

Psychology and Your Life with P.O.W.E.R Learning, 4e (Feldman)
Chapter 2 Neuroscience and Behavior

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

- A) genetic psychologists.
- B) biopsychologists.
- C) evolutionary psychologists.
- D) forensic psychologists.

Answer: B

Difficulty: 1 Easy Page Ref: 47

Topic: Profession of Psychology; Subfields of Psychology

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

2) The basic elements of the nervous system are called

- A) erythrocytes.
- B) neutrophils.
- C) neurons.
- D) neurotransmitters.

Answer: C

Difficulty: 1 Easy Page Ref: 48

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

3) Which of the following characteristics distinguishes neurons from most other cells in the human body?

- A) the ability to migrate and accommodate the body's physiological requirements
- B) the ability to undergo division and replication for extended periods of time
- C) the ability to communicate with other cells and over long distances
- D) the ability to withstand denaturation in extremely acidic or alkaline conditions

Answer: C

Difficulty: 2 Medium Page Ref: 48

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

4) There is a cluster of fibers at the end of every neuron that receives messages from other neurons called

- A) axons.
- B) terminal buttons.
- C) glial fibers.
- D) dendrites.

Answer: D

Difficulty: 1 Easy Page Ref: 48

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

5) An axon is a

- A) neuron's cell body.
- B) cluster of fibers at one end of a neuron.
- C) neuron's protective coating of fat and protein.
- D) long, slim, tubelike extension of a neuron.

Answer: D

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

6) Terminal buttons are small bulges found at the end of

- A) neurotransmitters.
- B) dendrites.
- C) axons.
- D) glial cells.

Answer: C

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

7) Dendrite is to axon what _____ is to _____.

- A) receiving; sending
- B) sending; receiving
- C) reuptake; action potential
- D) action potential; reuptake

Answer: A

Difficulty: 2 Medium Page Ref: 48-49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

8) Which of the following is true of neural impulses?

- A) They are electrical in nature.
- B) They deliver excitatory and inhibitory messages.
- C) They are stored in the axons of neurons.
- D) They are bidirectional.

Answer: A

Difficulty: 2 Medium Page Ref: 48-49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

- A) dendrite → axon → cell body
- B) dendrite → cell body → axon
- C) cell body → axon → dendrite
- D) axon → dendrite → cell body

Answer: B

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

10) Electrical wires are generally protected by a tube of plastic. Similarly, the nervous system is insulated by a

- A) myelin sheath.
- B) glial cell.
- C) terminal button.
- D) synapse.

Answer: A

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

11) _____ is a protective coating of fat and protein that wraps around an axon.

- A) A myelin sheath
- B) A glial cell
- C) The sarcoplasmic reticulum
- D) The basal lamina

Answer: A

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) intensity of stimulus
- B) graded action
- C) all-or-none
- D) incremental transformational

Answer: C

Difficulty: 1 Easy Page Ref: 49

Topic: How Neurons Fire

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) triggering
- B) terminal
- C) optimum
- D) resting

Answer: D

Difficulty: 1 Easy Page Ref: 49

Topic: How Neurons Fire

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

14) Which of the following statements is true of an action potential?

- A) As an impulse travels along an axon, the movement of ions changes the charge from positive to neutral in successive sections of the axon.
- B) An action potential moves from one end of an axon to the other like a flame moving along a fuse.
- C) After an impulse has passed through a particular section of an axon, negative ions are pumped out of that section, and its charge returns to positive while an action potential continues to move along the axon.
- D) Just after an action potential has passed through a section of an axon, a neuron can fire again immediately if it receives enough stimulation.

Answer: B

Difficulty: 2 Medium Page Ref: 50

Topic: How Neurons Fire

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

15) An action potential is triggered when a neuron's electrical charge changes from

- A) negative to neutral.
- B) positive to neutral.
- C) negative to positive.
- D) positive to negative.

Answer: C

Difficulty: 1 Easy Page Ref: 50

Topic: How Neurons Fire

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) Pharyngeal motor neurons
- B) Mirror neurons
- C) Ventral cord motor neurons
- D) Amphid neurons

Answer: B

Difficulty: 1 Easy Page Ref: 50

Topic: Mirror Neurons

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) synapse
- B) terminal button
- C) tight junction
- D) sarcomere

Answer: A

Difficulty: 1 Easy Page Ref: 51

Topic: Synapse

Learning Objective: 5.3: Summarize how messages travel from one neuron to another.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

18) Which of the following statements is true of inhibitory messages?

- A) Inhibitory messages, on outnumbering excitatory messages, cause neurons to fire.
- B) Inhibitory messages decrease the likelihood that a receiving neuron will fire.
- C) Inhibitory messages are triggered when a neurotransmitter does not fit into a receptor site on a neuron.
- D) Inhibitory messages make it more likely that an action potential will travel down an axon.

Answer: B

Difficulty: 2 Medium Page Ref: 52

Topic: How Neurons Fire; Neurotransmitters

Learning Objective: 5.3: Summarize how messages travel from one neuron to another.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 19) The reabsorption of neurotransmitters by an axon's terminal button is termed
- A) recycling.
 - B) reassertion.
 - C) reuptake.
 - D) reuse.

Answer: C

Difficulty: 1 Easy Page Ref: 52

Topic: Neurotransmitters

Learning Objective: 5.3: Summarize how messages travel from one neuron to another.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 20) Which of the following neurotransmitters is correctly matched with its description?
- A) Acetylcholine: It transmits messages related to skeletal muscles.
 - B) Gamma-aminobutyric acid (GABA): It is an excitatory neurotransmitter inhibited by alcohol or tranquilizers.
 - C) Serotonin: It aids in muscle movement and cognitive functioning.
 - D) Glutamate: It is primarily an inhibitory neurotransmitter, except in the hippocampus.

Answer: A

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 21) Identify a true statement about the neurotransmitter dopamine.
- A) A deficiency in dopamine levels is related to Alzheimer's disease.
 - B) It is found primarily in the spinal cord.
 - C) Reduction in dopamine production enables effective regulation of sleep and pain.
 - D) It is involved in movement, attention, and learning.

Answer: D

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

22) Which neurotransmitter is correctly matched with a psychological function?

- A) Glutamate: It relieves pain.
- B) Acetylcholine: It regulates mood.
- C) Dopamine: It facilitates learning.
- D) Serotonin: It contributes to memory.

Answer: C

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

23) Which disorder is correctly paired with an associated neurotransmitter?

- A) Parkinson's disease: dopamine
- B) Depression: glutamate
- C) Schizophrenia: serotonin
- D) Alzheimer's disease: endorphins

Answer: A

Difficulty: 1 Easy Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

24) Inhibitory is to excitatory what _____ is to _____.

- A) glutamate; gamma-aminobutyric acid (GABA)
- B) glutamate; acetylcholine
- C) gamma-aminobutyric acid (GABA); glutamate
- D) an endorphin; serotonin

Answer: C

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 25) The nervous system is divided into
- A) the primary and secondary nervous systems.
 - B) the somatic and autonomic nervous systems.
 - C) the sympathetic and parasympathetic nervous systems.
 - D) the central and peripheral nervous systems.

Answer: D

Difficulty: 1 Easy Page Ref: 56

Topic: Nervous System; Peripheral Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 26) The brain and the spinal cord constitute the _____ nervous system.
- A) central
 - B) peripheral
 - C) somatic
 - D) parasympathetic

Answer: A

Difficulty: 1 Easy Page Ref: 56

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 27) The _____ is the primary means for transmitting messages between the brain and the rest of the body.
- A) hematopoietic stem cell
 - B) sarcoplasmic reticulum
 - C) juxtaglomerular apparatus
 - D) spinal cord

Answer: D

Difficulty: 1 Easy Page Ref: 56

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 28) One of the characteristic features of the spinal cord is that it
- A) functions exclusively as a communication channel.
 - B) is not involved in reflexes.
 - C) can control some simple reflexes without the brain's help.
 - D) is a part of the peripheral nervous system.

Answer: C

Difficulty: 2 Medium Page Ref: 57

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 29) A(n) _____ is an automatic, involuntary response to an incoming stimulus.
- A) action potential
 - B) synapse
 - C) inflammation
 - D) reflex

Answer: D

Difficulty: 1 Easy Page Ref: 57

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 30) Unlike the central nervous system, the peripheral nervous system
- A) is made up of sensory neurons, motor neurons, and interneurons.
 - B) is composed of the brain and the spinal cord.
 - C) consists of neurons that have short axons and dendrites.
 - D) comprises the somatic and autonomic nervous systems.

Answer: D

Difficulty: 2 Medium Page Ref: 57

Topic: Nervous System; Peripheral Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

31) Sensory is to motor what _____ is to _____.

- A) efferent; afferent
- B) afferent; efferent
- C) afferent; interneuron
- D) interneuron; efferent

Answer: B

Difficulty: 2 Medium Page Ref: 57

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

32) _____ are involved in reflexes and communicate information from the nervous system to muscles and glands.

- A) Mirror neurons
- B) Amphid neurons
- C) Motor neurons
- D) Autoneurons

Answer: C

Difficulty: 1 Easy Page Ref: 57

Topic: Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

33) The two major divisions of the peripheral nervous system are

- A) the somatic and autonomic divisions.
- B) the sympathetic and parasympathetic divisions.
- C) the afferent and efferent divisions.
- D) the sensory and motor divisions.

Answer: A

Difficulty: 1 Easy Page Ref: 58

Topic: Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) somatic division
- B) sympathetic division
- C) parasympathetic division
- D) autonomic division

Answer: A

Difficulty: 1 Easy Page Ref: 58

Topic: Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

35) Somatic is to autonomic what _____ is to _____.

- A) involuntary; voluntary
- B) voluntary; involuntary
- C) excitation; rest
- D) rest; excitation

Answer: B

Difficulty: 2 Medium Page Ref: 58

Topic: Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

- A) somatic division.
- B) sympathetic division.
- C) parasympathetic division.
- D) synaptic division.

Answer: B

Difficulty: 1 Easy Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

37) The "fight-or-flight" response is associated with the _____ of the autonomic division of the peripheral nervous system.

- A) somatic division
- B) sympathetic division
- C) parasympathetic division
- D) hematopoietic division

Answer: B

Difficulty: 1 Easy Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

38) The part of the autonomic division of the peripheral nervous system that acts to calm the body after an emergency or a stressful situation has ended is known as the

- A) somatic division.
- B) sympathetic division.
- C) parasympathetic division.
- D) synaptic division.

Answer: C

Difficulty: 1 Easy Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

39) The _____ of the autonomic division of the peripheral nervous system directs the body to store energy for use in emergencies.

- A) somatic division
- B) sympathetic division
- C) parasympathetic division
- D) dendritic division

Answer: C

Difficulty: 1 Easy Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) Brooke accidentally touches a hot iron, and she immediately jerks her hand away.
- B) Callie panics when she mistakes her roommate for a thief, but she relaxes after having a glass of water.
- C) Denise walks toward her car in a deserted street and is alarmed when a strange-looking man appears out of nowhere.
- D) Peyton gets ready to go to bed and is alarmed when she sees a stranger at her window.

Answer: B

Difficulty: 3 Hard Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

41) Izzy sees a snake in her backyard. Her pupils dilate, and her heart starts pounding. Her breathing is shallow and rapid. Her _____ nervous system is active.

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

Answer: B

Difficulty: 3 Hard Page Ref: 58

Topic: Autonomic Division; Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Apply

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains; 1.3:

Describe applications of psychology

Accessibility: Keyboard Navigation

42) The study of the effects of heredity on how people conduct themselves is known as

- A) behavioral genetics.
- B) classical genetics.
- C) development genetics.
- D) molecular genetics.

Answer: A

Difficulty: 1 Easy Page Ref: 58

Topic: Evolutionary Foundations of Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

43) Tara is an 18-year-old with a rare and inherited form of childhood blindness. Her case has been referred to Dr. Schilling, who is currently conducting experimental trials with people having this form of blindness. In his experiments, Dr. Schilling targets the mutated genes responsible for the blindness and replaces them with functional pieces of deoxyribonucleic acid (DNA). The treatment method that Dr. Schilling is trying to perfect is

- A) gene therapy.
- B) gene sequencing.
- C) gene mapping.
- D) gene linkage.

Answer: A

Difficulty: 3 Hard Page Ref: 60

Topic: Evolutionary Foundations of Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

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

- A) The nervous system and the endocrine system operate independently of each other.
- B) The endocrine system is part of the central nervous system.
- C) The endocrine system influences and is influenced by the nervous system.
- D) The central nervous system is part of the endocrine system.

Answer: C

Difficulty: 2 Medium Page Ref: 61

Topic: Nervous System; Endocrine System

Learning Objective: 6.2: Describe the operation of the endocrine system and how it affects behavior.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

- A) esophageal
- B) apocrine
- C) parotid
- D) pituitary

Answer: D

Difficulty: 1 Easy Page Ref: 61

Topic: Endocrine System

Learning Objective: 6.2: Describe the operation of the endocrine system and how it affects behavior.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) pituitary
- B) esophageal
- C) apocrine
- D) parotid

Answer: A

Difficulty: 1 Easy Page Ref: 61

Topic: Endocrine System

Learning Objective: 6.2: Describe the operation of the endocrine system and how it affects behavior.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

47) Gayle confides in his friend that he is considering using steroids to increase muscle mass. Gayle's friend has been studying about the effects of steroids and warns him that steroid abuse may lead to

- A) violent and dangerous behavior.
- B) extreme tiredness.
- C) yellowing of the eyes and skin.
- D) symptoms of type II diabetes.

Answer: A

Difficulty: 2 Medium Page Ref: 61

Topic: Endocrine System

Learning Objective: 6.2: Describe the operation of the endocrine system and how it affects behavior.

Bloom's: Apply

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology;
1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

48) Which of the following is a diagnostic use of the brain-scanning technique electroencephalography (EEG)?

- A) It helps in accurate diagnosis of strokes and multiple sclerosis.
- B) It facilitates more precise diagnosis of epilepsy and learning disabilities.
- C) It facilitates viewing individual circuits of neurons.
- D) It helps to identify the presence of brain tumors.

Answer: B

Difficulty: 2 Medium Page Ref: 65

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 49) Which of the following brain-scanning techniques is correctly matched with its description?
- A) Electroencephalogram (EEG): records the brain's electrical activity through electrodes
 - B) Positron emission tomography (PET): uses magnetic fields to cause a momentary interruption of the brain's electrical activity
 - C) Functional magnetic resonance imaging (fMRI): traces biochemical activity in the brain
 - D) Transcranial magnetic stimulation (TMS): produces a graph of electrical wave patterns

Answer: A

Difficulty: 2 Medium Page Ref: 65

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 50) Brent is taking part in an experiment in the cognitive neuroscience laboratory on campus. He is made to read silently sequences of words flashed on a computer screen. Simultaneously, the electrical activity of his brain is recorded through electrodes placed on the outside of his skull. The brain-scanning technique used in this study is
- A) functional magnetic resonance imaging (fMRI).
 - B) positron emission tomography (PET).
 - C) electroencephalogram (EEG).
 - D) transcranial magnetic stimulation (TMS).

Answer: C

Difficulty: 3 Hard Page Ref: 65

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

51) One of the newest brain-scanning techniques that is sometimes called a virtual lesion is

- A) positron emission tomography (PET).
- B) electroencephalogram (EEG).
- C) transcranial magnetic stimulation (TMS).
- D) functional magnetic resonance imaging (fMRI).

Answer: C

Difficulty: 1 Easy Page Ref: 66

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

52) Marisol is trying a new treatment for severe depression, in which a tiny region of her brain is exposed to a strong magnetic field. Marisol is undergoing

- A) optogenetic therapy.
- B) transcranial magnetic stimulation.
- C) positron emission tomography.
- D) functional magnetic resonance imaging.

Answer: B

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Apply

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology;
1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

53) In the context of brain-scanning techniques, the emerging field of _____ involves genetic engineering and the use of special types of light to view individual circuits of neurons.

- A) optogenetics
- B) synaptic reflectance
- C) neurogenetics
- D) transcranial magnetic stimulation

Answer: A

Difficulty: 1 Easy Page Ref: 66

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

54) In the context of brain-scanning techniques, researchers are developing hydrogel embedding methods to

- A) make unresponsive and mutated genes inoperative.
- B) view individual brain cells and the wiring of brain circuitry.
- C) cause interruptions in the brain's electrical activity.
- D) determine the composition of the human genome.

Answer: B

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

55) Sofia is learning about the human brain. Her teacher asks her to identify a part of the brain's central core. Which of the following should she choose?

- A) the cerebellum
- B) the cerebral cortex
- C) the hippocampus
- D) the spinal cord

Answer: A

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Structure; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Apply

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

Accessibility: Keyboard Navigation

56) Which of the following is a function of the medulla?

- A) maintaining body movement and balance
- B) coordinating muscle movements
- C) maintaining body temperature
- D) regulating breathing and heartbeat

Answer: D

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Function; Brain Structure; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 57) The pons serves to
- A) regulate breathing and heartbeat.
 - B) relay sensory information to the brain's association areas.
 - C) integrate movement between the left and right halves of the body.
 - D) consolidate memories.

Answer: C

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Function; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 58) Identify a true statement about the cerebellum.
- A) It is sometimes referred to as the "animal brain" because its structures and functions are like those of other mammals.
 - B) Drinking too much alcohol may depress the activity of the cerebellum.
 - C) It is involved in regulating sleep.
 - D) Injury to the cerebellum can produce striking changes in behavior.

Answer: B

Difficulty: 2 Medium Page Ref: 66

Topic: Brain Function; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 59) The part of the brain extending from the medulla through the pons and made up of groups of nerve cells that can immediately activate other parts of the brain to produce general bodily arousal is called the
- A) reticular formation.
 - B) thalamus.
 - C) cerebellum.
 - D) sarcoplasmic reticulum.

Answer: A

Difficulty: 1 Easy Page Ref: 67

Topic: Brain Function; Brain Structure; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) thalamus
- B) cerebellum
- C) hypothalamus
- D) amygdala

Answer: A

Difficulty: 1 Easy Page Ref: 67

Topic: Brain Function; Brain Structure; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

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

Answer: C

Difficulty: 1 Easy Page Ref: 67

Topic: Brain Function; Brain Structure; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

62) The hypothalamus in the brain contributes to the body's maintenance of a steady internal environment called

- A) peristalsis.
- B) homeostasis.
- C) ketoacidosis.
- D) hematopoiesis.

Answer: B

Difficulty: 1 Easy Page Ref: 67

Topic: Brain Function; Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

63) Which of the following structures is found in the limbic system?

- A) the amygdala
- B) the pons
- C) the thalamus
- D) the corpus callosum

Answer: A

Difficulty: 1 Easy Page Ref: 68

Topic: Limbic System

Learning Objective: 7.3: Describe the limbic system of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

- A) basal lamina
- B) endocrine system
- C) limbic system
- D) cerebral cortex

Answer: C

Difficulty: 1 Easy Page Ref: 68

Topic: Limbic System

Learning Objective: 7.3: Describe the limbic system of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

65) The _____ is referred to as the "new brain" because of its relatively recent evolution.

- A) hindbrain
- B) sarcoplasmic reticulum
- C) cerebral cortex
- D) hypothalamus

Answer: C

Difficulty: 1 Easy Page Ref: 68

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 66) The uneven shape of the cerebral cortex
- A) enables sophisticated information processing.
 - B) helps in the maintenance of body temperature.
 - C) depresses the activity of the cerebellum.
 - D) helps in the identification of brain tumors.

Answer: A

Difficulty: 2 Medium Page Ref: 67

Topic: Brain Structure; Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

- 67) In the context of the cerebral cortex of the brain, the motor area is located in the _____ lobes.
- A) occipital
 - B) frontal
 - C) parietal
 - D) temporal

Answer: B

Difficulty: 1 Easy Page Ref: 69

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

- 68) In a neurophysiological investigation, a rat makes an involuntary gesture when a portion of its brain is electrically stimulated. The area of the brain that was most likely stimulated is the
- A) parietal lobe.
 - B) frontal lobe.
 - C) temporal lobe.
 - D) occipital lobe.

Answer: B

Difficulty: 2 Medium Page Ref: 68

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

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

- A) attribution
- B) sensory
- C) motor
- D) association

Answer: B

Difficulty: 1 Easy Page Ref: 70

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

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

Answer: D

Difficulty: 2 Medium Page Ref: 70

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

71) The visual area in the cortex is located in the

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

Answer: B

Difficulty: 1 Easy Page Ref: 70

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

72) The _____ in the cerebral cortex are the site of higher mental processes, such as thinking, language, memory, and speech.

- A) sensory areas
- B) auditory areas
- C) motor areas
- D) association areas

Answer: D

Difficulty: 1 Easy Page Ref: 71

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

73) Which of the following is an executive function that is controlled by the association areas of the cortex?

- A) recalling information
- B) calculating expenses
- C) setting goals
- D) speaking clearly

Answer: C

Difficulty: 2 Medium Page Ref: 71

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

74) The brain's ability to change throughout the life span through the addition of new neurons, new interconnections between neurons, and the reorganization of information-processing areas is termed

- A) neurogenesis.
- B) neuroplasticity.
- C) neuroadaptation.
- D) neuromutability.

Answer: B

Difficulty: 1 Easy Page Ref: 71

Topic: Plasticity

Learning Objective: 7.5: Recognize neuroplasticity and its implications.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

75) _____ is the creation of new neurons.

- A) Neurogenesis
- B) Neuroadaptation
- C) Neuromutability
- D) Neuropathy

Answer: A

Difficulty: 1 Easy Page Ref: 72

Topic: Plasticity

Learning Objective: 7.5: Recognize neuroplasticity and its implications.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

76) Which of the following statements is most accurate in the context of the lateralization of language?

- A) Language processing is most likely to occur in the left side of the brain.
- B) Language processing is most likely to occur in the right side of the brain.
- C) The control of language is shared equally between the hemispheres.
- D) The lateralization of language varies dramatically from one person to another.

Answer: A

Difficulty: 2 Medium Page Ref: 72

Topic: Specialization of Hemispheres

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

77) Trevor is desperately trying to solve a verbal analogy as part of a standardized entrance examination. On the other hand, Sienna is giving an oral presentation in a political science class. Which of the following is a true statement in the context of this scenario?

- A) Sienna's right hemisphere is likely to be more active than her left hemisphere.
- B) Trevor's left hemisphere is likely to be more active than his right hemisphere.
- C) Both Trevor and Sienna are likely to have suffered damage to their left hemispheres.
- D) Neither Trevor's nor Sienna's brain exhibits lateralization.

Answer: B

Difficulty: 3 Hard Page Ref: 72

Topic: Specialization of Hemispheres

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

- 78) Who among the following is likely to have suffered damage to the right side of the brain?
- A) Kate, who is able to achieve feng shui in her living room by rearranging the couch and the TV
 - B) Norah, who is able to easily read the musical notes in her violin class
 - C) Denver, who is unable to read the look on his girlfriend's face
 - D) Harry, who is unable to express what is on his mind to his friends

Answer: C

Difficulty: 3 Hard Page Ref: 72

Topic: Specialization of Hemispheres

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Apply

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology;
1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

- 79) Ramona is a woman. Stefan is a man. Which of the following statements is true regarding the potential differences in the corpus callosum between these two individuals?
- A) Stefan's corpus callosum is probably the same size as Ramona's.
 - B) A part of Ramona's corpus callosum is proportionally larger than Stefan's.
 - C) A part of Ramona's corpus callosum is slightly smaller than Stefan's.
 - D) A part of Stefan's corpus callosum is much larger than Ramona's.

Answer: B

Difficulty: 2 Medium Page Ref: 74

Topic: Specialization of Hemispheres

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Apply

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology;
1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

80) People whose corpus callosum has been surgically cut to stop seizures are called
A) deep-brain patients.
B) dual-brain patients.
C) split-brain patients.
D) bicameral patients.

Answer: C

Difficulty: 1 Easy Page Ref: 75

Topic: Split Brain

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

81) Mrs. Simon has learned to lessen the pain associated with her migraines by voluntarily relaxing specific muscles and reducing her blood pressure. This example illustrates
A) deep-brain stimulation.
B) biofeedback.
C) split-brain control.
D) transcranial stimulation.

Answer: B

Difficulty: 2 Medium Page Ref: 76

Topic: Biofeedback

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Apply

APA Outcome: 1.1: Describe key concepts, principles, and overarching themes in psychology;
1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

82) The _____ is an insulating coating of fat and protein wrapped around an axon.

Answer: myelin sheath

Difficulty: 1 Easy Page Ref: 49

Topic: Neurons

Learning Objective: 5.1: Explain the structure of a neuron.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

Answer: all-or-none

Difficulty: 1 Easy Page Ref: 49

Topic: How Neurons Fire

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

84) After a long run, Aaron sometimes experiences a feeling of euphoria, a "runner's high," reflecting the activity of a group of neurotransmitters called _____.

Answer: endorphins

Difficulty: 2 Medium Page Ref: 53

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Apply

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

1.3: Describe applications of psychology

Accessibility: Keyboard Navigation

85) The neurons that transmit information from the perimeter of the body to the central nervous system are called _____.

Answer: afferent neurons

Difficulty: 1 Easy Page Ref: 57

Topic: Neurons

Learning Objective: 5.3: Summarize how messages travel from one neuron to another.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

86) The somatic nervous system controls voluntary movement. In contrast, the _____ nervous system controls involuntary movement.

Answer: autonomic

Difficulty: 1 Easy Page Ref: 58

Topic: Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

87) Wilma has been experiencing memory difficulties, and her doctor is concerned that Wilma may have a brain tumor. Her doctor is most likely to recommend a(n) _____ scan to confirm his diagnosis.

Answer: positron emission tomography (PET)

Difficulty: 2 Medium Page Ref: 65

Topic: Brain Imaging

Learning Objective: 7.1: Illustrate how researchers identify the major parts and functions of the brain.

Bloom's: Apply

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains; 1.3:

Describe applications of psychology

Accessibility: Keyboard Navigation

88) Extending from the medulla, through the midbrain, into the forebrain is the _____, which can activate other parts of the brain immediately to produce general bodily arousal.

Answer: reticular formation

Difficulty: 1 Easy Page Ref: 67

Topic: Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

89) Information travels from the sensory receptors to the _____ in the brain, which communicates the information upward to higher parts of the brain.

Answer: thalamus

Difficulty: 1 Easy Page Ref: 67

Topic: Central Core

Learning Objective: 7.2: Describe the central core of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

90) The amygdala and hippocampus are found within the brain's _____, the part of the brain that controls eating, aggression, and reproduction.

Answer: limbic system

Difficulty: 1 Easy Page Ref: 74

Topic: Limbic System

Learning Objective: 7.3: Describe the limbic system of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

91) The cortex has four major sections called _____.

Answer: lobes

Difficulty: 1 Easy Page Ref: 69

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

Answer: somatosensory

Difficulty: 1 Easy Page Ref: 70

Topic: Cerebral Cortex

Learning Objective: 7.4: Describe the cerebral cortex of the brain.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

93) Vince has learned to voluntarily control his internal physiological processes as part of the treatment for an anxiety disorder. This is an example of _____.

Answer: biofeedback

Difficulty: 2 Medium Page Ref: 76

Topic: Biofeedback

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Apply

APA Outcome: 1.2: Develop a working knowledge of psychology's content domains; 1.3:

Describe applications of psychology

Accessibility: Keyboard Navigation

94) Briefly describe mirror neurons.

Answer: Students' examples may vary.

The answer should contain the following information:

Mirror neurons are neurons that fire not only when a person enacts a particular behavior, but also when a person simply observes another individual carrying out the same behavior. Mirror neurons may help explain how (and why) humans have the capacity to understand others' intentions. Specifically, mirror neurons may fire when we view others' behavior, helping us to predict what their goals are and what they may do next.

Difficulty: 2 Medium Page Ref: 50-51

Topic: Mirror Neurons

Learning Objective: 5.2: Describe how neurons fire.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

Answer: Students' examples may vary.

The answer should contain the following information:

Alzheimer's disease may be associated with diminished production of the neurotransmitter acetylcholine (ACh). Acetylcholine is found throughout the nervous system. It transmits messages relating to skeletal muscles and is involved in memory capabilities.

Parkinson's disease is caused by a deficiency of the neurotransmitter dopamine in the brain. Dopamine is involved in movement, attention, and learning.

On the other hand, schizophrenia is hypothesized to be affected or caused by unusually high levels of dopamine. Drugs that block the reception of dopamine reduce the symptoms displayed by some people diagnosed with schizophrenia.

Difficulty: 2 Medium Page Ref: 53-54

Topic: Neurotransmitters

Learning Objective: 5.4: Identify neurotransmitters.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

96) Briefly describe the peripheral nervous system.

Answer: Students' examples may vary.

The answer should contain the following information:

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

The somatic division of the peripheral nervous system specializes in the control of voluntary movements, such as the motion of the eyes to read or those of the hand to scroll down a page. The somatic division also communicates information to and from the sense organs. The autonomic division of the peripheral nervous system controls the parts of the body that keep us alive—the heart, blood vessels, glands, lungs, and other organs that function involuntarily without our awareness

Difficulty: 2 Medium Page Ref: 57-58

Topic: Nervous System; Peripheral Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

Answer: Students' examples may vary.

The answer should contain the following information:

The sympathetic nervous system acts to prepare an organism's body for action in stressful situations by engaging all of the organism's resources to run away or confront the threat. This response is often called the "fight-or-flight" response. On the other hand, the parasympathetic nervous system acts to calm the body once a stressful situation or emergency has ended. It allows the body to store energy.

The sympathetic nervous system becomes active in fight-or-flight situations, such as noticing a threatening stranger in a desolate car park, being part of a near-accident on the road, and so on. The parasympathetic nervous system, however, becomes active in calm, restful situations, such as relaxing after dinner or resting in bed before falling asleep.

Activation of the sympathetic nervous system causes the pupils to dilate (enhanced vision), relaxes the bronchi (increased air to lungs), accelerates and strengthens heartbeat (increased oxygen), inhibits the activity (blood to muscles) of the stomach and intestines, and contracts the vessels of internal organs. Activation of the parasympathetic nervous system, on the other hand, causes the pupils to contract, slows heartbeat, constricts the bronchi, stimulates the activity of the stomach and intestines, and dilates the vessels of internal organs.

Difficulty: 2 Medium Page Ref: 58-59

Topic: Autonomic Division; Peripheral Nervous System; Central Nervous System

Learning Objective: 6.1: Explain how the structures of the nervous system are linked together.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

98) Briefly describe the functions of the endocrine system and the pituitary gland.

Answer: Students' examples may vary.

The answer should contain the following information:

The endocrine system is a chemical communication network that sends messages throughout the body via the bloodstream. Its job is to secrete hormones, chemicals that circulate through the blood and regulate the functioning or growth of the body. It also influences—and is influenced by—the functioning of the nervous system.

A key component of the endocrine system is the tiny pituitary gland. The pituitary gland has sometimes been called the "master gland" because it controls the functioning of the rest of the endocrine system. But the pituitary gland is more than just the taskmaster of other glands; it has important functions in its own right. For instance, hormones secreted by the pituitary gland control growth. Extremely short people and unusually tall ones usually have pituitary gland abnormalities.

Difficulty: 1 Easy Page Ref: 61

Topic: Endocrine System

Learning Objective: 6.2: Describe the operation of the endocrine system and how it affects behavior.

Bloom's: Remember

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

Accessibility: Keyboard Navigation

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

Answer: Students' examples may vary.

The answer should contain the following information:

Most males tend to show greater lateralization of language in the left hemisphere. For them, language is clearly relegated largely to the left side of the brain. In contrast, women display less lateralization, with language abilities apt to be more evenly divided between the two hemispheres. Such differences in brain lateralization may account, in part, for the superiority often displayed by females on certain measures of verbal skills, such as the onset and fluency of speech.

Other research suggests that men's brains are somewhat bigger than women's brains even after taking differences in body size into account. In contrast, part of the corpus callosum, a bundle of fibers that connects the hemispheres of the brain, is proportionally larger in women than in men.

Men and women also may process information differently. For example, in one study, fMRI brain scans of men making judgments discriminating real from false words showed activation of the left hemisphere of the brain, whereas women used areas on both sides of the brain.

Furthermore, newer research suggests that most brains contain elements of male and female characteristics. Such findings contradict the notion that a brain is essentially either male or female.

Culture also gives rise to differences in brain lateralization. For example, the volume of gray-matter material in the cortex is greater in higher-income adolescents than in low-income adolescents. Native speakers of Japanese seem to process information regarding vowel sounds primarily in the brain's left hemisphere. In contrast, North and South Americans, Europeans, and individuals of Japanese ancestry who learn Japanese later in life handle vowel sounds principally in the right hemisphere.

Difficulty: 2 Medium Page Ref: 74-75

Topic: Brain Function; Brain Structure

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Understand

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

Accessibility: Keyboard Navigation

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

Answer: Students' examples may vary.

The answer should contain the following information:

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

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

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

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Topic: Biofeedback

Learning Objective: 7.6: Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior.

Bloom's: Understand

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

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