- C) olfactory nerves
- D) auditory nerves

Answer: A

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

16) _____ are interconnected groups of nerve cells that integrate sensory input and motor output.

- A) Sensory networks
- B) Afferent nerves
- C) Efferent nerves
- D) Neural networks

Answer: D

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 43

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

17) Which of the following statements is true of neural networks?

- A) They are networks of nerve cells that connect the brain and spinal cord to other parts of the body.
- B) They make up most of the brain.
- C) They are also called motor nerves.
- D) They carry information about the external environment to the brain and spinal cord.

Answer: B

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 44

Topic: Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

18) The brain and spinal cord make up the

- A) peripheral nervous system.
- B) central nervous system.
- C) autonomic nervous system.
- D) somatic nervous system.

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 44

Topic: Central Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 19) Which of the following statements is true of the central nervous system (CNS)?
- A) More than 99 percent of all nerve cells are located in the CNS.
 - B) The neocortex makes up 40 percent of the cortex in the CNS of human beings.
 - C) The function of the CNS is to bring information to and from the brain and spinal cord.
 - D) The CNS has two major divisions: the somatic nervous system and the autonomic nervous system.

Answer: A

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 44

Topic: Central Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

- 20) The _____ connects the brain and spinal cord to the rest of the body.

- A) central nervous system
- B) peripheral nervous system
- C) limbic system
- D) endocrine system

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 44

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 21) The somatic nervous system and autonomic nervous system are components of the

- A) sensory system.
- B) central nervous system.
- C) limbic system.
- D) peripheral nervous system.

Answer: D

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 44

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 22) The somatic nervous system consists of motor nerves, whose function is to
- A) mobilize the body for action in a dangerous situation.
 - B) tell muscles what to do.
 - C) reduce the stress levels of the body.
 - D) convey information from the skin and muscles to the central nervous system.

Answer: B

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

- 23) The function of sensory nerves of the somatic nervous system is to
- A) take messages to and from the body's internal organs, monitoring such processes as breathing, heart rate, and digestion.
 - B) be involved in the experience of stress and calm the body.
 - C) arouse the body to mobilize it for action.
 - D) convey information from the skin and muscles to the CNS about conditions such as pain and temperature.

Answer: D

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

24) The function of the _____ is to take messages to and from the body's internal organs, monitoring such processes as breathing, heart rate, and digestion.

- A) central nervous system
- B) autonomic nervous system
- C) somatic nervous system
- D) voluntary nervous system

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

25) Which of the following essential body functions are under the control of the autonomic nervous system?

- A) functions of reproductive system
- B) excretory functions
- C) sensory functions such as vision and hearing
- D) functions of heart rate, breathing, and digestion

Answer: D

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

26) The sympathetic nervous system and parasympathetic nervous system are components of the

- A) central nervous system.
- B) endocrine system.
- C) somatic nervous system.
- D) autonomic nervous system.

Answer: D

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Autonomic Division

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

27) The _____ is the part of the autonomic nervous system that arouses the body to mobilize it for action and thus is involved in the experience of stress.

- A) sympathetic nervous system
- B) parasympathetic nervous system
- C) somatic nervous system
- D) central nervous system

Answer: A

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

28) In the context of the autonomic nervous system, the _____ calms the body.

- A) sympathetic nervous system
- B) parasympathetic nervous system
- C) somatic nervous system
- D) central nervous system

Answer: B

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

29) Which of the following is one of the functions of the sympathetic nervous system?

- A) convey information from skin to the central nervous system (CNS)
- B) calm the body
- C) fight-or-flight reaction
- D) tell muscles what to do

Answer: C

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

30) _____ are the circumstances and events that threaten individuals and tax their coping abilities.

- A) Stressors
- B) Synapses
- C) Blips
- D) Stimulators

Answer: A

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

31) You are walking to school when you encounter a barking dog. You start sweating and contemplate whether you should run away. Which nervous system is primarily responsible for this "fight-or-flight" reaction?

- A) somatic
- B) sympathetic
- C) parasympathetic
- D) central

Answer: B

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

32) Just before you went on a job interview your heart was pounding like crazy. You experienced a shortness of breath and felt sick to your stomach. These symptoms were most likely produced by your _____ nervous system.

- A) central
- B) somatic
- C) parasympathetic
- D) sympathetic

Answer: D

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

33) Which division of the peripheral nervous system is responsible for producing physiological symptoms (such as increased heart rate and butterflies in the stomach) under conditions of stress?

- A) somatic
- B) parasympathetic
- C) sympathetic
- D) central

Answer: C

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

34) If a person needs to run away from a dangerous situation, the _____ nervous system sends blood to the person's extremities to prepare him or her for taking off.

- A) central
- B) somatic
- C) sympathetic
- D) parasympathetic

Answer: C

Explanation: The Nervous System

Difficulty: 2 Medium Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

35) After taking her English final, Natalie attempts to relax in her chair by meditating. She is attempting to reduce her heart and respiration rates, as well as her muscular tension. In this scenario, her physiological relaxation can be best attributed to the functioning of her _____ nervous system.

- A) somatic
- B) central
- C) parasympathetic
- D) sympathetic

Answer: C

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

36) After a game of football, David tries to calm down by relaxing in the swimming pool. He tries to get his breath back and relax to avoid muscle cramps. In this scenario, which part of the autonomic nervous system is most likely involved in calming David's body?

- A) the somatic nervous system
- B) the central nervous system
- C) the sympathetic nervous system
- D) the parasympathetic nervous system

Answer: D

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

37) Maya burns her fingers while cooking dinner. Which of the following divisions of the nervous system will be primarily responsible for the pain she feels?

- A) the central nervous system
- B) the autonomic nervous system
- C) the somatic nervous system
- D) the parasympathetic nervous system

Answer: C

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

38) After finishing a psychology test, you try to relax by engaging in some meditation techniques. Doing these exercises should increase the response of the _____ nervous system, which results in a slower heart and respiration rate and less muscular tension.

- A) somatic
- B) central
- C) parasympathetic
- D) sympathetic

Answer: C

Explanation: The Nervous System

Difficulty: 3 Hard Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

39) Corticosteroids are

- A) stress hormones.
- B) sex hormones.
- C) neurotransmitters that regulate mood.
- D) neurotransmitters that regulate memory.

Answer: A

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Stress

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

40) _____ stress is the momentary stress that occurs in response to life experiences.

- A) Intrinsic
- B) Differential
- C) Chronic
- D) Acute

Answer: D

Explanation: The Nervous System

Difficulty: 1 Easy Page Ref: 45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

41) Which of the following types of cells in the nervous system handle the information-processing function?

- A) neurons
- B) glial cells
- C) sclerenchyma cells
- D) sensors

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 46

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

42) _____ provide support, nutritional benefits, and other functions in the nervous system.

- A) Neurons
- B) Glial cells
- C) Sclerenchyma cells
- D) Dendrites

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 46

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

43) The cell body contains the _____, which directs the manufacture of substances that a neuron needs for growth and maintenance.

- A) myelin
- B) nucleus
- C) axon
- D) dendrite

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 46

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

44) Which of the following is a true statement about dendrites?

- A) They encase and insulate most axons.
- B) They are treelike fibers projecting from a neuron.
- C) They contain the nucleus of a neuron.
- D) They direct the manufacture of substances required for growth of neurons.

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 46

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

45) Which of the following is a true statement about an axon?

- A) It encases and insulates most nuclei.
- B) It is a treelike fiber projecting from a neuron.
- C) It is extremely thin and has many branches.
- D) It directs the manufacture of substances required for growth of neurons.

Answer: C

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

46) Dendrites are

- A) the part of the neuron that is responsible for sending information away from the cell body toward other cells.
- B) tree-like fibers which receive information and orient it toward the neuron's cell body.
- C) located inside the cell body.
- D) the layer of fat cells that encase and insulate the neuron.

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

47) The axon is

- A) the part of the neuron that carries information away from the cell body toward other cells.
- B) the branch-like part of the neuron that is responsible for receiving information from other neurons.
- C) located inside the cell body.
- D) the layer of fat cells that encase and insulate the neuron.

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

48) A _____ is a layer of fat cells that insulates most axons and speeds up the transmission of nerve impulses.

- A) dendrite
- B) myelin sheath
- C) cyton
- D) nucleolus

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

49) Which of the following is a function of the myelin sheath?

- A) carry information away from the cell body toward other cells
- B) increase the surface area of nerve cells
- C) speed up the transmission of nerve impulses
- D) play a role in imitation

Answer: C

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

50) When considering multiple sclerosis, which part of the neuron typically hardens and disrupts the flow of information through the neurons?

- A) the nucleus
- B) the dendrites
- C) the cell body
- D) the myelin sheath

Answer: D

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

51) In the context of the neural impulse, the membrane that encases the axon is called semipermeable because

- A) only sodium ions can cross the membrane.
- B) any type of substance can pass through the membrane.
- C) fluids can sometimes flow into and out of it.
- D) depolarization of the membranes cannot occur.

Answer: C

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 48

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

52) Normally, when a neuron is not transmitting information and a slight negative charge is present on the inside of the cell membrane, the neuron is said to be

- A) depolarized.
- B) resting.
- C) active.
- D) highly charged.

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 48

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

53) Resting potential is the

- A) amount of time a signal travels through the central nervous system.
- B) amount of time a neuron must "rest" in between firing episodes.
- C) stable, positive charge of an inactive neuron.
- D) stable, negative charge of an inactive neuron.

Answer: D

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 48

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

54) The membrane of the resting neuron is said to be

- A) deconcentrated.
- B) depolarized.
- C) concentrated.
- D) polarized.

Answer: D

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 48

Topic: Neurons

Learning Objective: Explain how neurons transmit information.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

55) When a neuron is at its resting state, what is the status of the charges on each side of the cell membrane?

- A) There is a negative charge on the outside of the cell membrane and a positive charge on the inside.
- B) There is a negative charge on the inside of the cell membrane and a positive charge on the outside.
- C) There is a negative charge on both the outside and the inside of the cell membrane.
- D) There is a positive charge on both the outside and the inside of the cell membrane.

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 48

Topic: Neurons

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

56) In the context of the neural impulse, which of the following is true about the depolarization of neuron membranes?

- A) It is characterized by more negatively charged ions on the inside of the cell and more positively charged ions on the outside.
- B) It occurs when there is a decrease in the charge difference between the fluids inside and outside of the neuron.
- C) It is the brief wave of positive electrical charge that sweeps down the axon.
- D) It is the phase that allows sodium ions to move out of the neuron.

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 49

Topic: Neurons

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

57) The brief wave of positive electrical charge that sweeps down the axon is

- A) resting potential.
- B) action potential.
- C) graded potential.
- D) polarized potential.

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 49

Topic: How Neurons Fire

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

58) When a neuron sends an action potential, it is commonly said to be

- A) firing.
- B) grading.
- C) depolarizing.
- D) classifying.

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 49

Topic: How Neurons Fire

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 59) According to the all-or-nothing principle,
- A) if all the neurons in a network are not integrated, the "message" carried by the neurons will be lost.
 - B) the amount of time a neuron must "rest" in between firing episodes is stable.
 - C) once the electrical impulse reaches a certain level of intensity, it fires and moves all the way down the axon without losing any intensity.
 - D) as a person ages, his or her neurological system slows down and the intensity of neural impulses decreases significantly.

Answer: C

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 49

Topic: How Neurons Fire

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

- 60) Which of the following refers to tiny spaces between neurons?

- A) dendrites
- B) axons
- C) synapses
- D) basal ganglia

Answer: C

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 50

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

61) _____ are chemical substances that are stored in very tiny sacs within the neuron's terminal buttons and involved in transmitting information across a synaptic gap to the next neuron.

- A) Neurotransmitters
- B) Neural impulses
- C) Synapses
- D) Dendrites

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 50

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

62) Acetylcholine is a neurotransmitter that plays an important role in

- A) learning and memory.
- B) vision and hearing.
- C) mood regulation.
- D) reproductive function.

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 51

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

63) Your relative is experiencing memory loss related to Alzheimer disease. Research suggests that the decline in memory is due to a(n) _____ deficiency in this individual's brain.

- A) serotonin
- B) gamma-aminobutyric acid (GABA)
- C) acetylcholine
- D) dopamine

Answer: C

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 51

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

64) _____ inhibits the firing of neurons in the central nervous system, but it excites the heart muscle, intestines, and urogenital tract.

- A) Serotonin
- B) Dopamine
- C) Norepinephrine
- D) GABA

Answer: C

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

65) Which of the following pairs are correctly matched?

- A) high levels of oxytocin—Alzheimer disease
- B) low levels of dopamine—Parkinson disease
- C) low levels of acetylcholine—schizophrenia
- D) high levels of serotonin—depression

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

66) Emma has recently started to suffer from migraine headaches and seizures. She also suffers from anxiety and depression. In the context of neurochemical messengers, which of the following conditions is most likely to be the cause for her symptoms?

- A) too little norepinephrine
- B) too much glutamate
- C) too much acetylcholine
- D) too little dopamine

Answer: B

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

67) Depression is associated with low levels of which neurotransmitter?

- A) acetylcholine
- B) serotonin
- C) dopamine
- D) oxytocin

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

68) In the context of neurotransmitters, which of the following best describes the effect of norepinephrine stimulation?

- A) It plays a role in the human tendency to feel pleasure during orgasm.
- B) It plays a role in forming emotional bonds with romantic partners.
- C) It inhibits the heart muscle, intestines, and urogenital tract.
- D) It helps to control the level of alertness.

Answer: D

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

69) Which of the following is true of the neurotransmitter serotonin?

- A) It is related to the personality trait of extraversion.
- B) It inhibits the firing of neurons in the central nervous system.
- C) It is involved in the regulation of mood and attention.
- D) It is hardly involved in the regulation of sleep.

Answer: C

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

70) _____ are natural opiates that mainly stimulate the firing of neurons.

- A) Endorphins
- B) Corticosteroids
- C) Aldosterones
- D) Histidines

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

71) Which of the following is a function of endorphins?

- A) shielding the body from pain and elevating feelings of pleasure
- B) playing an important role in the experience of love and social bonding
- C) regulating sleep, mood, attention, and learning
- D) stimulating the release of norepinephrine, which helps to control alertness

Answer: A

Explanation: Neurons

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

72) Kenny has been diagnosed with Parkinson disease and has been prescribed medication to manage some of his symptoms. The medication elevates the levels of dopamine in his system. If the levels of dopamine in his system become excessive, Kenny is most likely to exhibit symptoms associated with

- A) depression.
- B) multiple sclerosis.
- C) Alzheimer's disease.
- D) schizophrenia.

Answer: D

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 52

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

73) Who among the following is most likely to have elevated levels of endorphins?

- A) Amy, a 30-year-old teacher, who is in shock after a car wreck
- B) Jamie, a 40-year-old diplomat, who is on a cruise
- C) Martha, a 32-year-old homemaker, who is showing symptoms of schizophrenia
- D) Joshua, a 17-year-old student, who is depressed after seeing his low SAT scores

Answer: A

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

74) _____ is a hormone and neurotransmitter that plays an important role in the experience of love and social bonding.

- A) Acetylcholine
- B) Dopamine
- C) Serotonin
- D) Oxytocin

Answer: D

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

75) A powerful surge of oxytocin is released in a

- A) person who is in shock after a car wreck.
- B) long-distance runner.
- C) young boy on a roller-coaster ride.
- D) mother who has just given birth.

Answer: D

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

76) Lilly, who has just given birth, is able to provide nourishment for her baby and loves her newborn unconditionally. Which of the following neurotransmitters is said to play an important role in this case?

- A) acetylcholine
- B) serotonin
- C) dopamine
- D) oxytocin

Answer: D

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

77) An _____ is a drug that mimics or increases a neurotransmitter's effects, whereas an _____ is a drug that blocks a neurotransmitter's effects.

- A) agonist; antagonist
- B) antagonist; agonist
- C) oxytocin; endorphin
- D) endorphin; oxytocin

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

78) Morphine, a neurotransmitter, mimics the actions of endorphins by stimulating receptors in the brain and spinal cord associated with pleasure and pain. Morphine, therefore, is an example of a(n)
A) agonist.
B) antagonist.
C) synapse.
D) stressor.

Answer: A

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

79) Drugs used to treat schizophrenia interfere with the activity of dopamine. Such a drug is an example of a(n)
A) agonist.
B) antagonist.
C) synapse.
D) stressor.

Answer: B

Explanation: Neurons

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

80) Mark Johnson, a doctor in Dallas, prescribed an antidepressant drug Prozac to his patient, Ted. Prozac works by increasing brain levels of serotonin. This means that Prozac is considered

- A) an agonist.
- B) an antagonist.
- C) an endorphin.
- D) an oxytocin.

Answer: A

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

81) Michael has schizophrenia. His doctor prescribed a new drug that blocks or interferes with the activity of dopamine. The doctor is using _____ to treat Michael's disorder.

- A) an agonist
- B) an antagonist
- C) a brain lesion
- D) a lobotomy

Answer: B

Explanation: Neurons

Difficulty: 3 Hard Page Ref: 53

Topic: Neurotransmitters

Learning Objective: Identify the key neurotransmitters and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

82) _____ is an abnormal disruption in the tissue of the brain resulting from injury or disease.

- A) Brain lesioning
- B) Brain imaging
- C) Brain ischemia
- D) Brain stem stroke

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 55

Topic: Brain Structure

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

83) Neuroscientists who surgically remove, destroy, or eliminate the brain tissue of laboratory animals are using which of the following techniques for studying the brain?

- A) electroencephalogram
- B) positron emission tomography (PET)
- C) magnetic resonance imaging (MRI)
- D) brain lesioning

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 55

Topic: Brain Structure

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

84) Which of the following is a significance of the brain-lesioning process?

- A) It assesses the amount of glucose in the various brain regions.
- B) It gives a three-dimensional view of various brain regions.
- C) It gives a sense of the functions of the damaged brain regions.
- D) It assesses the amount of radioactivity in several brain regions.

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 55

Topic: Brain Structure

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

85) Which of the following methods of studying the brain involves recording the brain's electrical activity by placing electrodes on the scalp to detect brain-wave activity?

- A) electroencephalograph (EEG)
- B) positron emission tomography (PET)
- C) magnetic resonance imaging (MRI)
- D) functional MRI (fMRI)

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 55

Topic: Brain Structure

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

86) Harry has been diagnosed with epilepsy by his neurologist. Which of the following should the neurologist use to assess Harry's epilepsy by studying his brain-wave activity?

- A) electrooculography
- B) electromyography
- C) electroencephalograph
- D) electrocardiograph

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 55

Topic: Brain Structure

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

87) Arnold Becker, a doctor in Seattle, needs information about the location and extent of damage involving stroke and loss of memory of his patient, Judith. Which of the following techniques will he most likely use to diagnose Judith's condition?

- A) brain lesioning
- B) computerized axial tomography (CAT scan)
- C) positron emission tomography (PET)
- D) electroencephalogram (EEG)

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 56

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

88) Michael, a doctor, is studying the extent of damage to the brain involving loss of memory in his patient Kayla. He examines a three-dimensional image obtained from X-rays of Kayla's head that are assembled into a composite image. In the context of brain imaging, which of the following techniques was most likely used to produce the three-dimensional image?

- A) computerized axial tomography (CAT scan or CT scan)
- B) positron-emission tomography (PET scan)
- C) magnetic resonance imaging (MRI)
- D) transcranial magnetic stimulation (TMS)

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 56

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

89) Stern Tyler, a neuroscientist who is collecting data for a new research study, uses a technique for monitoring the amount of glucose in various areas of the brain. Which of the following methods is Stern Tyler using in this study?

- A) brain lesioning
- B) staining
- C) positron emission tomography (PET scan)
- D) electroencephalogram (EEG)

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 56

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

90) In the context of brain imaging, _____ involves creating a magnetic field around a person's body and using radio waves to construct images of the person's tissues and biochemical activities.

- A) transcranial magnetic stimulation (TMS)
- B) magnetic resonance imaging (MRI)
- C) positron-emission tomography (PET scan)
- D) computerized axial tomography (CAT scan or CT scan)

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 56

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 91) Functional magnetic resonance imaging (fMRI) is a technique that
- A) allows scientists to see what is happening in the brain while it is working.
 - B) requires injecting the brain with a substance but still cannot portray brain function.
 - C) measures the amount of glucose in various areas of the brain and then sends this information to a computer for analysis.
 - D) examines the effects of lesions in brain tissue.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 56

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

- 92) In which of the following ways does functional magnetic resonance imaging (fMRI) detect the functioning of the brain?

- A) It exploits changes in blood oxygen that occur in association with brain activity.
- B) It measures the amount of glucose in various areas of the brain.
- C) It places electrodes on the scalp to detect brain-wave activity.
- D) It establishes a cause-effect relationship between variables associated with brain activity.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 57

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

93) Which of the following principles underlies the technique of functional magnetic resonance imaging (fMRI)?

- A) It rests on the principle that mental activity is associated with changes in glucose levels in the brain.
- B) It rests on the principle that mental activity is associated with changes in the oxygenated blood levels in the brain.
- C) It rests on the principle that mental activity is associated with changes in hydrogenated blood levels in the brain.
- D) It rests on the principle that mental activity is associated with changes in magnetic fields in the brain.

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 57

Topic: Brain Imaging

Learning Objective: Explain the techniques used to map and study the brain.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

94) Which of the following is true of the brain-imaging technique known as transcranial magnetic stimulation (TMS)?

- A) It does not allow researchers to draw cause-and-effect conclusions.
- B) It examines neuronal functioning following brain-injuring events.
- C) It is not used to treat any neurological and psychological disorders.
- D) It is the most painful technique used in examining the role of various regions of the brain.

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 57

Topic: Brain Imaging

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

95) Michael, a researcher in the field of neuroscience, has a theory about a specific area of the brain causing difficulties in face recognition. To draw a solid causal inference, he intends to test his hypothesis on dogs by disrupting regions of their brains and examining the effects of this disruption on the dogs' face-recognition capacity. Which of the following techniques should be used by Michael to achieve his purpose?

- A) computerized axial tomography (CAT scan)
- B) magnetic resonance imaging (MRI)
- C) transcranial magnetic stimulation (TMS)
- D) functional magnetic resonance imaging (fMRI)

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 57

Topic: Brain Imaging

Learning Objective: Identify the brain's structures.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

96) In the context of the major regions of the brain, which of the following is the lowest portion of the brain?

- A) hindbrain
- B) forebrain
- C) cerebral cortex
- D) hypothalamus

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 58

Topic: Brain Structure

Learning Objective: Identify the brain's structures.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

97) Which part of the nervous system regulates breathing and heart rate?

- A) hypothalamus
- B) pons
- C) medulla
- D) cerebellum

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 58

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

98) Damien has been unable to sleep for the past few weeks. He wakes up in the middle of the night and cannot go back to sleep. On certain occasions, he cannot fall asleep at all and at other times, he is unable to wake up from sleep. In the context of organization of the brain, Damien's problem with sleep and arousal is most likely caused by the poor functioning of the

- A) pons.
- B) amygdala.
- C) medulla.
- D) cerebellum.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 60

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

99) Marshall's cerebellum was damaged in a car accident. Marshall is likely to have problems with

- A) breathing and heart rate.
- B) seeing and hearing.
- C) talking and understanding.
- D) balance and muscle coordination.

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 58

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

100) The _____ relays information between the brain and the eyes and ears.

- A) forebrain
- B) midbrain
- C) hindbrain
- D) cerebellum

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 60

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

101) The reticular formation of the midbrain is involved in

- A) controlling breathing and regulating reflexes to maintain an upright posture.
- B) stereotyped patterns of behavior such as walking, sleeping, or turning to attend to a sudden noise.
- C) the control and coordination of balance, hearing, and parasympathetic function.
- D) governing higher brain functions, such as thinking, learning, and consciousness.

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 60

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

102) Which of the following is the brain's largest division?

- A) forebrain
- B) midbrain
- C) hindbrain
- D) medulla

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 60

Topic: Brain Structure

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

103) The _____ is a set of subcortical brain structures central to emotion, memory, and reward processing.

- A) thalamus
- B) limbic system
- C) cerebrum
- D) cerebral cortex

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 60

Topic: Brain Function

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

104) Joe has suffered a massive stroke. Since then, he finds it difficult to remember names of new people whom he meets or even to recognize them. This is because he is unable to retain any new memories after the stroke. In the context of the organization of the brain, these symptoms are most likely due to a damaged

- A) amygdala.
- B) thalamus.
- C) hippocampus.
- D) hypothalamus.

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 61

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

105) Which of the following parts of the brain are correctly matched?

- A) thalamus—hindbrain
- B) amygdala—midbrain
- C) basal ganglia—hindbrain
- D) limbic system—forebrain

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 60

Topic: Brain Structure

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

106) Nathan is suffering from amnesia, an illness that prevents the retrieval of new memories. In the context of the organization of the brain, which area of Nathan's brain is most likely responsible for the amnesia?

- A) basal ganglia
- B) reticular formation
- C) cerebellum
- D) hippocampus

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 61

Topic: Brain Function

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

107) Discrimination of objects that are necessary for survival (such as appropriate food) as well as emotional awareness and expression involves the

- A) hippocampus.
- B) occipital lobe.
- C) medulla.
- D) amygdala.

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 61

Topic: Brain Function

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

108) Carrie suffered brain damage when she was injured in a car accident. Since then, she is unable to take pleasure in the things she used to. She has also lost interest in sexual intimacy with her husband and does not enjoy the taste of her favorite foods. In this scenario, damage to which of the following areas of the brain is most likely causing her inability to experience pleasure?

- A) medulla
- B) hippocampus
- C) hypothalamus
- D) pituitary gland

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 62

Topic: Brain Function

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

109) Steven was in a serious automobile accident that caused a severe injury to his hippocampus. What type of problem is Steven likely to experience as a result of this brain injury?

- A) He will probably be unable to speak.
- B) He will probably be unable to comprehend language.
- C) He will probably be unable to retain any new conscious memories.
- D) He will probably be unable to move on his own.

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 61

Topic: Brain Function

Learning Objective: Describe the limbic system's key structure and functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

110) Large neuron clusters located above the thalamus and under the cerebral cortex that work with the cerebellum and the cerebral cortex to control and coordinate voluntary movements are called

- A) occipital lobes.
- B) basal ganglia.
- C) medulla.
- D) amygdala.

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 61

Topic: Brain Structure

Learning Objective: Identify the brain's structures.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

111) The _____ is a small forebrain structure that monitors pleasurable activities (e.g., eating, drinking, and sex), emotion, stress, and reward.

- A) hypothalamus
- B) basal ganglia
- C) corpus callosum
- D) medulla

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 62

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

112) The _____ is part of the forebrain, the outer layer of the brain, and is responsible for the most complex mental functions, such as thinking and planning.

- A) cerebral cortex
- B) hypothalamus
- C) amygdala
- D) hippocampus

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 63

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

113) The _____ is the outermost part of the cerebral cortex, making up 80 percent of the human brain's cortex.

- A) motor cortex
- B) thalamus
- C) hypothalamus
- D) neocortex

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 63

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

114) As a result of a brain injury after an accident, James lost his vision. Which of the following regions of James's cerebral cortex is most likely to be damaged?

- A) association cortex
- B) parietal lobe
- C) occipital lobe
- D) somatosensory cortex

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 63

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

115) Samantha had a stroke. Doctors told her she sustained substantial damage to the occipital lobes. What type of deficiencies is Samantha likely to experience as a result of this brain damage?

- A) She may be blind or unable to see clearly.
- B) She will probably be unable to comprehend language.
- C) She will probably have difficulties with memory function.
- D) She will probably suffer from impaired cognitive functioning.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 63

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

116) Structures in the cerebral cortex that are involved in hearing, language processing, and memory are called

- A) temporal lobes.
- B) frontal lobes.
- C) occipital lobes.
- D) parietal lobes.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

117) The _____ are involved in personality, intelligence, and the control of voluntary muscles.

- A) temporal lobes
- B) frontal lobes
- C) occipital lobes
- D) parietal lobes

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

118) Zeus was injured in a mining accident and suffered severe brain damage. In time, his brain healed, and he was back to working in the mines. The only change was in his personality. From being a highly aggressive and temperamental individual, he became mild-mannered and calm, almost to the extent of being placid. In this scenario, the region of the cerebral cortex that was most likely damaged in the accident was the _____ lobe.

- A) frontal
- B) occipital
- C) temporal
- D) parietal

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

119) Which of the following are correctly matched?

- A) frontal lobes—hearing, language processing, and memory
- B) occipital lobes—personality, intelligence, and the control of voluntary muscles
- C) temporal lobes—visual stimuli
- D) parietal lobes—spatial location, attention, and motor control

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

120) Gregory is an excellent basketball player. He is always able to gauge the distance between himself and the basket correctly, and he never misses a shot. To help him use this spatial location skill, which of the following regions of the cerebral cortex should function the most efficiently?

- A) the parietal lobe
- B) the temporal lobe
- C) the somatosensory cortex
- D) the prefrontal cortex

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

121) The _____, located at the front of the parietal lobes, is defined as a region in the cerebral cortex that processes information about body sensations.

- A) motor cortex
- B) prefrontal cortex
- C) somatosensory cortex
- D) neocortex

Answer: C

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 64

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

122) The _____ is the part of the cerebral cortex that processes information about voluntary movement.

- A) motor cortex
- B) sensory cortex
- C) limbic system
- D) temporal lobe

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 65

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

123) Which of the following is true with regard to the association cortex?

- A) It processes information about body sensations.
- B) It makes up 25 percent of the cerebral cortex.
- C) It is at the rear of the frontal lobes, processes information about voluntary movement.
- D) It is the site of the highest intellectual functions, such as thinking and problem solving.

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 66

Topic: Cerebral Cortex

Learning Objective: Describe the major areas of the cerebral cortex and their functions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

124) Katy was in a car accident and sustained serious brain damage. Since the accident, Katy can speak only one word. This is an example of

- A) amnesia.
- B) aphasia.
- C) multiple sclerosis.
- D) epilepsy.

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 3 Hard Page Ref: 66

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

125) _____ plays an important role in the production of speech, whereas _____ plays an important role in the comprehension of language.

- A) Wernicke's area; Broca's area
- B) Broca's area; Wernicke's area
- C) The occipital lobe; the hippocampus
- D) The hippocampus; the occipital lobe

Answer: B

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 66

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

126) The _____ is the large bundle of axons that connects the brain's two hemispheres and is responsible for relaying information between the two sides.

- A) corpus callosum
- B) neocortex
- C) association cortex
- D) hypothalamus

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 66

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

127) Neurosurgeons can reduce the unbearable seizures some epileptics experience by severing the

- A) hypothalamus.
- B) cerebellum.
- C) amygdala.
- D) corpus callosum.

Answer: D

Explanation: Structures of the Brain and Their Functions

Difficulty: 1 Easy Page Ref: 68

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

128) The left hemisphere of the brain plays an important role in managing or regulating

- A) speech and grammar.
- B) spatial perception.
- C) visual recognition.
- D) movement in the left side of the body.

Answer: A

Explanation: Structures of the Brain and Their Functions

Difficulty: 2 Medium Page Ref: 67

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

129) The endocrine system

- A) directs the most complex mental functions, such as thinking and planning.
- B) connects the brain and the spinal cord to the rest of the body.
- C) consists of a set of glands that regulate the activities of certain organs by releasing their chemical products into the bloodstream.
- D) communicates through the release of neurotransmitters.

Answer: C

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 70

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

130) Which of the following is defined as organs or tissues in the body that create chemicals that control many bodily functions?

- A) glands
- B) dendrites
- C) synapses
- D) pons

Answer: A

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 70

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

131) The chemical messengers produced by the endocrine glands are known as

- A) neurotransmitters.
- B) hormones.
- C) axons.
- D) stem cells.

Answer: B

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

132) The _____ gland is defined as a pea-sized gland just beneath the hypothalamus that controls growth and regulates other glands.

- A) sebaceous
- B) adrenal
- C) thyroid
- D) pituitary

Answer: D

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

133) The _____ is sometimes referred to as the "master gland" because almost all of its hormones direct the activity of target glands elsewhere.

- A) anterior thyroid gland
- B) posterior adrenal gland
- C) anterior pituitary gland
- D) posterior parathyroid gland

Answer: C

Explanation: The Endocrine System

Difficulty: 2 Medium Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

134) Ellie has recently experienced irregular mood swings. Her energy level has decreased, and she seems to have greater difficulty coping with stress. Based on her symptoms, it seems as though Ellie may have problems with her _____ glands.

- A) pituitary
- B) pineal
- C) adrenal
- D) thymus

Answer: C

Explanation: The Endocrine System

Difficulty: 3 Hard Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

135) _____ and _____ are secreted by the adrenal glands.

- A) Epinephrine; norepinephrine
- B) Estrogen; testosterone
- C) Estrogen; epinephrine
- D) Acetylcholine; testosterone

Answer: A

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

136) The _____ is defined as a dual-purpose gland under the stomach that performs both digestive and endocrine functions.

- A) pancreas
- B) pituitary gland
- C) adrenal gland
- D) hypothalamus

Answer: A

Explanation: The Endocrine System

Difficulty: 1 Easy Page Ref: 71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

137) Which of the following play(s) an important role in insulin production, metabolism, and body weight?

- A) testes and ovaries
- B) adrenal gland
- C) pituitary gland
- D) pancreas

Answer: D

Explanation: The Endocrine System

Difficulty: 2 Medium Page Ref: 72

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

138) Which of the following organs are involved in men's and women's sexual development and reproduction?

- A) testes and ovaries
- B) adrenal glands
- C) pituitary glands
- D) pancreas

Answer: A

Explanation: The Endocrine System

Difficulty: 2 Medium Page Ref: 72

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

139) When the axons of healthy neurons adjacent to damaged cells grow new branches, _____ has occurred.

- A) collateral sprouting
- B) substitution of function
- C) neurogenesis
- D) synaptic pruning

Answer: A

Explanation: Brain Damage, Plasticity, and Repair

Difficulty: 1 Easy Page Ref: 73

Topic: Brain Damage

Learning Objective: Describe plasticity and the brain's capacity for recovery and repair.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

140) When Charlie was three years old, he fell off the slide at the playground and damaged the left hemisphere of his brain. Despite this injury, as Charlie grew older he still retained some of his language abilities because the right hemisphere of his brain took control over the language function. Which of the following mechanisms of brain-damage repair is apparent in this example?

- A) collateral sprouting
- B) substitution of function
- C) neurogenesis
- D) lobotomy

Answer: B

Explanation: Brain Damage, Plasticity, and Repair

Difficulty: 3 Hard Page Ref: 73

Topic: Brain Damage

Learning Objective: Describe plasticity and the brain's capacity for recovery and repair.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

141) Which of the following is true about neurogenesis?

- A) Neurogenesis cannot occur in human adults.
- B) Researchers have found that neurogenesis does not occur in a few mammals such as mice.
- C) Researchers have documented neurogenesis in only two brain regions: the hippocampus and the olfactory bulb.
- D) Recent research has revealed that exercise decreases neurogenesis.

Answer: C

Explanation: Brain Damage, Plasticity, and Repair

Difficulty: 2 Medium Page Ref: 73

Topic: Brain Damage

Learning Objective: Describe plasticity and the brain's capacity for recovery and repair.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

142) In the context of brain tissue implants, what is unique about stem cells?

- A) They survive for extended periods outside of the body.
- B) They can develop into most types of human cells.
- C) They are insusceptible to the effects of plasticity.
- D) They transfer genetic information into human cells.

Answer: B

Explanation: Brain Damage, Plasticity, and Repair

Difficulty: 2 Medium Page Ref: 73

Topic: Brain Damage

Learning Objective: Describe plasticity and the brain's capacity for recovery and repair.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

143) In the human cell, threadlike structures that come in 23 pairs, one member of each pair originating from each parent, and that contain DNA are called

- A) chromosomes.
- B) ergosomes.
- C) ribosomes.
- D) polysomes.

Answer: A

Explanation: Genetics and Behavior

Difficulty: 1 Easy Page Ref: 73

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

144) _____ is a complex molecule in the cell's chromosomes that carries genetic information.

- A) RNA
- B) DNA
- C) Ribosome
- D) Polysome

Answer: B

Explanation: Genetics and Behavior

Difficulty: 1 Easy Page Ref: 75

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

145) Genes

- A) consist of short segments of ribosomes composed of RNA.
- B) match and link small pieces of RNA.
- C) manufacture the proteins that are necessary for maintaining life.
- D) act independently and do not collaborate with another gene.

Answer: C

Explanation: Genetics and Behavior

Difficulty: 1 Easy Page Ref: 75

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

146) _____ is a term used by scientists to describe the influences of multiple genes on behavior.

- A) Sequencing
- B) Polygenic inheritance
- C) Phenotype
- D) Genotype

Answer: B

Explanation: Genetics and Behavior

Difficulty: 1 Easy Page Ref: 77

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

147) _____ involves the manipulation of genes using technology to determine their effect on behavior.

- A) Molecular genetics
- B) Selective breeding
- C) Genome-wide association method
- D) Behavior genetics

Answer: A

Explanation: Genetics and Behavior

Difficulty: 2 Medium Page Ref: 77

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

148) _____ is a genetic method in which organisms are chosen for reproduction based on how much of a particular trait they display.

- A) Selective breeding
- B) Experimental evolution
- C) Polymorphism
- D) Natural selection

Answer: A

Explanation: Genetics and Behavior

Difficulty: 1 Easy Page Ref: 77

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Remember

Accessibility: Keyboard Navigation

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology.

149) Matthew, a behavioral psychologist, studies the hunting ability of dogs. He controls the mating of dogs so they exhibit a particular characteristic of hunting. In this scenario, which of the following genetic methods is Matthew most likely using for his study?

- A) selective breeding
- B) natural selection
- C) the genome-wide association method
- D) polymorphism

Answer: A

Explanation: Genetics and Behavior

Difficulty: 3 Hard Page Ref: 77

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

150) Dr. Cardinale is interested in the effects of heredity and environment on intelligence. She compares the similarity of IQ scores of identical twins to the similarity of IQ scores of fraternal twins. In this case, Dr. Cardinale is studying heredity's influence on behavior using

- A) human genome.
- B) molecular genetics.
- C) behavior genetics.
- D) selective breeding.

Answer: C

Explanation: Genetics and Behavior

Difficulty: 3 Hard Page Ref: 78

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

151) A(n) _____ is a person's genetic heritage, his or her actual genetic material.

- A) prototype
- B) phenotype
- C) endophenotype
- D) genotype

Answer: D

Explanation: Genetics and Behavior

Difficulty: 2 Medium Page Ref: 79

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

152) Molly's natural hair color is brown, but she has had it dyed blonde. Molly changed her

- A) phenotype.
- B) genotype.
- C) chromosomes.
- D) genetic heritage.

Answer: A

Explanation: Genetics and Behavior

Difficulty: 3 Hard Page Ref: 79

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Apply

Accessibility: Keyboard Navigation

APA Outcome: 1.3: Describe applications of psychology.

153) Briefly describe the peripheral nervous system and its four divisions. What is the function of each? Give examples of situations that would activate each division and how they would do so.

Answer: The peripheral nervous system (PNS) is the network of nerves that connects the brain and spinal cord to other parts of the body. The two major divisions of the PNS are the somatic and autonomic divisions. The somatic nervous system consists of sensory nerves (afferent), whose function is to convey information from the skin and muscles to the CNS about conditions such as pain and temperature, and motor nerves (efferent), whose function is to tell muscles what to do. The function of the autonomic nervous system is to take messages to and from the body's internal organs, monitoring such processes as breathing, heart rate, and digestion. The autonomic division is further subdivided into the sympathetic and parasympathetic divisions, and these subdivisions are most noticeable during emergencies. The sympathetic division prepares the body for emergencies and helps us to either fight stressors or to flee from them. If you were inside a burning house, for example, the sympathetic division would produce the necessary arousal that would allow you to either run out of the house to safety, or to find a fire extinguisher to help battle the blaze. The parasympathetic division restores the body to its resting state once an emergency has ended. Once it is clear that your house was not on fire, your breathing and heart rate return to normal, and you eventually feel a sense of calm.

Difficulty: 2 Medium Page Ref: 44-45

Topic: Peripheral Nervous System

Learning Objective: Explain the functions of the nervous system's main divisions.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

154) Describe the structure of a neuron and explain the function of each component.

Answer: Every neuron has three components: a cell body, dendrites, and an axon. Dendrites are tree-like fibers that receive information and orient it towards the neuron's cell body. Most nerve cells have multiple dendrites. The axon is the part of the neuron that carries information away from the cell body toward other cells. The cell body contains the nucleus, which directs the manufacture of substances that the neuron needs for growth and maintenance.

Difficulty: 2 Medium Page Ref: 46-47

Topic: Neurons

Learning Objective: Identify the parts of a neuron.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

155) Briefly explain how one neuron sends a message to another neuron. Be sure to include a description of the roles that the various structures of the neuron play in communicating neural messages.

Answer: When neurons are at rest, they have a negative electrical charge. When an excitatory message is received from another neuron, the neuron becomes more positive. As the charge reaches a critical level of positivity, an action potential occurs and the electrical message travels along the neuron's axon. Once the message passes any point of the axon, that section becomes negatively charged once again, and the neuron is unable to fire again immediately. When a nerve impulse reaches the end of the axon, the terminal buttons on the ends of the axon release neurotransmitters into the synapse. Dendrites of nearby neurons receive messages from the neurotransmitters that "fit" onto their particular receptor sites. If the concentration of excitatory neurotransmitters that have been received is higher, then the neuron fires. If the concentration of inhibitory neurotransmitters that have been received is higher, then the neuron will not fire.

Difficulty: 2 Medium Page Ref: 49-50

Topic: Neurons

Learning Objective: Describe how nerve cells communicate with other nerve cells.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

156) Compare and contrast the techniques researchers use to study the brain. Explain what type of information can be gained by each approach.

Answer: One way researchers have learned more about the brain is by studying the effects of brain lesions or brain damage. By examining the person or animal that has the lesion, researchers get a sense of the function of the part of the brain that was damaged. Electroencephalograph (EEG) involves recording the brain's electrical activity. Researchers also might use one of several brain-imaging techniques. Computerized axial tomography (CAT scan or CT scan) involves the use of X-rays to produce a composite three-dimensional image and can provide information about the location and extent of brain damage. Positron-emission tomography (PET scan) is another brain-imaging technique that is based on metabolic (glucose) changes related to brain activity. Magnetic resonance imaging (MRI) involves creating a magnetic field around a person's body and using radio waves to construct images of the person's tissues and biochemical activities. MRI scans provide valuable information about the structure of the brain and can allow researchers to see if and how experiences affect brain structure. Although MRI scans can reveal considerable information about brain structure, they cannot portray brain function. A new method known as functional magnetic resonance imaging (fMRI) allows scientists to see what is happening in the brain while it is working. The fMRI charts track changes in blood oxygen that occur in association with brain activity.

Difficulty: 2 Medium Page Ref: 55-57

Topic: Brain Imaging

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

157) Identify the major functions of the hypothalamus, cerebellum, and the reticular formation. Give examples of their functions in terms of real behaviors.

Answer: The hypothalamus is a small forebrain structure that monitors three pleasurable activities—eating, drinking, and sex—as well as emotion, stress, and reward. It also regulates the body's internal state. For example, the hypothalamus works to keep the body at a constant temperature, triggering perspiration when the body is hot and shivering when the body is cold. The cerebellum extends from the rear of the hindbrain, just above the medulla. It consists of two rounded structures thought to play important roles in motor coordination. Damage to the cerebellum impairs the performance of coordinated movements. When this damage occurs, people's movements become awkward and jerky. Extensive damage to the cerebellum makes it impossible even to stand up. The reticular formation is a diffuse collection of neurons involved in stereotyped patterns of behavior such as walking, sleeping, and turning to attend to a sudden noise.

Difficulty: 2 Medium Page Ref: 58-62

Topic: Brain Function

Learning Objective: Identify the brain's structures.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

158) Explain how the right and left hemispheres of the brain are specialized for different functions.

Answer: The right hemisphere receives information only from the left side of the body, and the left hemisphere receives information only from the right side of the body. When you hold an object in your left hand, for example, only the right hemisphere of your brain detects the object. When you hold an object in your right hand, only the left hemisphere of the brain detects it. The most extensive research on the brain's two hemispheres has focused on language. Speech and grammar are localized to the left hemisphere. Although it is a common misconception that all language processing occurs in the left hemisphere, much language processing and production does come from this hemisphere. The right hemisphere dominates in processing nonverbal information such as spatial perception, visual recognition, and emotion.

Difficulty: 2 Medium Page Ref: 67-68

Topic: Specialization of Hemispheres

Learning Objective: Explain what split-brain research reveals about the functions of the brain's two hemispheres.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

159) Compare and contrast the nervous system and the endocrine system.

Answer: Neuroscientists have discovered that the nervous system and endocrine system are intricately interconnected. Both systems work together to control the body's activities. However, the nervous system and endocrine system do differ in a variety of ways. First, the parts of the endocrine system are not all connected in the way that the parts of the nervous system are. Second, the endocrine system communicates via hormones, whereas the nervous system communicates via electrical impulses and neurotransmitters. Hormones are released in the bloodstream and are transported throughout the body by the circulatory system. Thus, hormones move much more slowly than the neural impulses in the nervous system.

Difficulty: 2 Medium Page Ref: 70-71

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

160) How does the endocrine system transmit its messages? What functions do the pituitary gland, adrenal glands, pancreas, and gonads (testes or ovaries) perform?

Answer: The endocrine system consists of a set of glands that regulate the activities of certain organs by releasing hormones (chemical substances) into the bloodstream. The pituitary gland regulates growth and its anterior part is known as the "master gland" because almost all of its hormones direct the activity of target glands elsewhere. Adrenal glands are located at the top of each kidney. They secrete epinephrine and norepinephrine and play an important role in regulating mood, energy level, and the ability to cope with stress. The pancreas, which is located under the stomach, performs both digestive and endocrine functions. The pancreas produces insulin, which is a hormone that controls glucose levels in the body and is related to metabolism, body weight, and obesity. The ovaries and testes are the sex-related endocrine glands that produce hormones related to sexual development and reproduction.

Difficulty: 2 Medium Page Ref: 70-72

Topic: Endocrine System

Learning Objective: Describe the function of the endocrine system.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

161) Discuss the three ways through which brain repair can take place.

Answer: There are three ways that brain repair might take place:

In collateral sprouting, the axons of some healthy neurons adjacent to damaged cells grow new branches. In substitution of function, the damaged region's function is taken over by another area or areas of the brain. Neurogenesis is the process by which new neurons are generated. Researchers have found that neurogenesis occurs in mammals such as mice. It is now accepted that neurogenesis can occur in humans.

Difficulty: 2 Medium Page Ref: 73

Topic: Plasticity

Learning Objective: Describe plasticity and the brain's capacity for recovery and repair.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.

162) Explain the difference between genotype and phenotype. Be sure to mention the role of environmental influences.

Answer: A genotype is one's genetic heritage, the actual genetic material that determines characteristics. A phenotype is one's observable characteristics. The phenotype is influenced by the genotype but also by environmental factors. The activity of genes (genetic expression) is affected by their environment. For example, hormones that circulate in the blood make their way into the cell where they can turn genes on and off. The flow of hormones, too, can be affected by environmental conditions, such as light, day length, nutrition, and behavior.

Difficulty: 2 Medium Page Ref: 79-80

Topic: Genetics

Learning Objective: Explain how genetics increases our understanding of behavior.

Bloom's: Understand

Accessibility: Keyboard Navigation

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains.