

1. The study of the links between biology and behavior is called
  - A) neurology.
  - B) cognitive psychology.
  - C) endocrinology.
  - D) biological psychology.
  
2. Dr. Wolski conducts research on the relationship between neurotransmitter deficiencies and mood states. Dr. Wolski's research focus is most characteristic of
  - A) tomography.
  - B) biological psychology.
  - C) psychoanalysis.
  - D) cognitive psychology.
  
3. A biological psychologist would be most interested in conducting research on the relationship between
  - A) neurotransmitters and depression.
  - B) age and bone density.
  - C) self-esteem and popularity.
  - D) genetics and eye color.
  
4. Neurons are best described as
  - A) positively charged sodium and potassium ions.
  - B) chemical molecules that cross the synaptic gap.
  - C) nerve cells that function as the building blocks of the nervous system.
  - D) bundled axon cables that connect the CNS with muscles, glands, and sense organs.
  
5. Dendrites are branching extensions of
  - A) neurotransmitters.
  - B) endorphins.
  - C) neurons.
  - D) glial cells.
  
6. The function of dendrites is to
  - A) receive incoming signals from other neurons.
  - B) release neurotransmitters into the spatial junctions between neurons.
  - C) coordinate the activation of the parasympathetic and sympathetic nervous systems.
  - D) control pain through the release of opiate-like chemicals into the brain.

7. An axon is
- A) a cell that serves as the basic building block of the nervous system.
  - B) a layer of fatty tissue that encases the fibers of many neurons.
  - C) a molecule that blocks neurotransmitter receptor sites.
  - D) the extension of a neuron that carries messages away from the cell body.
8. Dendrite is to \_\_\_\_\_ as axon is to \_\_\_\_\_.
- A) sensory neuron; motor neuron
  - B) sodium ion; potassium ion
  - C) signal reception; signal transmission
  - D) central nervous system; peripheral nervous system
9. The longest part of a motor neuron is likely to be the
- A) dendrite.
  - B) axon.
  - C) cell body.
  - D) synapse.
10. In transmitting sensory information to the brain, an electrical signal travels from the \_\_\_\_\_ of a single neuron.
- A) dendrites to the axon to the cell body
  - B) axon to the cell body to the dendrites
  - C) dendrites to the cell body to the axon
  - D) axon to the dendrites to the cell body
11. A myelin sheath is a
- A) nerve network within the spinal cord that controls physical arousal.
  - B) large band of neural fibers connecting the two adrenal glands.
  - C) layer of fatty tissue encasing the axons of some nerve cells.
  - D) bushy extension of a neuron that conducts impulses toward the cell body.
12. The speed at which a neural impulse travels is increased when the axon is encased by a(n)
- A) endorphin.
  - B) myelin sheath.
  - C) glial cell.
  - D) synaptic vesicle.

13. Degeneration of the myelin sheath results in
- A) reuptake.
  - B) multiple sclerosis.
  - C) the fight-or-flight response.
  - D) an action potential.
14. Gerald has experienced increasing difficulties with muscle weakness, motor coordination, and body balance, which physicians have attributed to multiple sclerosis. These symptoms are most likely to be directly linked with the degeneration of
- A) endorphins.
  - B) synaptic gaps.
  - C) the pituitary gland.
  - D) the myelin sheath.
15. Neurons are surrounded by \_\_\_\_\_, which guide neural connections and mop up ions and neurotransmitters.
- A) endorphins
  - B) glial cells
  - C) hormones
  - D) agonists
16. One function of glial cells is to
- A) increase the speed of neural impulses.
  - B) mimic the effects of neurotransmitters.
  - C) provide nutrients to neurons.
  - D) stimulate the production of hormones.
17. Which brain cells play a role in learning and memory by communicating with neurons?
- A) endorphins
  - B) glial cells
  - C) agonists
  - D) myelin cells
18. A brief electrical charge that travels down the axon of a neuron is called the
- A) synapse.
  - B) agonist.
  - C) action potential.
  - D) refractory period.

19. Mathematical computations by a computer are faster than your quickest mathematical computations because the top speed of a neural impulse is about \_\_\_\_\_ times slower than the speed of electricity through the wired circuitry in a computer.
- A) 3 hundred
  - B) 3 thousand
  - C) 3 hundred thousand
  - D) 3 million
20. An action potential is generated by the movement of \_\_\_\_\_ through an axon membrane.
- A) glial cells
  - B) glands
  - C) neurotransmitters
  - D) ions
21. A state in which the fluid outside an axon has a mostly positive charge and the fluid inside the axon has a mostly negative charge is called
- A) the action potential.
  - B) the resting potential.
  - C) the refractory period.
  - D) depolarization.
22. A resting axon's fluid interior has a mostly negative charge thanks to the presence of large \_\_\_\_\_ ions.
- A) sodium
  - B) serotonin
  - C) protein
  - D) dopamine
23. Neurons generate electricity from a chemical process involving the exchange of
- A) ions.
  - B) enzymes.
  - C) cortisol.
  - D) oxytocin.
24. The resting potential of an axon results from the fact that an axon membrane is
- A) encased by a myelin sheath.
  - B) selectively permeable.
  - C) sensitive to neurotransmitter molecules.
  - D) part of a larger neural network.

25. The depolarization of a neural membrane creates a(n)
- A) action potential.
  - B) myelin sheath.
  - C) neural network.
  - D) interneuron.
26. An action potential involves the temporary \_\_\_\_\_ through an axon membrane.
- A) inflow of positively charged ions
  - B) inflow of negatively charged ions
  - C) outflow of positively charged ions
  - D) outflow of negatively charged ions
27. The loss of an electrical charge difference between the inside and outside of an axon membrane is called
- A) reuptake.
  - B) depolarization.
  - C) the resting potential.
  - D) selective permeability.
28. Following depolarization, the sodium/potassium pump transports \_\_\_\_\_ ions \_\_\_\_\_ a neuron.
- A) positively charged; into
  - B) negatively charged; into
  - C) positively charged; out of
  - D) negatively charged; out of
29. The minimum level of stimulation required to trigger a neural impulse is called the
- A) reflex.
  - B) threshold.
  - C) synapse.
  - D) action potential.
30. Excitatory signals to a neuron must exceed inhibitory signals by a minimum intensity in order to trigger
- A) reuptake.
  - B) a refractory period.
  - C) an action potential.
  - D) selective permeability.

31. The \_\_\_\_\_ occurs at an electrical charge of about  $-70$  mV and the \_\_\_\_\_ occurs at a charge of about  $+40$  mV.
- A) action potential; resting potential
  - B) resting potential; threshold
  - C) threshold; resting potential
  - D) resting potential; action potential
32. With regard to the process of neural transmission, a refractory period refers to a time interval in which
- A) chemical messengers cross synaptic gaps between neurons.
  - B) a neurotransmitter is reabsorbed by a sending neuron.
  - C) an action potential cannot occur.
  - D) an organism reflexively withdraws from a pain stimulus.
33. Increasing excitatory signals above the threshold for neural activation will not affect the intensity of an action potential. This indicates that a neuron's reaction is
- A) inhibited by the myelin sheath.
  - B) delayed by a refractory period.
  - C) an all-or-none response.
  - D) dependent on neurotransmitter molecules.
34. A neuron's reaction of either firing at full strength or not firing at all is described as
- A) an all-or-none response.
  - B) a refractory period.
  - C) the resting potential.
  - D) a reflexive response.
35. A slap on the back is more painful than a pat on the back because a slap triggers
- A) the release of endorphins.
  - B) more intense neural impulses.
  - C) the release of GABA.
  - D) more neurons to fire, and to fire more often.
36. Sir Charles Sherrington observed that impulses took an unexpectedly long time to travel a neural pathway. His observation provided evidence for the existence of
- A) antagonists.
  - B) synaptic gaps.
  - C) interneurons.
  - D) neural networks.

37. A synapse is a(n)
- A) chemical messenger that triggers muscle contractions.
  - B) automatic response to sensory input.
  - C) junction between a sending neuron and a receiving neuron.
  - D) neural cable containing many axons.
38. The axon of a sending neuron is separated from the dendrite of a receiving neuron by a
- A) myelin sheath.
  - B) neural network.
  - C) glial cell.
  - D) synaptic gap.
39. The chemical messengers released into the spatial junctions between neurons are called
- A) hormones.
  - B) neurotransmitters.
  - C) synapses.
  - D) genes.
40. Neurotransmitters are released from knob-like terminals at the end of the
- A) dendrites.
  - B) cell body.
  - C) axon.
  - D) myelin sheath.
41. Reuptake refers to the
- A) movement of neurotransmitter molecules across a synaptic gap.
  - B) release of hormones into the bloodstream.
  - C) inflow of positively charged ions through an axon membrane.
  - D) reabsorption of excess neurotransmitter molecules by a sending neuron.
42. The number of neurotransmitter molecules located within a specific synaptic gap would most clearly be reduced by
- A) an action potential.
  - B) ACh-producing neurons.
  - C) acupuncture.
  - D) reuptake.

43. Which neurotransmitter plays the most direct role in learning and memory?
- A) dopamine
  - B) acetylcholine
  - C) GABA
  - D) oxytocin
44. Acetylcholine is a neurotransmitter that
- A) causes sleepiness.
  - B) lessens physical pain.
  - C) reduces depressed moods.
  - D) triggers muscle contractions.
45. Mr. Anderson suffers from Parkinson's disease and his shaking arm movements are so severe that he has difficulty feeding or dressing himself without help. His symptoms are most likely to be linked with an undersupply of the neurotransmitter
- A) cortisol.
  - B) dopamine.
  - C) serotonin.
  - D) oxytocin.
46. Schizophrenia is most closely linked to an oversupply of the neurotransmitter
- A) dopamine.
  - B) epinephrine.
  - C) acetylcholine.
  - D) serotonin.
47. An undersupply of serotonin is most closely linked to
- A) Alzheimer's disease.
  - B) schizophrenia.
  - C) Parkinson's disease.
  - D) depression.
48. An undersupply of the major inhibitory neurotransmitter known as \_\_\_\_\_ is linked to seizures.
- A) glutamate
  - B) GABA
  - C) serotonin
  - D) ACh



49. Jacob's severe migraine headaches have led him to seek medical help. It is likely that his symptoms are most closely linked to an
- A) oversupply of GABA.
  - B) undersupply of serotonin.
  - C) oversupply of glutamate.
  - D) undersupply of acetylcholine.
50. Endorphins are
- A) neurotransmitters.
  - B) sex hormones.
  - C) endocrine glands.
  - D) glial cells.
51. Opiate drugs occupy the same receptor sites as
- A) serotonin.
  - B) endorphins.
  - C) dopamine.
  - D) epinephrine.
52. Which of the following is an opiate that elevates mood and eases pain?
- A) melatonin
  - B) acetylcholine
  - C) morphine
  - D) glutamate
53. José has just played a long, bruising football game but feels little fatigue or discomfort. His lack of pain is most likely caused by the release of
- A) glutamate.
  - B) dopamine.
  - C) acetylcholine.
  - D) endorphins.
54. The body's natural production of endorphins is likely to be
- A) increased by heroin use and increased by vigorous exercise.
  - B) decreased by heroin use and decreased by vigorous exercise.
  - C) increased by heroin use and decreased by vigorous exercise.
  - D) decreased by heroin use and increased by vigorous exercise.

55. Jason's intensely uncomfortable withdrawal symptoms following heroin use were probably due in part to a reduction in his body's normal production of
- A) dopamine.
  - B) epinephrine.
  - C) acetylcholine.
  - D) endorphins.
56. A drug molecule that increases a neurotransmitter's action is called a(n)
- A) antagonist.
  - B) endorphin.
  - C) agonist.
  - D) steroid.
57. Any drug molecule that occupies a neurotransmitter receptor site and blocks the neurotransmitter's effect is a(n)
- A) glutamate.
  - B) agonist.
  - C) opiate.
  - D) antagonist.
58. Any drug molecule that blocks the reuptake of a neurotransmitter is a(n)
- A) steroid.
  - B) agonist.
  - C) endorphin.
  - D) antagonist.
59. Endorphin agonists are likely to \_\_\_\_\_ one's immediate pain, and endorphin antagonists are likely to \_\_\_\_\_ one's immediate pain.
- A) decrease; increase
  - B) increase; decrease
  - C) increase; increase
  - D) decrease; decrease
60. Botulin poisoning from improperly canned food causes paralysis by blocking the release of
- A) endorphins.
  - B) epinephrine.
  - C) acetylcholine.
  - D) dopamine.

61. Madison is experiencing symptoms of paralysis after eating food contaminated by botulin. Her paralysis is most likely to be relieved by a drug that functions as a(n)
- A) ACh agonist.
  - B) serotonin agonist.
  - C) ACh antagonist.
  - D) serotonin antagonist.
62. The nervous system is the
- A) complete set of glands that secrete hormones into the bloodstream.
  - B) collection of bundled axons that form neural cables carrying information to body muscles.
  - C) an organism's complete set of automatic reflex responses.
  - D) electrochemical communication network that includes all the body's neurons.
63. The two major divisions of the nervous system are the central and the \_\_\_\_\_ nervous systems.
- A) autonomic
  - B) sympathetic
  - C) somatic
  - D) peripheral
64. The central nervous system consists of
- A) sensory and motor neurons.
  - B) somatic and autonomic systems.
  - C) the brain and the spinal cord.
  - D) sympathetic and parasympathetic branches.
65. Messages are transmitted from your spinal cord to muscles in your hands by the \_\_\_\_\_ nervous system.
- A) somatic
  - B) parasympathetic
  - C) sympathetic
  - D) autonomic
66. Information travels through axons that are bundled into the cables we call
- A) interneurons.
  - B) action potentials.
  - C) nerves.
  - D) reflex pathways.

67. You feel the pain of a sprained ankle when \_\_\_\_\_ relay(s) messages from your ankle to your central nervous system.
- A) the myelin sheath
  - B) interneurons
  - C) motor neurons
  - D) sensory neurons
68. Sensory neurons are located in the
- A) synaptic gaps.
  - B) endocrine system.
  - C) peripheral nervous system.
  - D) myelin sheath.
69. Sensory neurons are \_\_\_\_\_ neurons, and motor neurons are \_\_\_\_\_ neurons.
- A) agonist; antagonist
  - B) afferent; efferent
  - C) antagonist; agonist
  - D) efferent; afferent
70. Information is carried from the central nervous system to the body's tissues by
- A) interneurons.
  - B) sensory neurons.
  - C) motor neurons.
  - D) adrenal glands.
71. Some neurons enable you to grasp objects by relaying outgoing messages to the muscles in your arms and hands. These neurons are called
- A) interneurons.
  - B) sensory neurons.
  - C) neurotransmitters.
  - D) motor neurons.
72. Motor neurons transmit signals to
- A) glands.
  - B) interneurons.
  - C) sensory neurons.
  - D) all of these parts.

73. Neurons that function within the brain and spinal cord are called
- A) sensory neurons.
  - B) interneurons.
  - C) endorphins.
  - D) motor neurons.
74. Central nervous system neurons that process information between sensory inputs and motor outputs are called
- A) neurotransmitters.
  - B) interneurons.
  - C) synapses.
  - D) dendrites.
75. The two divisions of the peripheral nervous system are the
- A) brain and spinal cord.
  - B) sympathetic nervous system and parasympathetic nervous system.
  - C) endocrine system and circulatory system.
  - D) somatic nervous system and the autonomic nervous system.
76. The somatic nervous system is a component of the \_\_\_\_\_ nervous system.
- A) peripheral
  - B) central
  - C) sympathetic
  - D) parasympathetic
77. The part of the peripheral nervous system that controls the movements of your mouth and jaws as you eat is called the
- A) somatic nervous system.
  - B) sympathetic nervous system.
  - C) endocrine system.
  - D) autonomic nervous system.
78. The part of the peripheral nervous system that controls the glands and the muscles of the internal organs is called the
- A) somatic nervous system.
  - B) endocrine system.
  - C) sensory nervous system.
  - D) autonomic nervous system.

79. Messages are transmitted from your spinal cord to your heart muscles by the
- A) sensory nervous system.
  - B) somatic nervous system.
  - C) central nervous system.
  - D) autonomic nervous system.
80. Which division of the autonomic nervous system arouses the body and mobilizes its energy in stressful situations?
- A) the parasympathetic nervous system
  - B) the sympathetic nervous system
  - C) the somatic nervous system
  - D) the central nervous system
81. You come home one night to find a burglar in your house. Your heart starts racing and you begin to perspire. These physical reactions are triggered by the
- A) somatic nervous system.
  - B) sympathetic nervous system.
  - C) parasympathetic nervous system.
  - D) sensory nervous system.
82. The parasympathetic nervous system
- A) stimulates digestion and slows heartbeat.
  - B) inhibits digestion and accelerates heartbeat.
  - C) stimulates digestion and accelerates heartbeat.
  - D) inhibits digestion and slows heartbeat.
83. After discovering that the shadows outside his window were only the trees in the yard, Ralph's blood pressure decreased and his heartbeat slowed. These physical reactions were most directly regulated by his
- A) parasympathetic nervous system.
  - B) sympathetic nervous system.
  - C) somatic nervous system.
  - D) sensory nervous system.
84. The sympathetic and parasympathetic nervous systems work together to keep you in a steady internal state called
- A) depolarization.
  - B) reuptake.
  - C) homeostasis.
  - D) the resting potential.

85. An accelerated heartbeat is to a slowed heartbeat as the \_\_\_\_\_ nervous system is to the \_\_\_\_\_ nervous system.
- A) somatic; autonomic
  - B) autonomic; somatic
  - C) sympathetic; parasympathetic
  - D) parasympathetic; sympathetic
86. Neural networks refer to
- A) the branching extensions of a neuron.
  - B) interrelated clusters of neurons in the central nervous system.
  - C) neural cables containing many axons.
  - D) junctions between sending and receiving neurons.
87. The strengthening of the brain's synaptic connections facilitates the formation of
- A) interneurons.
  - B) endorphins.
  - C) neural networks.
  - D) glial cells.
88. A football quarterback can simultaneously make calculations of receiver distances, player movements, and gravitational forces. This best illustrates the activity of multiple
- A) endocrine glands.
  - B) endorphin agonists.
  - C) neural networks.
  - D) acetylcholine antagonists.
89. The part of the central nervous system that carries information from your senses to your brain and motor-control information to your body parts is the
- A) pituitary gland.
  - B) pancreas.
  - C) spinal cord.
  - D) myelin sheath.
90. A simple, automatic, inborn response to a sensory stimulus is called a(n)
- A) neural network.
  - B) action potential.
  - C) neurotransmitter.
  - D) reflex.

91. The knee-jerk reflex is controlled by interneurons in the
- A) synaptic gap.
  - B) spinal cord.
  - C) sympathetic nervous system.
  - D) parasympathetic nervous system.
92. In a tragic diving accident, Andrew damaged his spinal cord. As a result, his legs were paralyzed. Andrew's injury was located in his
- A) somatic nervous system.
  - B) autonomic nervous system.
  - C) sympathetic nervous system.
  - D) central nervous system.
93. Aaron consistently exhibits a knee-jerk response without having any sensations of the taps on his knees. Aaron's experience is most indicative of
- A) botulin poisoning.
  - B) a severed spinal cord.
  - C) a sympathetic nervous system injury.
  - D) a refractory period.
94. The endocrine system consists of the
- A) communication network that includes all the body's neurons.
  - B) regions of the brain that regulate emotion.
  - C) interneurons within the spinal cord.
  - D) glands that secrete hormones.
95. Hormones are the chemical messengers of the
- A) autonomic nervous system.
  - B) somatic nervous system.
  - C) endocrine system.
  - D) central nervous system.
96. The speedy nervous system zips messages by way of neurotransmitters. Endocrine messages, however, are delivered more slowly because hormones travel through
- A) myelinated neurons.
  - B) the bloodstream.
  - C) glial cells.
  - D) interneurons.



97. The ovaries in females and the testes in males are part of the
- A) somatic nervous system.
  - B) endocrine system.
  - C) autonomic nervous system.
  - D) central nervous system.
98. The release of hormones by the adrenal glands is most likely to trigger
- A) depression.
  - B) the fight-or-flight response.
  - C) the pain reflex.
  - D) a refractory period.
99. If a professor accused you of cheating on a test, your adrenal glands would probably release \_\_\_\_\_ into your bloodstream.
- A) endorphins
  - B) acetylcholine
  - C) epinephrine
  - D) insulin
100. The release of epinephrine into the bloodstream is most likely to
- A) increase blood sugar.
  - B) lower blood pressure.
  - C) stimulate digestion.
  - D) decrease perspiration.
101. The master gland of the endocrine system is the
- A) thyroid gland.
  - B) adrenal gland.
  - C) pituitary gland.
  - D) pancreas.
102. At the age of 22, Mrs. LaBlanc was less than 4 feet tall. Her short stature was probably influenced by the lack of a growth hormone produced by the
- A) pancreas.
  - B) thyroid.
  - C) adrenal gland.
  - D) pituitary gland.

103. During a laboratory game, those given a nasal squirt of \_\_\_\_\_ rather than a placebo were more likely to trust strangers with their money.
- A) epinephrine
  - B) oxytocin
  - C) dopamine
  - D) serotonin
104. Oxytocin is secreted by the
- A) pancreas.
  - B) thyroid gland.
  - C) pituitary gland.
  - D) adrenal gland.
105. The hypothalamus influences the \_\_\_\_\_ to send messages to the \_\_\_\_\_.
- A) adrenal glands; pancreas
  - B) pituitary; endocrine glands
  - C) motor neurons; sensory neurons
  - D) somatic nervous system; autonomic nervous system
106. Surgical destruction of brain tissue is called a(n)
- A) EEG.
  - B) diffusion spectrum.
  - C) lesion.
  - D) MRI.
107. An amplified recording of the waves of electrical activity that sweep across the surface of the brain is called a(n)
- A) fMRI.
  - B) EEG.
  - C) PET scan.
  - D) MRI.
108. The release of gamma waves from radioactive blood sugar in different regions of the brain is detected by a(n)
- A) MRI scan.
  - B) EEG.
  - C) PET scan.
  - D) fMRI.

109. To identify which of Lucy's brain areas was most active when she talked, neuroscientists gave her a temporarily radioactive form of glucose and a(n)
- A) fMRI.
  - B) PET scan.
  - C) EEG.
  - D) MRI scan.
110. Magnetic resonance imaging uses magnetic fields and \_\_\_\_\_ to produce computer-generated images of soft tissue.
- A) radio waves
  - B) brain lesions
  - C) a radioactive form of glucose
  - D) electrodes placed on the scalp
111. The best way to detect enlarged fluid-filled brain regions in some patients who have schizophrenia is to use a(n)
- A) EEG.
  - B) MRI.
  - C) PET scan.
  - D) brain lesion.
112. To detect Mr. Ziegler's loss of brain tissue from a degenerative disease, his physicians are most likely to request that he receive a(n)
- A) EEG.
  - B) MRI scan.
  - C) brain lesion.
  - D) PET scan.
113. To identify which specific brain areas are most active during a particular mental task, researchers would be most likely to make use of a(n)
- A) fMRI.
  - B) microelectrode insertion.
  - C) MRI.
  - D) brain lesion.

114. When the brain is unoccupied, an fMRI indicates that blood continues to flow via a web of brain regions called the
- A) reticular formation.
  - B) nucleus accumbens.
  - C) default network.
  - D) diffusion spectrum.
115. The \$40 million Human Connectome Project harnesses \_\_\_\_\_ technology to map neural connections across long distances within the brain.
- A) positron emission tomography
  - B) electroencephalogram
  - C) diffusion spectrum imaging
  - D) microelectrode insertion
116. The part of the brainstem that controls heartbeat and breathing is called the
- A) cerebellum.
  - B) medulla.
  - C) amygdala.
  - D) thalamus.
117. The part of the brainstem that helps to coordinate movements is called the
- A) nucleus accumbens.
  - B) hippocampus.
  - C) amygdala.
  - D) pons.
118. If your \_\_\_\_\_ is destroyed, the left side of your brain could not control the movements of your right hand.
- A) brainstem
  - B) hippocampus
  - C) amygdala
  - D) hypothalamus
119. Which brain structure receives information from all the senses except smell?
- A) hippocampus
  - B) amygdala
  - C) pons
  - D) thalamus

120. Jason lost his sense of taste because a tumor caused damage to a structure located on top of his brainstem. This structure is known as the
- A) amygdala.
  - B) thalamus.
  - C) medulla.
  - D) hippocampus.
121. Information from higher brain regions is transmitted to the medulla through the
- A) hypothalamus.
  - B) hippocampus.
  - C) amygdala.
  - D) thalamus.
122. The reticular formation is a nerve network that travels through the \_\_\_\_\_ into the thalamus.
- A) brainstem
  - B) amygdala
  - C) hypothalamus
  - D) cerebellum
123. Which region of your brainstem plays a role in arousing you to a state of alertness when, for example, you accidentally stumble over another person's misplaced pair of shoes?
- A) reticular formation
  - B) hypothalamus
  - C) amygdala
  - D) hippocampus
124. Severing a cat's reticular formation from higher brain regions causes the cat to
- A) become violently aggressive.
  - B) cower in fear.
  - C) experience convulsive seizures.
  - D) lapse into a coma.
125. Which baseball-sized structure at the rear of the brainstem serves many functions, including helping you to judge time and to discriminate sounds and textures?
- A) amygdala
  - B) cerebellum
  - C) hippocampus
  - D) basal ganglia

126. The \_\_\_\_\_ at the back of the brain enables nonverbal learning and skill memory.
- A) amygdala
  - B) cerebellum
  - C) hypothalamus
  - D) nucleus accumbens
127. With assistance from the \_\_\_\_\_, the cerebellum regulates \_\_\_\_\_.
- A) hypothalamus; hunger and thirst
  - B) amygdala; heartbeat and breathing
  - C) pons; physical coordination and balance
  - D) medulla; fear and rage
128. After Kato's serious motorcycle accident, doctors detected damage to his cerebellum. Kato is most likely to have difficulty
- A) reading printed words.
  - B) understanding what others are saying.
  - C) tasting the flavors of foods.
  - D) playing his guitar.
129. A neural system at the border between the brainstem and the cerebral hemispheres is known as the
- A) pons.
  - B) limbic system.
  - C) reticular formation.
  - D) medulla.
130. The sequence of brain regions from the oldest to newest is
- A) limbic system, brainstem, cerebral cortex.
  - B) brainstem, cerebral cortex, limbic system.
  - C) limbic system, cerebral cortex, brainstem.
  - D) brainstem, limbic system, cerebral cortex.
131. The amygdala consists of emotion-linked neural clusters in the
- A) brainstem.
  - B) reticular formation.
  - C) limbic system.
  - D) cerebellum.

132. S. M. is a patient who has been called “the woman with no fear,” even of being threatened with a gun. Her fearlessness is best attributed to damage to her
- A) pons.
  - B) cerebellum.
  - C) hypothalamus.
  - D) amygdala.
133. To demonstrate that brain stimulation can make a rat violently aggressive, a neuroscientist should electrically stimulate the rat's
- A) reticular formation.
  - B) cerebellum.
  - C) medulla.
  - D) amygdala.
134. Which limbic system structure regulates thirst and body temperature?
- A) medulla
  - B) amygdala
  - C) hippocampus
  - D) hypothalamus
135. The brain structure that provides a major link between the nervous system and the endocrine system is the
- A) cerebellum.
  - B) amygdala.
  - C) reticular formation.
  - D) hypothalamus.
136. A brain tumor caused extensive damage to Mr. Thorndike's hypothalamus. It is most likely that he may suffer a loss of
- A) visual perception.
  - B) muscular coordination.
  - C) sexual motivation.
  - D) language comprehension.
137. James Olds and Peter Milner located reward centers in the brain structure known as the
- A) hypothalamus.
  - B) cerebellum.
  - C) medulla.
  - D) amygdala.

138. A limbic system reward center located in front of the hypothalamus is called the
- A) amygdala.
  - B) reticular formation.
  - C) pons.
  - D) nucleus accumbens.
139. Our pleasurable “chills” response to a favorite piece of music is facilitated by the release of the neurotransmitter
- A) GABA.
  - B) cortisol.
  - C) ACh.
  - D) dopamine.
140. Addictive disorders may stem from malfunctioning reward centers in the
- A) thalamus.
  - B) cerebellum.
  - C) reticular formation.
  - D) limbic system.
141. Some researchers believe that a reward deficiency syndrome contributes to
- A) schizophrenia.
  - B) amygdala lesions.
  - C) muscular paralysis.
  - D) substance use disorders.
142. The neural center in the limbic system that processes explicit memories for storage is called the
- A) hypothalamus.
  - B) thalamus.
  - C) hippocampus.
  - D) medulla.
143. Those who survive a hippocampal brain tumor in childhood are likely to have difficulty \_\_\_\_\_ in adulthood.
- A) getting adequate sleep
  - B) remembering new information
  - C) maintaining body balance while walking
  - D) experiencing feelings of fear



144. About 85 percent of human brain weight comes from the
- A) hippocampus.
  - B) cerebrum.
  - C) corpus callosum.
  - D) frontal lobes.
145. The cerebral cortex is the covering layer of the
- A) brainstem.
  - B) corpus callosum.
  - C) hippocampus.
  - D) cerebrum.
146. Your conscious awareness of your own name and self-identity depends primarily on the normal functioning of your
- A) somatosensory cortex.
  - B) amygdala.
  - C) motor cortex.
  - D) cerebral cortex.
147. Which portion of the cerebral cortex is most closely adjacent to the ears?
- A) parietal lobes
  - B) temporal lobes
  - C) occipital lobes
  - D) frontal lobes
148. Which portion of the cerebral cortex is located nearest the top of the head just behind the frontal lobes?
- A) occipital lobes
  - B) hippocampus
  - C) parietal lobes
  - D) temporal lobes
149. The occipital lobes are to \_\_\_\_\_ as the temporal lobes are to \_\_\_\_\_.
- A) hearing; sensing movement
  - B) seeing; sensing touch
  - C) seeing; hearing
  - D) speaking; hearing

150. Applying mild electrical stimulation to parts of an animal's cortex, Gustav Fritsch and Edward Hitzig discovered what is now called the
- A) motor cortex.
  - B) visual cortex.
  - C) auditory cortex.
  - D) somatosensory cortex.
151. The motor cortex is located in the \_\_\_\_\_ lobes.
- A) occipital
  - B) temporal
  - C) frontal
  - D) parietal
152. A laboratory cat could be made to twitch its whiskers by direct stimulation of the \_\_\_\_\_ lobes of its cerebral cortex.
- A) temporal
  - B) occipital
  - C) frontal
  - D) parietal
153. During open-brain surgery, Adam's left ankle twitched whenever the surgeon electrically stimulated a specific area within Adam's
- A) left frontal lobe.
  - B) right frontal lobe.
  - C) left parietal lobe.
  - D) right parietal lobe.
154. Which of the following body parts is associated with the greatest amount of brain tissue in the motor cortex?
- A) arms
  - B) face
  - C) trunk
  - D) knees
155. In a clinical trial of brain-implanted microelectrodes, a paralyzed 25-year-old man constructed shapes on a computer screen by activating neurons in his
- A) somatosensory cortex.
  - B) occipital lobes.
  - C) motor cortex.
  - D) hippocampus.

156. The somatosensory cortex is most critical for our sense of
- A) sight.
  - B) hearing.
  - C) touch.
  - D) smell.
157. Which part of your brain is essential for receiving information that you are moving your legs?
- A) corpus callosum
  - B) hippocampus
  - C) somatosensory cortex
  - D) temporal lobes
158. Which of the following body parts is associated with the greatest amount of brain tissue in the somatosensory cortex?
- A) toes
  - B) knees
  - C) neck
  - D) lips
159. Which lobes of the brain receive the input that enables you to feel someone scratching your back?
- A) parietal
  - B) temporal
  - C) occipital
  - D) frontal
160. The surgical removal of a large tumor from Dane's occipital lobe resulted in extensive loss of brain tissue. Dane is most likely to suffer some loss of
- A) muscular coordination.
  - B) visual perception.
  - C) speaking ability.
  - D) pain sensations.
161. Auditory stimulation is processed in the \_\_\_\_\_ lobes.
- A) occipital
  - B) temporal
  - C) frontal
  - D) parietal

162. The auditory hallucinations experienced by people with schizophrenia are most closely linked with the activation of areas in their
- A) motor cortex.
  - B) parietal lobes.
  - C) temporal lobes.
  - D) somatosensory cortex.
163. The association areas are located in the
- A) brainstem.
  - B) thalamus.
  - C) hippocampus.
  - D) cerebral cortex.
164. The most extensive regions of the brain are involved in higher mental functions such as memory and reasoning. These regions are called the
- A) somatosensory cortex.
  - B) hippocampus.
  - C) corpus callosum.
  - D) association areas.
165. After he suffered a stroke, Mr. Santore's physical coordination skills and responsiveness to sensory stimulation quickly returned to normal. Unfortunately, however, he could no longer figure out how to find his way around his neighborhood. It is most likely that Mr. Santore suffered damage to his
- A) amygdala.
  - B) somatosensory cortex.
  - C) motor cortex.
  - D) association areas.
166. Knowing that you will be punished for breaking Mom's favorite dish is a function of the
- A) somatosensory cortex.
  - B) corpus callosum.
  - C) association areas.
  - D) motor cortex.

167. The classic case of railroad worker Phineas Gage best illustrated that frontal lobe damage can
- A) trigger muscle spasms.
  - B) enhance moral reasoning skills.
  - C) alter one's personality.
  - D) facilitate neurogenesis.
168. Cecil Layton displayed increased impulsivity and lowered intelligence test performance following damage to his left \_\_\_\_\_ lobe in a sawmill accident.
- A) parietal
  - B) occipital
  - C) frontal
  - D) temporal
169. Those with damage to the \_\_\_\_\_ lobes are often untroubled by the ethical dilemma of choosing to push one person in front of a runaway trolley in order to save five others.
- A) temporal
  - B) occipital
  - C) parietal
  - D) frontal
170. Mathematical and spatial reasoning capacities are especially likely to be linked with association areas in the
- A) parietal lobes.
  - B) temporal lobes.
  - C) occipital lobes.
  - D) frontal lobes.
171. The inability to recognize familiar faces even though one can clearly see and describe features of the faces is associated with damage to the right \_\_\_\_\_ lobe.
- A) frontal
  - B) parietal
  - C) occipital
  - D) temporal

172. The capacity of a brain area to develop new neural pathways as it adjusts to damage is known as
- A) lateralization.
  - B) neurogenesis.
  - C) the split brain.
  - D) plasticity.
173. Although James lost some manual dexterity following brain damage from a stroke, the development of new neural pathways enabled him to regain most of his lost agility. This best illustrates the value of
- A) neurogenesis.
  - B) lateralization.
  - C) plasticity.
  - D) brain fissures.
174. The benefits of brain plasticity are most clearly demonstrated in
- A) children who have had a cerebral hemisphere surgically removed.
  - B) people paralyzed by a severed spinal cord.
  - C) individuals with Alzheimer's disease.
  - D) split-brain patients.
175. Areas of the visual cortex that normally help people to see may aid blind people to read Braille by processing tactile sensations from the fingers. This best illustrates the value of
- A) plasticity.
  - B) brain fissures.
  - C) lateralization.
  - D) neurogenesis.
176. If a slow-growing left-hemisphere tumor disrupts language, the right hemisphere may take over this language functioning. This best illustrates the value of
- A) the split brain.
  - B) neurogenesis.
  - C) brain fissures.
  - D) plasticity.

177. Among deaf people, a temporal lobe area normally dedicated to hearing may begin to process visual signals. This best illustrates the impact of
- A) plasticity.
  - B) neurogenesis.
  - C) lateralization.
  - D) brain fissures.
178. After Clark's hand had been amputated, he gradually began to feel sensations on his nonexistent fingers when his arm was stroked. This best illustrates the consequences of
- A) neurogenesis.
  - B) plasticity.
  - C) lateralization.
  - D) the split brain.
179. The process of forming new neurons within the brain is called
- A) lateralization.
  - B) hemispherectomy.
  - C) neurogenesis.
  - D) plasticity.
180. Physical exercise, sleep, and exposure to nonstressful but stimulating environments are most likely to promote
- A) lateralization.
  - B) neurogenesis.
  - C) hemispherectomy.
  - D) new brain fissures.
181. There is some hope that \_\_\_\_\_ discovered in the human embryo can someday be used to generate replacements for damaged neurons in the brain.
- A) gene fragments
  - B) somatosensory neurons
  - C) optic nerves
  - D) stem cells
182. A tendency for the brain's left and right hemispheres to serve different functions is called
- A) hemispherectomy.
  - B) lateralization.
  - C) neurogenesis.
  - D) plasticity.

183. The control of speech production by the left rather than the right hemisphere of the brain best illustrates
- A) neurogenesis.
  - B) lateralization.
  - C) brain fissures.
  - D) plasticity.
184. Damage to the left cerebral hemisphere is most likely to reduce people's ability to
- A) solve arithmetic problems.
  - B) copy drawings.
  - C) recognize faces.
  - D) recognize familiar melodies.
185. The corpus callosum is a wide band of axon fibers that
- A) enables the left hemisphere to control the right side of the body.
  - B) transmits information between the cerebral hemispheres.
  - C) sends information from the left half of your field of vision to your right cerebral hemisphere.
  - D) transfers neural impulses from the somatosensory cortex to the motor cortex.
186. Those whose corpus callosum is surgically severed are said to be patients with
- A) brain plasticity.
  - B) brain fissures.
  - C) neurogenesis.
  - D) split brains.
187. Neurosurgeons have severed the corpus callosum in human patients in order to reduce
- A) lateralization.
  - B) epileptic seizures.
  - C) neural plasticity.
  - D) neurogenesis.
188. Sensory information is transmitted from the \_\_\_\_\_ visual field of \_\_\_\_\_ to the left cerebral hemisphere.
- A) left; only the left eye
  - B) right; only the right eye
  - C) left; only the right eye
  - D) right; both the right and left eyes



189. A picture of a dog is briefly flashed in the left visual field of a split-brain patient. At the same time a picture of a boy is flashed in the right visual field. In identifying what she saw, the patient would be most likely to
- A) use her left hand to point to a picture of a dog.
  - B) verbally report that she saw a dog.
  - C) use her left hand to point to a picture of a boy.
  - D) verbally report that she saw a boy.
190. The ability to simultaneously copy different figures with the right and left hand is most characteristic of those whose \_\_\_\_\_ has been cut.
- A) somatosensory cortex
  - B) hippocampus
  - C) corpus callosum
  - D) motor cortex
191. When a person speaks, brain waves and bloodflow are especially likely to reveal increased activity in the
- A) cerebellum.
  - B) left hemisphere.
  - C) hippocampus.
  - D) right hemisphere.
192. Deaf people who use sign language typically
- A) demonstrate greater mathematical competence than hearing persons.
  - B) process language in their left cerebral hemisphere.
  - C) have better communication skills than hearing persons.
  - D) have a smaller corpus callosum than hearing persons.
193. People who suffer partial paralysis as a result of damage to the \_\_\_\_\_ will sometimes obstinately claim they can move a paralyzed limb.
- A) right cerebral hemisphere
  - B) corpus callosum
  - C) left cerebral hemisphere
  - D) occipital lobes

194. Every nongenetic influence, from prenatal nutrition to the people and things around us, is an aspect of our
- A) natural selection.
  - B) genome.
  - C) environment.
  - D) heredity.
195. The impact of our cultural backgrounds on the development of our personal values best illustrates the influence of
- A) our shared human genome.
  - B) epigenetic marks.
  - C) natural selection.
  - D) the environment.
196. Characteristics that are genetically transferred from parents to their offspring are said to be a product of
- A) epigenetics.
  - B) heredity.
  - C) shared family environments.
  - D) behavior genetics.
197. The study of the relative power and limits of genetic and environmental influences on behavior is known as
- A) genomics.
  - B) epigenetics.
  - C) behavior genetics.
  - D) evolutionary psychology.
198. A behavior geneticist would be most interested in studying hereditary influences on
- A) skin color.
  - B) sexual anatomy.
  - C) physical attractiveness.
  - D) personality traits.
199. A human sperm cell contains
- A) 23 chromosomes.
  - B) 23 genes.
  - C) 46 chromosomes.
  - D) 46 genes.

200. Chromosomes are threadlike structures made of
- A) serotonin molecules.
  - B) epigenetic molecules.
  - C) DNA molecules.
  - D) dizygotic molecules.
201. Chromosomes are contained within
- A) brain cells.
  - B) sperm cells.
  - C) blood cells.
  - D) all of these types of cells.
202. DNA is a complex
- A) sex hormone.
  - B) genome.
  - C) molecule.
  - D) epigenetic mark.
203. The biochemical units of heredity that make up the chromosomes are called
- A) genes.
  - B) genomes.
  - C) epigenetic molecules.
  - D) neurotransmitters.
204. A segment of DNA that provides the code for creating protein molecules is called a(n)
- A) organic methyl molecule.
  - B) epigenetic mark.
  - C) chromosome.
  - D) gene.
205. Depending on environmental conditions, specific genes can be either
- A) monozygotic or dizygotic.
  - B) active or inactive.
  - C) identical or fraternal.
  - D) structured or unstructured.

206. The biochemical code for eye color is transmitted from parents to offspring by
- A) neurotransmitters.
  - B) natural selection.
  - C) epigenetic molecules.
  - D) genes.
207. The genome refers to an organism's complete set of
- A) epigenetic marks.
  - B) genetic material.
  - C) protein molecules.
  - D) zygotic cells.
208. Twin and adoption studies have been most helpful for teasing apart the influences of
- A) genetic mutations and epigenetic marks.
  - B) extraversion and neuroticism.
  - C) genes and protein molecules.
  - D) heredity and environment.
209. Identical twins originate from the fertilization of
- A) a single egg cell by a single sperm cell.
  - B) two egg cells by a single sperm cell.
  - C) a single egg cell by two sperm cells.
  - D) two egg cells by two sperm cells.
210. Twins who develop from separate fertilized eggs are called \_\_\_\_\_ twins.
- A) epigenetic
  - B) monozygotic
  - C) identical
  - D) fraternal
211. Unlike identical twins, fraternal twins are described as
- A) epigenetic.
  - B) dizygotic.
  - C) extraverted.
  - D) monozygotic.

212. Twin studies suggest that the risk of having autism spectrum disorder is influenced by
- A) prenatal genetic testing.
  - B) free-floating stress hormones.
  - C) heredity.
  - D) organic methyl molecules.
213. Compared with fraternal twins, identical twins report \_\_\_\_\_ similarity in neuroticism, and \_\_\_\_\_ similarity in extraversion.
- A) more; less
  - B) less; less
  - C) more; more
  - D) less; more
214. Juan and Alonzo are fraternal twin brothers, whereas Jake and Alex are identical twin brothers. The similarities between Jake and Alex with respect to \_\_\_\_\_ are likely to be greater than the similarities between Juan and Alonzo.
- A) extraversion
  - B) neuroticism
  - C) physical appearance
  - D) all of these characteristics
215. Compared with fraternal twins, identical twins are \_\_\_\_\_ similar in physical appearance. Compared with unrelated look-alike pairs of individuals, identical twins report \_\_\_\_\_ similar personalities.
- A) no more; more
  - B) more; no more
  - C) no more; no more
  - D) more; more
216. Environmental influences on personality traits are most clearly highlighted by comparing
- A) identical twins raised together with fraternal twins raised apart.
  - B) identical twins raised together with fraternal twins raised together.
  - C) identical twins raised apart with fraternal twins raised together.
  - D) identical twins raised together with identical twins raised apart.

217. Identical twins have been shown to have some amazing psychological similarities. But we should be cautious about attributing these similarities to shared genes because
- A) the twins may have been raised in completely different environments.
  - B) genetic factors influence physical, not psychological, characteristics.
  - C) any two strangers are likely to share many coincidental similarities.
  - D) many fraternal twins have been shown to be psychologically different from each other.
218. Differences between men and women in personality traits that are highly heritable cannot necessarily be attributed to genetic differences between the two groups because
- A) physical growth proceeds at different rates for males than for females.
  - B) natural selection contributes to humans' common genetic endowment.
  - C) heritable traits can be influenced by environmental factors.
  - D) genes influence the production of sex hormones.
219. The personalities of adopted children
- A) are very similar to the personalities of the other children in their adoptive families.
  - B) are very similar to the personalities of their biologically related siblings.
  - C) are not very similar to the personalities of their adoptive parents.
  - D) are more similar to the personalities of their caregiving adoptive parents than to the personalities of their biological parents.
220. Jason and Alex are biologically unrelated adolescents who were adopted as infants and raised together. For which of the following are Jason and Alex least likely to resemble each other any more than they resemble a genetically unrelated adolescent from another home in their neighborhood?
- A) extraversion
  - B) religious beliefs
  - C) table manners
  - D) political attitudes
221. Person-to-person differences in religious involvement are \_\_\_\_\_ attributable to their differing genes, and identical twins have \_\_\_\_\_ religious beliefs if raised together rather than apart.
- A) not; no more similar
  - B) partly; no more similar
  - C) not; more similar
  - D) partly; more similar

222. The home environment most clearly has a greater influence on children's \_\_\_\_\_ than on their \_\_\_\_\_.
- A) political attitudes; economic values
  - B) extraversion; table manners
  - C) religious beliefs; personality traits
  - D) neuroticism; religious beliefs
223. Children in adoptive homes are \_\_\_\_\_ likely than average to experience parental neglect and abuse. They have typically grown up to be \_\_\_\_\_ altruistic than average.
- A) more; less
  - B) more; more
  - C) less; less
  - D) less; more
224. When the effect of one factor depends on the presence of another factor, outcomes are said to reflect
- A) an epigenetic mark.
  - B) an interaction.
  - C) natural selection
  - D) adaptive flexibility
225. While you develop callused feet when you go barefoot for a summer, your neighbor remains a tenderfoot by protecting her feet with shoes. The differences in skin toughness between you and your neighbor are best attributed to
- A) the molecular structure of genes.
  - B) person-to-person genetic variations.
  - C) the impact of epigenetic marks on gene expression.
  - D) the interaction of genetic and environmental influences.
226. An African butterfly that is green in the summer turns brown in the fall thanks to a temperature-controlled genetic switch. This best illustrates that genes are
- A) dizygotic.
  - B) self-regulating.
  - C) epigenetic marks.
  - D) protein molecules.

227. The unique genetically influenced traits of children often evoke predictable responses from their caregivers. This best illustrates the \_\_\_\_\_ of nature and nurture.
- A) heritability
  - B) interaction
  - C) epigenetics
  - D) independence
228. People have always responded so positively to Alyssa's good looks that she has developed a socially confident and outgoing personality. This best illustrates the interaction of
- A) genes and chromosomes.
  - B) evolution and natural selection.
  - C) nature and nurture.
  - D) behavior genetics and evolutionary psychology.
229. The study of influences on gene expression that occur without a DNA change is called
- A) genomics.
  - B) epigenetics.
  - C) behavior genetics.
  - D) evolutionary psychology.
230. An organic methyl molecule attached to part of a DNA strand has been identified as a(n)
- A) genome.
  - B) double helix.
  - C) epigenetic mark.
  - D) self-regulating gene.
231. The molecules that can block genetic expression are called
- A) genomes.
  - B) chromosomes.
  - C) stress hormones.
  - D) epigenetic marks.
232. Infant rats deprived of their mothers' normal licking had more \_\_\_\_\_ that block access to the "on" switch for developing the brain's stress hormone receptors.
- A) self-regulating genes
  - B) neurotransmitters
  - C) genomes
  - D) epigenetic molecules



233. If chronic child abuse alters a victim's gene expression in such a fashion as to trigger depression, this would be said to illustrate
- A) natural selection.
  - B) an epigenetic effect.
  - C) high serotonin levels.
  - D) a genetic mutation.
234. Evolutionary psychology studies the evolution of behavior and the mind using principles of
- A) behavior genetics.
  - B) epigenetics.
  - C) genomics.
  - D) natural selection.
235. The principle of natural selection was first advanced by
- A) Dmitry Belyaev.
  - B) Sigmund Freud.
  - C) Charles Darwin.
  - D) Thomas Bouchard.
236. Inherited trait variations that contribute to reproduction and survival will most likely to be passed on to succeeding generations. This best illustrates
- A) adaptive flexibility.
  - B) behavior genetics.
  - C) natural selection.
  - D) self-regulation.
237. Several organisms from a strain of bacteria infecting hospital patients inherited a mutation that increased their resistance to the hospital's antibacterial drugs. Over time, the drug-resistant bacteria increasingly outnumbered the bacteria without the mutation. This best illustrates
- A) domestication.
  - B) an epigenetic mark.
  - C) natural selection.
  - D) behavior genetics.

238. Evolutionary psychology is most likely to emphasize that human adaptiveness to a variety of different environments has contributed to
- A) the second Darwinian revolution.
  - B) genetic mutations.
  - C) epigenetic marks.
  - D) reproductive success.
239. Our adaptive flexibility in responding to different environments contributes to our fitness, which refers to
- A) random errors in the replication of genes.
  - B) epigenetic marks that regulate gene expression.
  - C) our ability to survive and reproduce.
  - D) the interaction of our genes with the environment.
240. A random error in gene replication is known as a(n)
- A) epigenetic mark.
  - B) genome.
  - C) mutation.
  - D) selected trait.
241. A random alteration in the DNA sequence within one of his genes has caused James to suffer a rare form of nearsightedness. His difficulty best illustrates the impact of
- A) an epigenetic mark.
  - B) a mutation.
  - C) free-floating stress hormones.
  - D) an organic methyl molecule.
242. Our shared human genome is the complete
- A) collection of epigenetic marks that regulate gene expression.
  - B) range of biological and behavioral traits that contribute to reproductive success.
  - C) genetic profile common to all humanity.
  - D) set of interactions between our shared genes and our shared environments.
243. If a genetically based aversion to the bitter taste of rhubarb leaves contributes to survival, that trait will likely be passed on from parents to offspring. This best illustrates
- A) behavior genetics.
  - B) domestication.
  - C) natural selection.
  - D) an epigenetic mark.

244. According to evolutionary psychologists, behaviors that promote reproductive success are likely to be
- A) socially prohibited.
  - B) genetically predisposed.
  - C) ecologically disruptive.
  - D) disease-producing.
245. According to evolutionary psychologists, our predisposition to overconsume fatty junk foods most clearly illustrates that we are biologically prepared to behave in ways that promoted the \_\_\_\_\_ of our ancestors.
- A) hunting skills
  - B) epigenetic marks
  - C) reproductive success
  - D) neuroticism
246. Evolutionary psychologists would be most likely to predict that
- A) more people are biologically predisposed to fear guns than to fear snakes.
  - B) children are more likely to be valued by their biological fathers than by their stepfathers.
  - C) people are the most romantically attracted to those who are the most genetically dissimilar to themselves.
  - D) genetic predispositions have little effect on our social relationships.

## **Answer Key**

1. D
2. B
3. A
4. C
5. C
6. A
7. D
8. C
9. B
10. C
11. C
12. B
13. B
14. D
15. B
16. C
17. B
18. C
19. D
20. D
21. B
22. C
23. A
24. B
25. A
26. A
27. B
28. C
29. B
30. C
31. D
32. C
33. C
34. A
35. D
36. B
37. C
38. D
39. B
40. C
41. D
42. D
43. B
44. D

45. B
46. A
47. D
48. B
49. C
50. A
51. B
52. C
53. D
54. D
55. D
56. C
57. D
58. B
59. A
60. C
61. A
62. D
63. D
64. C
65. A
66. C
67. D
68. C
69. B
70. C
71. D
72. A
73. B
74. B
75. D
76. A
77. A
78. D
79. D
80. B
81. B
82. A
83. A
84. C
85. C
86. B
87. C
88. C
89. C
90. D

- 91. B
- 92. D
- 93. B
- 94. D
- 95. C
- 96. B
- 97. B
- 98. B
- 99. C
- 100. A
- 101. C
- 102. D
- 103. B
- 104. C
- 105. B
- 106. C
- 107. B
- 108. C
- 109. B
- 110. A
- 111. B
- 112. B
- 113. A
- 114. C
- 115. C
- 116. B
- 117. D
- 118. A
- 119. D
- 120. B
- 121. D
- 122. A
- 123. A
- 124. D
- 125. B
- 126. B
- 127. C
- 128. D
- 129. B
- 130. D
- 131. C
- 132. D
- 133. D
- 134. D
- 135. D
- 136. C

- 137. A
- 138. D
- 139. D
- 140. D
- 141. D
- 142. C
- 143. B
- 144. B
- 145. D
- 146. D
- 147. B
- 148. C
- 149. C
- 150. A
- 151. C
- 152. C
- 153. B
- 154. B
- 155. C
- 156. C
- 157. C
- 158. D
- 159. A
- 160. B
- 161. B
- 162. C
- 163. D
- 164. D
- 165. D
- 166. C
- 167. C
- 168. C
- 169. D
- 170. A
- 171. D
- 172. D
- 173. C
- 174. A
- 175. A
- 176. D
- 177. A
- 178. B
- 179. C
- 180. B
- 181. D
- 182. B

- 183. B
- 184. A
- 185. B
- 186. D
- 187. B
- 188. D
- 189. D
- 190. C
- 191. B
- 192. B
- 193. A
- 194. C
- 195. D
- 196. B
- 197. C
- 198. D
- 199. A
- 200. C
- 201. D
- 202. C
- 203. A
- 204. D
- 205. B
- 206. D
- 207. B
- 208. D
- 209. A
- 210. D
- 211. B
- 212. C
- 213. C
- 214. D
- 215. D
- 216. D
- 217. C
- 218. C
- 219. C
- 220. A
- 221. D
- 222. C
- 223. D
- 224. B
- 225. D
- 226. B
- 227. B
- 228. C



- 229. B
- 230. C
- 231. D
- 232. D
- 233. B
- 234. D
- 235. C
- 236. C
- 237. C
- 238. D
- 239. C
- 240. C
- 241. B
- 242. C
- 243. C
- 244. B
- 245. C
- 246. B

1. A neuron is best described as a(n)
  - A) ion.
  - B) cell.
  - C) sheath.
  - D) molecule.
  
2. Which of the following is most clearly characterized by a temporary inflow of positively charged sodium ions through an axon membrane?
  - A) reuptake
  - B) an action potential
  - C) a refractory period
  - D) the resting potential
  
3. Drugs that block the reuptake of serotonin will thereby increase the concentration of serotonin molecules in the
  - A) axon terminals.
  - B) synaptic gaps.
  - C) glial cells.
  - D) endocrine glands.
  
4. Natural, opiate-like neurotransmitters linked to pain control are called
  - A) ACh agonists.
  - B) dendrites.
  - C) morphine antagonists.
  - D) endorphins.
  
5. Botox injections smooth facial wrinkles because botulin is a(n)
  - A) ACh antagonist.
  - B) dopamine antagonist.
  - C) ACh agonist.
  - D) dopamine agonist.
  
6. The vast majority of neurons in the body's information system are
  - A) glial cells.
  - B) interneurons.
  - C) motor neurons.
  - D) sensory neurons.

7. As needed, the sympathetic nervous system \_\_\_\_\_ blood sugar levels and \_\_\_\_\_ the pupils of the eyes.
- A) lowers; dilates
  - B) raises; contracts
  - C) lowers; contracts
  - D) raises; dilates
8. While listening to operatic solos, musicians process the lyrics and the tunes in separate brain areas. This most clearly illustrates the functioning of different
- A) neurotransmitters.
  - B) parathyroids.
  - C) neural networks.
  - D) reflex systems.
9. The endocrine system consists of
- A) myelin sheaths.
  - B) neural networks.
  - C) interneurons.
  - D) glands.
10. Which hormone enables contractions associated with birthing and milk flow during nursing?
- A) insulin
  - B) cortisol
  - C) oxytocin
  - D) epinephrine
11. Which of the following would be particularly useful for detecting the brain areas that are most active as a person performs mathematical calculations?
- A) a brain lesion
  - B) enlarged ventricles
  - C) a PET scan
  - D) an MRI scan
12. The brain's oldest region is the
- A) hippocampus.
  - B) amygdala.
  - C) brainstem.
  - D) hypothalamus.

13. Which brain structure relays information from the eyes to the visual cortex?
- A) thalamus
  - B) amygdala
  - C) medulla
  - D) cerebellum
14. After suffering an accidental brain injury, Kira has difficulty walking in a smooth and coordinated manner. She has probably suffered damage to her
- A) amygdala.
  - B) hypothalamus.
  - C) cerebellum.
  - D) hippocampus.
15. The limbic system structure that regulates hunger is called the
- A) thalamus.
  - B) amygdala.
  - C) hippocampus.
  - D) hypothalamus.
16. The limbic system's hippocampus
- A) coordinates body movement and balance.
  - B) regulates hunger and thirst.
  - C) plays a central role in fear and rage.
  - D) helps process explicit memories for storage.
17. Which portion of the cerebral cortex is most directly involved in making plans and formulating moral judgments?
- A) occipital lobes
  - B) frontal lobes
  - C) temporal lobes
  - D) parietal lobes
18. The brain devotes more tissue within the \_\_\_\_\_ for body areas requiring the most precise movement control such as the fingers.
- A) hippocampus
  - B) corpus callosum
  - C) occipital lobes
  - D) motor cortex

19. The regions of the parietal lobes that are involved in mathematical and spatial reasoning are known as
- A) the hippocampus.
  - B) the corpus callosum.
  - C) the somatosensory cortex.
  - D) association areas.
20. If you lose a foot, the somatosensory cortex that received its input will begin to pick up signals from the formerly adjoined leg. This best illustrates the value of
- A) neurogenesis.
  - B) lateralization.
  - C) plasticity.
  - D) hemispherectomy.
21. The right hemisphere of Julie's brain is better than her left hemisphere at recognizing facial expressions of emotion. This best illustrates
- A) neurogenesis.
  - B) plasticity.
  - C) lateralization.
  - D) brain fissures.
22. Compared with fraternal twins, identical twins are
- A) less similar in their risk of developing autism spectrum disorder and less similar in risk of being emotionally unstable.
  - B) more similar in their risk of developing autism spectrum disorder and more similar in risk of being emotionally unstable.
  - C) equally similar in their risk of developing autism spectrum disorder and more similar in risk of being emotionally unstable.
  - D) more similar in their risk of developing autism spectrum disorder and equally similar in risk of being emotionally unstable.
23. Adoptive parents are LEAST likely to influence the \_\_\_\_\_ of their adopted children.
- A) personality traits
  - B) religious beliefs
  - C) political attitudes
  - D) moral values

24. In emphasizing that heredity's effects on behavior depend on a person's home environment, psychologists are most clearly highlighting the importance of
- A) a double helix.
  - B) natural selection.
  - C) dizygotic development.
  - D) nature–nurture interactions.
25. The study of molecular mechanisms by which environments can trigger or block gene expression is called
- A) behavior genetics.
  - B) evolutionary psychology.
  - C) epigenetics.
  - D) genomics.
26. The prevalence of genetically predisposed traits that have a reproductive advantage is best explained in terms of
- A) epigenetic marks.
  - B) natural selection.
  - C) the human genome.
  - D) behavior genetics.
27. Dmitry Belyaev and Lyudmila Trut successfully domesticated wild foxes by means of
- A) gene splicing.
  - B) selective mating.
  - C) food deprivation.
  - D) hormone injections.
28. Which of the following is a major source of genetic diversity?
- A) mutations
  - B) epigenetic marks
  - C) adaptive flexibility
  - D) free-floating stress hormones
29. An evolutionary psychologist would suggest that people are genetically predisposed to
- A) fear dangerous animals.
  - B) love their own children.
  - C) seek healthy-looking mates.
  - D) do all of these things.

## **Answer Key**

1. B
2. B
3. B
4. D
5. A
6. B
7. D
8. C
9. D
10. C
11. C
12. C
13. A
14. C
15. D
16. D
17. B
18. D
19. D
20. C
21. C
22. B
23. A
24. D
25. C
26. B
27. B
28. A
29. D

1. An axon transmits messages \_\_\_\_\_ the cell body and a dendrite transmits messages \_\_\_\_\_ the cell body.
  - A) away from; toward
  - B) away from; away from
  - C) toward; away from
  - D) toward; toward
  
2. To excite or inhibit an action potential in a receiving neuron, a neurotransmitter must cross the
  - A) axon.
  - B) synaptic gap.
  - C) myelin sheath.
  - D) endocrine glands.
  
3. The release of \_\_\_\_\_ to muscle cell receptors triggers muscle contractions.
  - A) ACh
  - B) serotonin
  - C) dopamine
  - D) adrenaline
  
4. Depressed mood states are linked to \_\_\_\_\_ levels of serotonin and \_\_\_\_\_ levels of norepinephrine.
  - A) low; low
  - B) high; high
  - C) low; high
  - D) high; low
  
5. A drug molecule that increases the release of a neurotransmitter into the synaptic gap is a(n)
  - A) glutamate.
  - B) steroid.
  - C) agonist.
  - D) opiate.
  
6. The peripheral nervous system consists of
  - A) interneurons.
  - B) the spinal cord.
  - C) endocrine glands.
  - D) sensory and motor neurons.



7. The autonomic nervous system most directly controls
- A) speech production.
  - B) thinking and memory.
  - C) movement of the arms and legs.
  - D) bladder contractions.
8. Although Ron has no genital sensations, he is capable of an erection if his genitals are stimulated. Ron's experience is most indicative of a(n)
- A) morphine antagonist.
  - B) severed spinal cord.
  - C) synaptic gap.
  - D) all-or-none response.
9. The release of epinephrine and norepinephrine \_\_\_\_\_ blood pressure and \_\_\_\_\_ blood sugar levels.
- A) raises; raises
  - B) lowers; lowers
  - C) raises; lowers
  - D) lowers; raises
10. To monitor the electrical activity in the brain that is triggered by hearing one's own name, researchers would make use of a(n)
- A) MRI.
  - B) PET scan.
  - C) EEG.
  - D) brain lesion.
11. Your life would be most immediately threatened if you suffered destruction of the
- A) amygdala.
  - B) hippocampus.
  - C) cerebellum.
  - D) medulla.
12. Stimulation of the reticular formation will cause a
- A) sleeping cat to awaken.
  - B) hungry cat to stop eating.
  - C) violent cat to become passive.
  - D) thirsty cat to drink.

13. Which neural center in the limbic system plays an important role in emotions such as fear and rage?
- A) amygdala
  - B) thalamus
  - C) nucleus accumbens
  - D) hypothalamus
14. Research has suggested that a reward deficiency syndrome may contribute to
- A) insomnia.
  - B) substance use disorders.
  - C) schizophrenia.
  - D) Parkinson's disease.
15. Which lobe of the cerebral cortex is most directly involved in controlling the facial muscle movements necessary for speaking?
- A) occipital
  - B) frontal
  - C) temporal
  - D) parietal
16. The visual cortex is located in the
- A) occipital lobes.
  - B) parietal lobes.
  - C) temporal lobes.
  - D) association areas.
17. Following massive damage to his frontal lobes, Phineas Gage was most strikingly debilitated by
- A) muscle spasms.
  - B) memory loss.
  - C) auditory hallucinations.
  - D) irritability.
18. Brain scans indicate that well-practiced pianists have a larger-than-usual auditory cortex area that encodes piano sounds. This best illustrates the impact of
- A) neurogenesis.
  - B) lateralization.
  - C) brain fissures.
  - D) plasticity.

19. Research with split-brain patients suggests that the \_\_\_\_\_ typically constructs the theories people offer to explain their own behaviors.
- A) corpus callosum
  - B) left cerebral hemisphere
  - C) somatosensory cortex
  - D) right cerebral hemisphere
20. Chromosomes are composed of
- A) epigenetic molecules.
  - B) genomes.
  - C) neurotransmitters.
  - D) deoxyribonucleic acid.
21. Two individuals are most likely to differ in personality if they are
- A) fraternal twins who were raised together.
  - B) identical twins who were raised apart.
  - C) fraternal twins who were raised apart.
  - D) identical twins who were raised together.
22. Adopted children are especially likely to have similar \_\_\_\_\_ if raised in the same home.
- A) mutations
  - B) genomes
  - C) personality traits
  - D) attitudes
23. Researchers studying mice have found that in utero exposure to certain chemicals can cause genetically identical twins to have different colored fur. This is best explained by the fact that genetically linked traits can be modified by
- A) serotonin molecules.
  - B) epigenetic marks.
  - C) natural selection.
  - D) behavior genetics.
24. Evolutionary psychology most clearly suggests that human behavioral and biological similarities arise from our shared
- A) neurotransmitter levels.
  - B) genome.
  - C) epigenetic molecules.
  - D) evocative interactions.

25. Evolutionary psychologists would be most likely to attribute the human tendency to fear spiders and snakes to
- A) epigenetic marks.
  - B) domestication.
  - C) free-floating stress hormones.
  - D) genetic predispositions.

## **Answer Key**

1. A
2. B
3. A
4. A
5. C
6. D
7. D
8. B
9. A
10. C
11. D
12. A
13. A
14. B
15. B
16. A
17. D
18. D
19. B
20. D
21. C
22. D
23. B
24. B
25. D

1. Biological psychology is best described as the scientific study of the links between
  - A) physiological activity and psychological events.
  - B) genes and neurotransmitters.
  - C) sensory and motor neurons.
  - D) the CNS and the PNS.
  
2. Professor Seif conducts research on the relationship between autonomic nervous system functioning and sexual motivation. Her research focus best represents the specialty area known as
  - A) biological psychology.
  - B) psychoanalysis.
  - C) cognitive psychology.
  - D) endocrinology
  
3. The cells that serve as the basic building blocks of the body's information system are called
  - A) neurons.
  - B) neurotransmitters.
  - C) agonists.
  - D) genes.
  
4. The branching extensions of nerve cells that receive incoming signals from sensory receptors or from other neurons are called the
  - A) axons.
  - B) synapses.
  - C) dendrites.
  - D) neurotransmitters.
  
5. The part of a neuron that transmits neural messages to other neurons or to muscles or glands is called the
  - A) dendrite.
  - B) synapse.
  - C) axon.
  - D) cell body.
  
6. Signal reception is to \_\_\_\_\_ as signal transmission is to \_\_\_\_\_.
  - A) interneuron; neural network
  - B) dendrite; axon
  - C) neurotransmitter; hormone
  - D) sympathetic nervous system; parasympathetic nervous system

7. Which part of a neuron is often encased by a fatty myelin sheath?
- A) axon
  - B) synaptic gap
  - C) cell body
  - D) dendrite
8. The myelin sheath helps to increase the \_\_\_\_\_ of neural impulses.
- A) frequency
  - B) intensity
  - C) threshold
  - D) speed
9. The slowdown of neural communication in multiple sclerosis results from the degeneration of the
- A) amygdala.
  - B) endorphins.
  - C) myelin sheath.
  - D) pituitary gland.
10. Ruth has experienced progressively increasing difficulty moving, speaking, and swallowing due to the deterioration of the myelin sheaths within her nervous system. Ruth most clearly suffers from
- A) epileptic seizures.
  - B) Alzheimer's disease.
  - C) multiple sclerosis.
  - D) depression.
11. Nerve cells receive life-supporting nutrients and insulating myelin from
- A) glial cells.
  - B) neurotransmitters.
  - C) endorphins.
  - D) hormones.
12. A postmortem analysis of Einstein's brain revealed a much greater concentration of \_\_\_\_\_ than found in the average adult brain.
- A) glutamate
  - B) opiate receptors
  - C) glial cells
  - D) ACh-producing neurons

13. An action potential refers to a
- A) neural impulse.
  - B) synaptic gap.
  - C) neurotransmitter.
  - D) reflex.
14. An electrically charged atom is called a(n)
- A) antagonist.
  - B) ion.
  - C) action potential.
  - D) radioactive tracer.
15. A car controlled by a computerized navigational guidance system is likely to respond more rapidly to sudden obstructions in its path than a car controlled by a human driver. This is primarily due to the fact that
- A) a neuron's reaction is an all-or-none response.
  - B) an axon branches into junctions with many other neurons.
  - C) the fatty tissue layer that insulates axons slows the transmission of neural impulses.
  - D) the speed of neural impulses is much slower than the speed of electricity through a wire.
16. The fluid outside a resting axon's membrane has mostly positively charged \_\_\_\_\_ ions.
- A) serotonin
  - B) sodium
  - C) dopamine
  - D) protein
17. The resting potential of a neuron refers to
- A) a brief electrical charge that travels down the axon.
  - B) the storage of neurotransmitter molecules within synaptic vesicles.
  - C) the electrical polarization of the inside and outside of the neural membrane.
  - D) a capacity to reabsorb neurotransmitter molecules released into the synaptic gap.



18. A resting axon's fluid interior contains both large, \_\_\_\_\_ charged protein ions and smaller, \_\_\_\_\_ charged potassium ions.
- A) positively; positively
  - B) negatively; negatively
  - C) positively; negatively
  - D) negatively; positively
19. The selective permeability of a neural membrane enables the development of a
- A) myelin sheath.
  - B) resting potential.
  - C) neural network.
  - D) synaptic gap.
20. The depolarization of an axon is most likely to occur when
- A) positively charged sodium ions rush into the axon.
  - B) negatively charged potassium ions rush into the axon.
  - C) positively charged sodium ions rush out of the axon.
  - D) negatively charged potassium ions rush out of the axon.
21. The temporary inflow of positive ions through an axon membrane is the
- A) resting potential.
  - B) refractory period.
  - C) action potential.
  - D) threshold.
22. An action potential registers an electrical charge of
- A) -70 millivolts.
  - B) -55 millivolts.
  - C) +40 millivolts.
  - D) +70 millivolts.
23. A neural impulse is generated only when excitatory minus inhibitory signals exceed a certain
- A) action potential.
  - B) synaptic gap.
  - C) level of reuptake.
  - D) threshold.

24. In the process of beginning an action potential, the threshold refers to
- A) neuron extensions that conduct messages toward the cell body.
  - B) a minimum intensity of excitatory minus inhibitory stimulation.
  - C) neuron extensions that send messages to other neurons.
  - D) the junction between a sending and receiving neuron.
25. A brief resting pause that occurs after a neuron has fired is called
- A) a synaptic gap.
  - B) an action potential.
  - C) a refractory period.
  - D) reuptake.
26. An all-or-none response pattern is characteristic of the
- A) activation of either the sympathetic or the parasympathetic system.
  - B) release of endorphins into the central nervous system.
  - C) release of hormones into the bloodstream.
  - D) initiation of neural impulses.
27. The neural impulses sent from your eyes to the visual processing centers of your brain will be no stronger or faster if you glance at a large campfire than if you glance at a burning candle. This best illustrates a characteristic of neural functioning known as
- A) reuptake.
  - B) depolarization.
  - C) selective permeability.
  - D) an all-or-none response.
28. A strong stimulus is experienced as more intense than a weak stimulus because a strong stimulus triggers
- A) a speedier action potential.
  - B) a higher-voltage action potential.
  - C) more neurons to fire, and to fire more often.
  - D) the release of epinephrine.
29. The junctions between the axon tips of sending neurons and the dendrites or cell bodies of receiving neurons are called
- A) interneurons.
  - B) synapses.
  - C) neural networks.
  - D) thresholds.

30. Synaptic gaps separate neurotransmitter receptor sites from
- A) glial cells.
  - B) axon terminals.
  - C) a myelin sheath.
  - D) dendrite fibers.
31. Neurons with the greatest number of dendrites and axon terminals would also be most likely to share the greatest number of \_\_\_\_\_ with other neurons.
- A) glial cells
  - B) endorphins
  - C) refractory periods
  - D) synapses
32. Neurotransmitters are molecules that travel across the
- A) cell body.
  - B) synaptic gap.
  - C) myelin sheath.
  - D) threshold.
33. Neurotransmitters are best described as
- A) electrically charged atoms.
  - B) sodium/potassium pumps.
  - C) chemical messengers.
  - D) action potentials.
34. Neurotransmitters bind to receptor sites and influence the flow of \_\_\_\_\_ into receiving neurons.
- A) ions
  - B) glial cells
  - C) myelin
  - D) hormones
35. Neurotransmitter receptor sites are primarily located on the
- A) dendrites.
  - B) myelin sheath.
  - C) glial cells.
  - D) axon terminals.

36. The reuptake of a neurotransmitter such as serotonin would involve the reabsorption of serotonin into a(n)
- A) axon terminal.
  - B) dendrite.
  - C) myelin sheath.
  - D) glial cell.
37. The reabsorption of excess neurotransmitter molecules by a sending neuron is called
- A) an action potential.
  - B) the all-or-none response.
  - C) a refractory period.
  - D) reuptake.
38. Transferring messages from a motor neuron to a leg muscle requires the neurotransmitter known as
- A) dopamine.
  - B) epinephrine.
  - C) acetylcholine.
  - D) insulin.
39. When the transmission of ACh is blocked, the result is
- A) depression.
  - B) aggression.
  - C) muscular paralysis.
  - D) schizophrenia.
40. After ingesting a poisonous substance, Alex experienced a temporary muscular paralysis. The poison most likely interfered with the normal functioning of the neurotransmitter
- A) serotonin.
  - B) dopamine.
  - C) acetylcholine.
  - D) norepinephrine.

41. Mr. Averro's symptoms of confusion and memory loss have led his physicians to conclude that he suffers from Alzheimer's disease. His symptoms are most likely to be linked with a deterioration of brain cells that produce the neurotransmitter
- A) dopamine.
  - B) acetylcholine.
  - C) epinephrine.
  - D) endorphins.
42. The tremors of Parkinson's disease result from the death of nerve cells that produce the neurotransmitter
- A) serotonin.
  - B) ACh.
  - C) GABA.
  - D) dopamine.
43. Janelle experiences difficulty sleeping and is seeking medical help for her lengthy episodes of depression and loss of energy. Effective prescription drugs for treating these symptoms would most likely be designed to increase the availability of the neurotransmitter
- A) GABA.
  - B) ACh.
  - C) serotonin.
  - D) dopamine.
44. An undersupply of GABA is most closely linked to
- A) schizophrenia.
  - B) paralysis.
  - C) insomnia.
  - D) Alzheimer's disease.
45. Seizures are likely to be associated with an
- A) undersupply of GABA and an oversupply of glutamate.
  - B) oversupply of GABA and an undersupply of glutamate.
  - C) undersupply of GABA and an undersupply of glutamate.
  - D) oversupply of GABA and an oversupply of glutamate.

46. Endorphins are neurotransmitter molecules similar to
- A) dopamine.
  - B) serotonin.
  - C) morphine.
  - D) acetylcholine.
47. Endorphins are most directly involved in the control of
- A) body temperature.
  - B) physical pain.
  - C) muscle contraction.
  - D) attention.
48. The pain of childbirth is most likely to be reduced by the release of
- A) acetylcholine.
  - B) endorphins.
  - C) dopamine.
  - D) glutamate.
49. After three hours of playing a physically exhausting professional tennis match, Chitra began to experience feelings of exhilaration and pleasure. It is likely that her feelings were most directly linked to the release of
- A) dopamine.
  - B) acetylcholine.
  - C) endorphins.
  - D) growth hormones.
50. Morphine and heroin are
- A) ACh agonists.
  - B) hormones.
  - C) dendrites.
  - D) opiates.
51. The brain's own natural production of endorphins is likely to be suppressed by
- A) physical pain.
  - B) physical exercise.
  - C) heroin usage.
  - D) antidepressant drugs.

52. Agonists are chemical molecules that increase the activity of
- A) motor neurons.
  - B) genes.
  - C) synapses.
  - D) neurotransmitters.
53. Any drug molecule that binds to a neurotransmitter receptor site and mimics the neurotransmitter's excitatory or inhibitory effects is a(n)
- A) glutamate.
  - B) steroid.
  - C) agonist.
  - D) action potential.
54. James is being treated for depression with a drug that blocks the reuptake of serotonin. This antidepressant drug functions as a(n)
- A) steroid.
  - B) agonist.
  - C) opiate.
  - D) antagonist.
55. A drug molecule that inhibits or blocks a neurotransmitter's action is called a(n)
- A) opiate.
  - B) agonist.
  - C) antagonist.
  - D) glutamate.
56. Curare is a paralyzing poison that functions as a(n)
- A) ACh agonist.
  - B) GABA agonist.
  - C) ACh antagonist.
  - D) GABA antagonist.
57. Botulin blocks the release of ACh. Botulin is best described as a(n)
- A) opiate.
  - B) glutamate.
  - C) antagonist.
  - D) neurotransmitter.

58. The body's speedy electrochemical information network is called the
- A) circulatory system.
  - B) cognitive system.
  - C) nervous system.
  - D) endocrine system.
59. The brain and spinal cord form the
- A) autonomic nervous system.
  - B) somatic nervous system.
  - C) central nervous system.
  - D) endocrine system.
60. When Dirk was stung by a bee, the pain message was transmitted to his spinal cord by the \_\_\_\_\_ nervous system.
- A) sympathetic
  - B) parasympathetic
  - C) peripheral
  - D) central
61. Nerves are neural cables formed from bundles of
- A) endorphins.
  - B) interneurons.
  - C) axons.
  - D) lesions.
62. Information is carried from the body's tissues and sensory receptors to the central nervous system by
- A) interneurons.
  - B) sensory neurons.
  - C) motor neurons.
  - D) endocrine glands.
63. Efferent is to afferent as \_\_\_\_\_ is to \_\_\_\_\_.
- A) sympathetic nervous system; parasympathetic nervous system
  - B) sensory neuron; motor neuron
  - C) parasympathetic nervous system; sympathetic nervous system
  - D) motor neuron; sensory neuron



64. Sensory neurons transmit signals to
- A) glands.
  - B) glial cells.
  - C) motor neurons.
  - D) interneurons.
65. For you to be able to run, \_\_\_\_\_ must relay messages from your central nervous system to your leg muscles.
- A) interneurons
  - B) motor neurons
  - C) afferent neurons
  - D) the autonomic nervous system
66. Motor neurons are an important part of the
- A) central nervous system.
  - B) circulatory system.
  - C) peripheral nervous system.
  - D) endocrine system.
67. Information travels from the spinal cord to the brain through
- A) interneurons.
  - B) somatic nervous system.
  - C) adrenal glands.
  - D) the sympathetic nervous system.
68. The division of the peripheral nervous system controlling the body's skeletal muscles is the
- A) motor nervous system.
  - B) sympathetic nervous system.
  - C) somatic nervous system.
  - D) parasympathetic nervous system.
69. The part of the peripheral nervous system that controls the movement of your arms when you write is the
- A) autonomic nervous system.
  - B) sympathetic nervous system.
  - C) somatic nervous system.
  - D) parasympathetic nervous system.

70. Neural signals from the spinal cord are transmitted to your stomach muscles by the
- A) skeletal nervous system.
  - B) central nervous system.
  - C) autonomic nervous system.
  - D) somatic nervous system.
71. The sympathetic nervous system
- A) stimulates digestion and slows heartbeat.
  - B) inhibits digestion and accelerates heartbeat.
  - C) stimulates digestion and accelerates heartbeat.
  - D) inhibits digestion and slows heartbeat.
72. When Mr. Valdez thought his 1-year-old daughter had fallen down the stairs, his heartbeat accelerated, his blood pressure rose, and he began to perspire heavily. Mr. Valdez's state of arousal was activated by his \_\_\_\_\_ nervous system.
- A) parasympathetic
  - B) sympathetic
  - C) somatic
  - D) central
73. The parasympathetic nervous system is a division of the \_\_\_\_\_ nervous system.
- A) autonomic
  - B) somatic
  - C) central
  - D) sympathetic
74. The parasympathetic nervous system is to the sympathetic nervous system as \_\_\_\_\_ is to \_\_\_\_\_.
- A) pupil dilation; pupil contraction
  - B) raising blood pressure; lowering blood pressure
  - C) inhibition of digestion; stimulation of digestion
  - D) lowering of blood sugar; raising of blood sugar
75. The autonomic nervous system helps to maintain a relatively consistent body temperature despite environmental temperature changes. This best illustrates
- A) reuptake.
  - B) a refractory period.
  - C) depolarization.
  - D) homeostasis.

76. When Jenny saw that a large barking dog was enclosed by a very high fence, her racing heartbeat began to slow. The slowing of her heartbeat was most directly regulated by her
- A) hypothalamus.
  - B) parasympathetic nervous system.
  - C) somatic nervous system.
  - D) sympathetic nervous system.
77. The neurons of the central nervous system cluster into work groups known as
- A) terminal branches.
  - B) dendrites.
  - C) motor neurons.
  - D) neural networks.
78. The brain's information-processing capacities are most clearly enhanced by
- A) neural networks.
  - B) ACh agonists.
  - C) endorphins.
  - D) reflexes.
79. People can simultaneously process many aspects of sensory information such as color, shape, and size. This best illustrates the functioning of multiple
- A) ACh agonists.
  - B) resting potentials.
  - C) neural networks.
  - D) serotonin antagonists.
80. The spinal cord is part of the \_\_\_\_\_ nervous system.
- A) central
  - B) peripheral
  - C) autonomic
  - D) somatic
81. The simplest neural pathways are those that govern our
- A) thoughts.
  - B) emotions.
  - C) reflexes.
  - D) sexual drives.

82. The knee-jerk reflex requires the activity of the
- A) central nervous system.
  - B) autonomic nervous system.
  - C) sympathetic nervous system.
  - D) parasympathetic nervous system.
83. Celeste was able to jerk her hand out of the scalding water before sensing any pain because this withdrawal reflex
- A) was activated by interneurons in her spinal cord.
  - B) did not involve any activity within her central nervous system.
  - C) was activated by the rapidly responding endorphins.
  - D) was activated by her self-regulating autonomic nervous system.
84. The body's chemical communication system that is much slower than the nervous system is called the
- A) somatic system.
  - B) parasympathetic system.
  - C) autonomic system.
  - D) endocrine system.
85. The chemical messengers of the endocrine system are called
- A) neurotransmitters.
  - B) hormones.
  - C) agonists.
  - D) genes.
86. In a moment of danger, an individual's adrenal glands release
- A) ACh.
  - B) GABA.
  - C) epinephrine.
  - D) dopamine.
87. When confronted by a large and potentially dangerous snake, Alissa experienced a surge of energy triggered by the release of \_\_\_\_\_ into her bloodstream.
- A) epinephrine
  - B) oxytocin
  - C) endorphins
  - D) serotonin

88. Epinephrine and norepinephrine are released by the
- A) thyroid gland.
  - B) pituitary gland.
  - C) adrenal glands.
  - D) pancreas.
89. The release of epinephrine into the bloodstream is most likely to
- A) lower blood sugar.
  - B) lower blood pressure.
  - C) stimulate digestion.
  - D) accelerate heartbeat.
90. The fight-or-flight response is most clearly associated with the release of \_\_\_\_\_ into the bloodstream.
- A) endorphins
  - B) serotonin
  - C) epinephrine
  - D) dopamine
91. When insulted by a classmate, Jeremy experienced a sudden surge of autonomic nervous system arousal. Jeremy's reaction best illustrates the nature of
- A) the pain reflex.
  - B) an all-or-none response.
  - C) a refractory period.
  - D) the fight-or-flight response.
92. Which endocrine gland regulates body growth?
- A) adrenal
  - B) thyroid
  - C) pituitary
  - D) pancreas
93. The pituitary has been identified as a(n)
- A) antagonist.
  - B) myelin sheath.
  - C) master gland.
  - D) agonist.

94. Group cohesion, pair bonding, and social trust are promoted by pituitary gland secretions of
- A) cortisol.
  - B) epinephrine.
  - C) oxytocin.
  - D) dopamine.
95. The pituitary does not send messages to the sex glands until it receives a signal from the
- A) thyroid gland.
  - B) parasympathetic nervous system.
  - C) somatic nervous system.
  - D) hypothalamus.
96. Under the influence of the \_\_\_\_\_, the \_\_\_\_\_ triggers other glands to release sex hormones, which in turn influence the brain.
- A) pancreas; thyroid
  - B) thyroid; pancreas
  - C) pituitary; hypothalamus
  - D) hypothalamus; pituitary
97. A brain lesion refers to \_\_\_\_\_ of brain tissue.
- A) electrical stimulation
  - B) X-ray photography
  - C) radioactive bombardment
  - D) destruction
98. Recording electrodes are placed directly on the scalp to produce a(n)
- A) EEG.
  - B) PET scan.
  - C) MRI.
  - D) fMRI.
99. After suffering a head injury, Amanda was taken to a medical clinic where recording electrodes were placed directly on Amanda's scalp to monitor her brain waves. The clinic was making use of a(n)
- A) EEG.
  - B) PET scan.
  - C) MRI.
  - D) fMRI.

100. The consumption of glucose in active regions of the brain underlies the usefulness of a(n)  
A) MRI.  
B) brain lesion.  
C) EEG.  
D) PET scan.
101. Using magnetic fields and radio waves to produce computer-generated images of the brain's soft tissues is called a(n)  
A) MRI scan.  
B) EEG.  
C) brain lesion.  
D) PET scan.
102. MRI scans have revealed that some patients with schizophrenia have unusually enlarged  
A) brainstems.  
B) ventricles.  
C) limbic systems.  
D) cerebellums.
103. To monitor the sequence in which blood flows to different regions of the brain, researchers are most likely to make use of a(n)  
A) brain lesion.  
B) fMRI.  
C) electroencephalogram.  
D) MRI.
104. Linda is relaxing in a quiet room with her eyes closed, not thinking about anything in particular. During this time, an fMRI would most likely detect bloodflow through a web of different brain regions known as the  
A) diffusion spectrum.  
B) nucleus accumbens.  
C) reticular formation.  
D) default network.
105. The oldest regions of the brain are those that regulate  
A) memory.  
B) emotion.  
C) breathing.  
D) foresight.

106. The medulla is part of the brain that most directly regulates
- A) language comprehension.
  - B) face recognition.
  - C) sexual motivation.
  - D) heartbeat and breathing.
107. Because a growing tumor caused damage to his brain, Joseph had to be placed on a ventilator in order to maintain his breathing. The tumor most likely damaged Joseph's
- A) hippocampus.
  - B) amygdala.
  - C) brainstem.
  - D) hypothalamus.
108. The brainstem structure located above the medulla that helps to control sleep is called the
- A) nucleus accumbens.
  - B) hippocampus.
  - C) amygdala.
  - D) pons.
109. In which brain structure are nerves from the left side of the brain routed to the right side of the body?
- A) thalamus
  - B) cerebellum
  - C) amygdala
  - D) brainstem
110. The thalamus serves as a
- A) memory bank.
  - B) reward center.
  - C) sensory control center.
  - D) master gland.
111. Your ability to experience the physical pleasure of a hot shower is most likely to be disrupted by damage to your
- A) cerebellum.
  - B) hippocampus.
  - C) amygdala.
  - D) thalamus.



112. The reticular formation extends from the spinal cord up through the
- A) thalamus.
  - B) hypothalamus.
  - C) amygdala.
  - D) hippocampus.
113. Which nerve network traveling through the brainstem plays an important role in controlling arousal?
- A) reticular formation
  - B) hypothalamus
  - C) cerebellum
  - D) medulla
114. Andrea became highly aroused and alert when stung by a bee thanks to the activation of her
- A) cerebellum.
  - B) hypothalamus.
  - C) reticular formation.
  - D) nucleus accumbens.
115. The “little brain” attached to the rear of the brainstem is called the
- A) amygdala.
  - B) thalamus.
  - C) cerebellum.
  - D) hippocampus.
116. A loss of physical coordination and balance is most likely to result from damage to the
- A) hypothalamus.
  - B) cerebellum.
  - C) hippocampus.
  - D) amygdala.
117. The medulla is to the control of \_\_\_\_\_ as the cerebellum is to the control of \_\_\_\_\_.
- A) eating; sleeping
  - B) breathing; walking
  - C) emotion; motivation
  - D) memory; attention

118. The amygdala, hypothalamus, and hippocampus are part of the
- A) brainstem.
  - B) limbic system.
  - C) reticular formation.
  - D) cerebral hemispheres.
119. If Professor Kosiba surgically removed the amygdala of a laboratory rat, the rat would most likely become
- A) hungry.
  - B) sexually aroused.
  - C) physically uncoordinated.
  - D) less aggressive.
120. One study has found math anxiety to be associated with hyperactivity in the right
- A) hippocampus.
  - B) hypothalamus.
  - C) amygdala.
  - D) cerebellum.
121. The activity of the hypothalamus most directly influences
- A) thirst.
  - B) muscular coordination.
  - C) memory.
  - D) vision.
122. The secretions of the pituitary gland are most directly regulated by the
- A) reticular formation.
  - B) hypothalamus.
  - C) amygdala.
  - D) cerebellum.
123. Olds and Milner found that a rat kept returning to a location where it had been stimulated by an electrode placed within its
- A) reticular formation.
  - B) cerebellum.
  - C) hypothalamus.
  - D) pons.

124. The nucleus accumbens has been identified as a
- A) sensory control center.
  - B) memory bank.
  - C) reward center.
  - D) source of aggression.
125. Animal research has revealed a general reward system related to the release of the neurotransmitter
- A) ACh.
  - B) GABA.
  - C) dopamine.
  - D) epinephrine.
126. Newer research reveals that stimulating the brain's reward circuits in humans produces more \_\_\_\_\_ than pure enjoyment.
- A) desire
  - B) fatigue
  - C) agitation
  - D) pain relief
127. Some researchers believe that substance use disorders may result from
- A) poor physical coordination skills.
  - B) enlarged ventricles.
  - C) high blood glucose levels.
  - D) a reward deficiency syndrome.
128. Janessa suffered a stroke that destroyed a specific part of her limbic system. Although she remembers events prior to her illness, she is unable to form new memories of her daily experiences. Janessa has most likely suffered damage to the
- A) thalamus.
  - B) hippocampus.
  - C) hypothalamus.
  - D) amygdala.
129. The thin surface layer of interconnected neural cells that covers the cerebrum is called the
- A) amygdala.
  - B) corpus callosum.
  - C) hippocampus.
  - D) cerebral cortex.

130. Which region of the human brain best distinguishes us from other animals?
- A) corpus callosum
  - B) cerebral cortex
  - C) hippocampus
  - D) amygdala
131. Which regions of the cerebral cortex are positioned closest to our eyes?
- A) temporal lobes
  - B) frontal lobes
  - C) parietal lobes
  - D) occipital lobes
132. Which regions of the cerebral cortex lie at the back of the head and receive visual information?
- A) occipital lobes
  - B) corpus callosum
  - C) temporal lobes
  - D) somatosensory cortex
133. The parietal lobes are to \_\_\_\_\_ as the occipital lobes are to \_\_\_\_\_.
- A) hearing; speaking
  - B) sensing touch; seeing
  - C) tasting; smelling
  - D) speaking; seeing
134. An area at the rear of the frontal lobes that controls voluntary movements is called the
- A) somatosensory cortex.
  - B) motor cortex.
  - C) corpus callosum.
  - D) frontal association area.
135. Direct stimulation of areas within the motor cortex would most likely result in
- A) feelings of anger.
  - B) acceleration of heartbeat.
  - C) a sensation of being touched on the arm.
  - D) movement of the mouth and lips.

136. To trigger a person's hand to make a fist, José Delgado stimulated the individual's
- A) motor cortex.
  - B) hippocampus.
  - C) somatosensory cortex.
  - D) corpus callosum.
137. The somatosensory cortex is located in the \_\_\_\_\_ lobes.
- A) parietal
  - B) temporal
  - C) frontal
  - D) occipital
138. The brain devotes more tissue within the \_\_\_\_\_ for body areas that are highly sensitive to touch such as the lips.
- A) corpus callosum
  - B) temporal lobes
  - C) somatosensory cortex
  - D) hippocampus
139. If a neurosurgeon directly stimulated parts of your somatosensory cortex, which of the following would you most likely experience?
- A) indistinct odors
  - B) flashes of light
  - C) repetitive sounds
  - D) touches on the face
140. Which of the following is located in the occipital lobes?
- A) somatosensory cortex
  - B) auditory cortex
  - C) motor cortex
  - D) visual cortex
141. Which of the following is located in the temporal lobes?
- A) visual cortex
  - B) auditory cortex
  - C) motor cortex
  - D) the somatosensory cortex

142. Alana suffered a brain disease that destroyed major portions of her temporal lobes. Alana is most likely to suffer some loss of
- A) auditory perception.
  - B) hunger and thirst.
  - C) pain sensations.
  - D) muscular coordination.
143. Regions of the cerebral cortex involved primarily in higher mental functions such as learning are called
- A) the motor cortex.
  - B) the corpus callosum.
  - C) association areas.
  - D) the somatosensory cortex.
144. The cortical regions that are NOT directly involved in sensory or motor functions are known as
- A) the hippocampus.
  - B) frontal lobes.
  - C) association areas.
  - D) parietal lobes.
145. The process of comparing currently experienced visual input with past visual memories takes place in
- A) the thalamus.
  - B) the cerebellum.
  - C) association areas.
  - D) the corpus callosum.
146. Association areas are located
- A) only in the frontal lobes.
  - B) only in the frontal lobes and temporal lobes.
  - C) only in the frontal, temporal, and parietal lobes.
  - D) in the frontal, temporal, occipital, and parietal lobes.
147. Damage to the association areas in the prefrontal cortex is most likely to interfere with the ability to
- A) formulate plans.
  - B) recognize familiar faces.
  - C) understand word meanings.
  - D) recognize familiar voices.

148. Phineas Gage underwent a dramatic personality change after a tamping iron inflicted massive damage to his \_\_\_\_\_ lobes.
- A) parietal
  - B) temporal
  - C) occipital
  - D) frontal
149. Most people would not advocate pushing one person in front of a runaway trolley to save five others. But those with damage to the \_\_\_\_\_ are often untroubled by such an ethical dilemma.
- A) hippocampus
  - B) corpus callosum
  - C) somatosensory cortex
  - D) frontal lobe association areas
150. The region of your cerebral cortex that enables you to visually recognize your own mother's face is
- A) the cerebellum.
  - B) the somatosensory cortex.
  - C) the corpus callosum.
  - D) an association area.
151. Plasticity refers to the brain's capacity to
- A) automatically regulate heartbeat and breathing.
  - B) generate a sense of conscious awareness.
  - C) build new neural pathways.
  - D) transmit information between the two cerebral hemispheres.
152. When Stoyka was a child, a brain disease required the surgical removal of her left cerebral hemisphere. Stoyka is now a successful college student who lives a normal life. Her success best illustrates the importance of
- A) brain fissures.
  - B) neurogenesis.
  - C) MRI scans.
  - D) plasticity.

153. Deaf people's enhanced peripheral and motion-detection vision has been attributed in part to
- A) auditory hallucinations.
  - B) lateralization.
  - C) plasticity.
  - D) neurogenesis.
154. After Terry lost a finger in an industrial accident, the area of his somatosensory cortex devoted to receiving input from that finger gradually became very responsive to sensory input from his adjacent fingers. This best illustrates
- A) lateralization.
  - B) neurogenesis.
  - C) plasticity.
  - D) brain fissuring.
155. Neurogenesis refers to
- A) severing of the corpus callosum.
  - B) the formation of new neurons.
  - C) rewiring the brain.
  - D) stimulating the parietal lobe to produce a feeling of wanting to move an upper limb.
156. The brain is most likely to compensate for a loss of neurons by
- A) generating new neural cells in the brain.
  - B) increasing the speed of neural impulses.
  - C) inhibiting activity in the association areas.
  - D) decreasing the production of stem cells.
157. Master stem cells that can develop into any type of brain cell have been discovered in the human
- A) embryo.
  - B) corpus callosum.
  - C) association areas.
  - D) somatosensory cortex.



158. The ability to recognize faces with the right hemisphere but not with the left hemisphere best illustrates
- A) brain fissures.
  - B) neurogenesis.
  - C) plasticity.
  - D) lateralization.
159. The large band of neural fibers connecting the two brain hemispheres is called the
- A) somatosensory cortex.
  - B) temporal lobe.
  - C) hippocampus.
  - D) corpus callosum.
160. Information is most quickly transmitted from one cerebral hemisphere to the other by the
- A) corpus callosum.
  - B) motor cortex.
  - C) association areas.
  - D) somatosensory cortex.
161. Split-brain patients have had their \_\_\_\_\_ surgically cut.
- A) hippocampus
  - B) corpus callosum
  - C) somatosensory cortex
  - D) frontal lobes
162. The left cerebral hemisphere is typically superior to the right in
- A) spatial reasoning.
  - B) speech production.
  - C) visual perception.
  - D) musical abilities.
163. If an individual's right cerebral hemisphere is completely destroyed by disease, that person is unable to see anything
- A) with his or her right eye.
  - B) with his or her left eye.
  - C) in his or her right field of vision.
  - D) in his or her left field of vision.

164. A picture of a cat is briefly flashed in the left visual field and a picture of a mouse is briefly flashed in the right visual field of a split-brain patient. The individual will be able to use her
- A) right hand to indicate she saw a cat.
  - B) left hand to indicate she saw a mouse.
  - C) right hand to indicate she saw a mouse.
  - D) left or right hand to indicate she saw a cat.
165. What will most likely happen as a neurosurgeon sedates the entire right cerebral hemisphere of a right-handed patient who is asked to count aloud with both arms extended upward?
- A) The patient's left arm will fall limp and he will become speechless.
  - B) The patient's right arm will fall limp and he will become speechless.
  - C) The patient's left arm will fall limp but he will continue counting aloud.
  - D) The patient's right arm will fall limp but he will continue counting aloud.
166. People who can hear usually process their speaking with the \_\_\_\_\_ hemisphere. Deaf people usually process their language signing with the \_\_\_\_\_ hemisphere.
- A) right; left
  - B) left; right
  - C) right; right
  - D) left; left
167. A failure to recognize that one's arm or leg is part of one's self is most likely to be associated with damage to the
- A) corpus callosum.
  - B) cerebellum.
  - C) right hemisphere.
  - D) motor cortex.
168. People's reactions to our genetically influenced traits constitute part of our
- A) epigenetic marks.
  - B) environment.
  - C) genome.
  - D) natural selection.

169. External influences on development such as social support are said to constitute our
- A) genome.
  - B) epigenetic marks.
  - C) environment.
  - D) natural selection.
170. The impact of a mother's healthy food consumption on the prenatal development of her offspring best illustrates
- A) dizygotic development.
  - B) natural selection.
  - C) environmental influence.
  - D) an epigenetic mark.
171. Karen has blue eyes, whereas Tom's eyes are brown. Their different eye colors can best be attributed to
- A) behavior genetics.
  - B) heredity.
  - C) epigenetic molecules.
  - D) shared family environments.
172. Behavior geneticists are most interested in assessing the extent to which heredity and environment contribute to our
- A) shared human genome.
  - B) epigenetic marks.
  - C) reproductive capacities.
  - D) individual differences.
173. Assessing the relative effects of nature and nurture on individual differences in personality would be of most direct interest to
- A) evolutionary psychologists.
  - B) genome researchers.
  - C) behavior geneticists.
  - D) epigeneticists.
174. The threadlike structures that contain genes are called
- A) organic methyl molecules.
  - B) epigenetic marks.
  - C) chromosomes.
  - D) genomes.

175. Chromosomes are located within human
- A) bone cells.
  - B) genes.
  - C) neurotransmitters.
  - D) DNA.
176. A gene is a small segment of a(n)
- A) synapse.
  - B) neurotransmitter.
  - C) DNA molecule.
  - D) epigenetic mark.
177. Genes provide the code for the production of
- A) shared family environments.
  - B) proteins.
  - C) epigenetic molecules.
  - D) genomes.
178. The nucleus of each cell of your body contains
- A) DNA molecules.
  - B) chromosomes.
  - C) genes.
  - D) all of these elements.
179. The complete set of genetic instructions in an organism's chromosomes is called the
- A) double helix.
  - B) DNA molecule.
  - C) genome.
  - D) epigenetic mark.
180. Our genetic predispositions help to explain
- A) our shared human nature but not our human diversity.
  - B) our human diversity but not our shared human nature.
  - C) neither our shared human nature nor our human diversity.
  - D) both our shared human nature and our human diversity.

181. Twin studies most clearly indicate that \_\_\_\_\_ exert(s) a strong influence on the development of our unique personality traits.
- A) prenatal genetic testing
  - B) epigenetic marks
  - C) free-floating stress hormones
  - D) person-to-person genetic variations
182. Unlike fraternal twins, identical twins are described as
- A) extraverted.
  - B) dizygotic.
  - C) epigenetic.
  - D) monozygotic.
183. Twin brothers or twin sisters who develop from a single fertilized egg that splits in two are called \_\_\_\_\_ twins.
- A) fraternal
  - B) identical
  - C) epigenetic
  - D) dizygotic
184. Fraternal twins originate from the fertilization of
- A) a single egg cell by a single sperm cell.
  - B) two egg cells by a single sperm cell.
  - C) a single egg cell by two sperm cells.
  - D) two egg cells by two sperm cells.
185. Matt becomes emotionally upset frequently and quickly. Matt's reactions most clearly illustrate
- A) extraversion.
  - B) neuroticism.
  - C) an epigenetic mark.
  - D) high serotonin levels.
186. Compared with identical twins, fraternal twins are
- A) more likely to be the same sex and more likely to be similar in extraversion.
  - B) more likely to be the same sex and less likely to be similar in extraversion.
  - C) less likely to be the same sex and less likely to be similar in extraversion.
  - D) less likely to be the same sex and equally likely to be similar in extraversion.

187. Genetic influences on personality traits are most clearly highlighted by comparing \_\_\_\_\_ with \_\_\_\_\_.  
A) identical twins raised together; identical twins raised apart  
B) fraternal twins raised together; identical twins raised apart  
C) identical twins raised together; fraternal twins raised together  
D) fraternal twins raised apart; identical twins raised together
188. Identical twins raised apart have \_\_\_\_\_ similar personalities than identical twins raised together and \_\_\_\_\_ similar personalities than fraternal twins raised apart.  
A) more; more  
B) less; less  
C) more; less  
D) less; more
189. Studies of identical twins who had been raised apart have most clearly increased scientific appreciation for the impact of \_\_\_\_\_ on personality development.  
A) natural selection  
B) epigenetic marks  
C) free-floating stress hormones  
D) genetic influences
190. One reason to be cautious about attributing the assessed personality similarities of separately raised identical twins to shared genes is that  
A) home environments have less impact on personality than does peer pressure.  
B) many separately raised identical twins were reunited prior to assessing their personalities.  
C) epigenetic marks have a strong impact on personality development.  
D) adopted children's personalities are highly similar to those of their adoptive parents.
191. Today's adults are taller and heavier than those of a century ago. The differences between these generational groups best illustrate the impact of  
A) genetics.  
B) nutrition.  
C) epigenetic marks.  
D) natural selection.

192. Identical twins separated at birth and raised apart would be most likely to have similar
- A) epigenetic marks.
  - B) religious beliefs.
  - C) personality traits.
  - D) political views.
193. Paul and Jeff are biologically related non-twin siblings raised in the same home environment. Susan and Cathy are biologically unrelated children adopted at birth and raised as siblings in the same home environment. People are likely to \_\_\_\_\_ the personality similarities of Paul and Jeff and \_\_\_\_\_ the personality similarities of Susan and Cathy.
- A) overestimate; underestimate
  - B) underestimate; overestimate
  - C) underestimate; underestimate
  - D) overestimate; overestimate
194. Adoptive parents are most likely to influence the \_\_\_\_\_ of their adopted children.
- A) political attitudes
  - B) genome
  - C) extraversion
  - D) personality traits
195. Adopted children grow up to be
- A) more self-giving than average.
  - B) less psychologically disordered than average.
  - C) more extraverted than average.
  - D) less aware of their unique personality traits than average.
196. The diversity of human traits is most clearly enabled by our shared
- A) moral values.
  - B) dizygotic development.
  - C) epigenetic molecules.
  - D) adaptive capacity.
197. The impact of genes on observable traits can vary in different environments. Thus, genes are said to be
- A) free-floating.
  - B) dizygotic.
  - C) self-regulating.
  - D) epigenetic.

198. Some genetically influenced traits are expressed in some environments but not in others. This best illustrates the \_\_\_\_\_ of genes and environments.
- A) heritability
  - B) natural selection
  - C) dizygotic impact
  - D) interaction
199. Our selective exposure to those life experiences that are best suited to our unique personality traits best illustrates the interaction of
- A) evolution and natural selection.
  - B) nature and nurture.
  - C) heredity and epigenetics.
  - D) genes and chromosomes.
200. Because Marla is the first girl in her fourth-grade class to sexually mature, she is sometimes teased and rejected by her classmates. Marla's sense of social isolation and embarrassment result from the interaction of
- A) dizygotic development and epigenetic marks.
  - B) evolution and natural selection.
  - C) genes and chromosomes.
  - D) nature and nurture.
201. Epigenetics is the study of environmental influences on \_\_\_\_\_ that occur without a DNA change.
- A) natural selection
  - B) personality traits
  - C) gene expression
  - D) stress hormones
202. Diet and stress can affect the \_\_\_\_\_ that regulate gene expression.
- A) neurotransmitters
  - B) mutations
  - C) epigenetic molecules
  - D) nerve cells



203. Which of the following would likely prevent DNA from producing the proteins coded by a gene?
- A) an epigenetic mark
  - B) neurotransmitters
  - C) the human genome
  - D) sex chromosomes
204. The study of how our behavior and mind have changed in adaptive ways over time due to natural selection is called
- A) epigenetics.
  - B) evolutionary psychology.
  - C) behavior genetics.
  - D) genome research.
205. Charles Darwin advanced the principle of
- A) the double helix.
  - B) the Big Bang theory.
  - C) epigenetics.
  - D) natural selection.
206. Evolutionary psychologists most clearly emphasize that environmentally adaptive behaviors are those that have promoted
- A) reproductive success.
  - B) personal happiness.
  - C) cultural diversity.
  - D) epigenetic marks.
207. If a genetic predisposition to fear darkness contributes to reproductive success, that trait will likely be passed on to subsequent generations. This best illustrates
- A) an epigenetic mark.
  - B) a mutation.
  - C) behavior genetics.
  - D) natural selection.
208. Evolutionary psychology would be most helpful for understanding the \_\_\_\_\_ human aggression.
- A) social causes of
  - B) reproductive advantages of
  - C) cross-cultural variations of
  - D) remedial treatments of

209. To produce sheepdogs that become very adept at sheepherding, dog breeders have been most likely to make use of
- A) gene splicing.
  - B) cloning.
  - C) selective mating.
  - D) epigenetic marks.
210. From an evolutionary perspective, which of the following is the clearest contributor to human fitness?
- A) neuroticism
  - B) epigenetic marks
  - C) adaptive flexibility
  - D) free-floating stress hormones
211. Mutations result from random errors in
- A) brain development.
  - B) gene replication.
  - C) natural selection.
  - D) neural transmission.
212. Evolutionary psychologists are most directly concerned with the impact of \_\_\_\_\_ on behavior.
- A) epigenetic molecules
  - B) shared family environments
  - C) genetic predispositions
  - D) domestication
213. Early women who were genetically predisposed to avoid bitter-tasting foods, especially when experiencing nausea during pregnancy, were most likely to survive and contribute their genetically based predispositions to later generations. This best illustrates
- A) domestication.
  - B) natural selection.
  - C) epigenetics.
  - D) neuroticism.

214. If a genetically based mating preference for people who are physically attractive contributes to reproductive success, that trait will be passed on to subsequent generations. This best illustrates
- A) domestication.
  - B) natural selection.
  - C) an epigenetic mark.
  - D) behavior genetics.
215. Evolutionary psychology would be most likely to suggest that human preferences for sweets and fats
- A) have hindered sexual reproduction.
  - B) are genetically predisposed.
  - C) vary widely across cultures.
  - D) are epigenetic marks.
216. The principles of evolutionary psychology would suggest that parents are genetically predisposed to experience the strongest grief over the deaths of their
- A) biologically related sons.
  - B) biologically related daughters.
  - C) adopted sons.
  - D) adopted daughters.

## Answer Key

1. A
2. A
3. A
4. C
5. C
6. B
7. A
8. D
9. C
10. C
11. A
12. C
13. A
14. B
15. D
16. B
17. C
18. D
19. B
20. A
21. C
22. C
23. D
24. B
25. C
26. D
27. D
28. C
29. B
30. B
31. D
32. B
33. C
34. A
35. A
36. A
37. D
38. C
39. C
40. C
41. B
42. D
43. C
44. C

45. A
46. C
47. B
48. B
49. C
50. D
51. C
52. D
53. C
54. B
55. C
56. C
57. C
58. C
59. C
60. C
61. C
62. B
63. D
64. D
65. B
66. C
67. A
68. C
69. C
70. C
71. B
72. B
73. A
74. D
75. D
76. B
77. D
78. A
79. C
80. A
81. C
82. A
83. A
84. D
85. B
86. C
87. A
88. C
89. D
90. C

- 91. D
- 92. C
- 93. C
- 94. C
- 95. D
- 96. D
- 97. D
- 98. A
- 99. A
- 100. D
- 101. A
- 102. B
- 103. B
- 104. D
- 105. C
- 106. D
- 107. C
- 108. D
- 109. D
- 110. C
- 111. D
- 112. A
- 113. A
- 114. C
- 115. C
- 116. B
- 117. B
- 118. B
- 119. D
- 120. C
- 121. A
- 122. B
- 123. C
- 124. C
- 125. C
- 126. A
- 127. D
- 128. B
- 129. D
- 130. B
- 131. B
- 132. A
- 133. B
- 134. B
- 135. D
- 136. A

- 137. A
- 138. C
- 139. D
- 140. D
- 141. B
- 142. A
- 143. C
- 144. C
- 145. C
- 146. D
- 147. A
- 148. D
- 149. D
- 150. D
- 151. C
- 152. D
- 153. C
- 154. C
- 155. B
- 156. A
- 157. A
- 158. D
- 159. D
- 160. A
- 161. B
- 162. B
- 163. D
- 164. C
- 165. C
- 166. D
- 167. C
- 168. B
- 169. C
- 170. C
- 171. B
- 172. D
- 173. C
- 174. C
- 175. A
- 176. C
- 177. B
- 178. D
- 179. C
- 180. D
- 181. D
- 182. D

- 183. B
- 184. D
- 185. B
- 186. C
- 187. C
- 188. D
- 189. D
- 190. B
- 191. B
- 192. C
- 193. D
- 194. A
- 195. A
- 196. D
- 197. C
- 198. D
- 199. B
- 200. D
- 201. C
- 202. C
- 203. A
- 204. B
- 205. D
- 206. A
- 207. D
- 208. B
- 209. C
- 210. B
- 211. B
- 212. C
- 213. B
- 214. B
- 215. B
- 216. A



1. After Lola began using a street drug to enhance her moods, she discovered that she needed larger and larger doses of the drug in order to feel the drug's effect. Use your understanding of the neurotransmission process to explain Lola's experience.
2. The ancient Greek physician Hippocrates believed that four basic body fluids (blood, black bile, yellow bile, and phlegm) influenced human behavior, emotions, and personality. Use your understanding of the body's rapid and slower chemical communication systems to support or refute the general logic of Hippocrates' theory.
3. Describe specific functions of our older brain structures, which reveal that our brains are responsible for much more than simply our capacity to think.
4. Describe how damage to specific structures in your limbic system would likely affect your experience of (a) emotions such as anxiety and elation, (b) motives such as hunger and sex drive, and (c) memories such as recall of familiar faces or locations.
5. After suffering a head injury in an auto accident, Alyssa says that she remembers what her mother looks like, and she can accurately recall many of her mother's distinctive facial features. However, when she is shown pictures of her mother, Alyssa is unable to recognize who it is, even though she can see clearly. Use your understanding of the functioning brain to account for Alyssa's strange pattern of experience.
6. Describe how an understanding of both a normally functioning brain and a split brain enables us to better appreciate the fact that most information processing takes place outside of conscious awareness.
7. Describe one of your personality traits that you believe to be heavily influenced by your unique genetic profile and another trait that seems to be much less so. Provide reasons for your answer, and explain why you would expect genetics to exert a greater impact on some personality traits than on others.
8. Mr. Firkin is a shy and reserved person who often feels tense and nervous. In therapy, he recalled that he had an unhappy childhood, feeling that he did not receive enough attention from his mother and resenting the conservative family discipline and lifestyle enforced by his father. He blames both parents for his current anxiety, unhappiness, and loneliness. In light of your understanding of the interactive influences of nature and nurture, explain why Mr. Firkin's complaints about his parents may be somewhat unfair and unhelpful.

9. Biological fathers are so much less likely than unrelated boyfriends to abuse and murder the children with whom they share a home. Use the principles of evolutionary psychology and natural selection to explain why this is so.

## **Answer Key**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

1. Identify specific work situations in which you have experienced a state of flow. Describe some of the features of those situations that could help you to better understand your own personal interests and vocational commitments.
2. Describe how a company might initiate annual reviews of employee performance without discouraging worker satisfaction and engagement.
3. Describe the contrasting effects of task leadership and social leadership on employee morale and productivity. Explain why the effectiveness of each style of leadership might depend on the specific task at hand, as well as on the personality traits and cultural backgrounds of both managers and employees.
4. Social and workplace interactions increasingly require web-based online communication. Describe how our advancing communication technologies might provide new career opportunities for human factors psychologists.

## **Answer Key**

- 1.
- 2.
- 3.
- 4.

1. Those who view their work as a necessary but personally unfulfilling way to make money are said to view work as a
  - A) contract.
  - B) job.
  - C) calling.
  - D) career.
  
2. Those who view their work as a career are especially likely to be concerned about opportunities for
  - A) outsourcing.
  - B) creating action plans.
  - C) transformational leadership.
  - D) increasingly better employment positions.
  
3. Andrea views her work as primarily an opportunity to climb the corporate ladder in pursuit of increasingly better positions. Andrea apparently views her work as a
  - A) calling.
  - B) job.
  - C) contract.
  - D) career.
  
4. People report the greatest satisfaction with their work and their lives if they
  - A) work only part-time.
  - B) view their work as a calling.
  - C) are strongly motivated by high wages.
  - D) are supervised by managers with a directive style.
  
5. After studying artists who would spend hour after hour painting or sculpting with focused concentration, Csikszentmihalyi formulated the concept of
  - A) transformational leadership.
  - B) strengths-based selection.
  - C) 360-degree feedback.
  - D) flow.
  
6. Flow is characterized by a \_\_\_\_\_ awareness of self and a \_\_\_\_\_ awareness of the passing of time.
  - A) heightened; diminished
  - B) diminished; heightened
  - C) heightened; heightened
  - D) diminished; diminished

7. Julia is a highly skilled professional violinist. She often becomes so focused and energized by her challenging practice sessions that they last hours longer than she had planned. Her experience best illustrates the concept of
- A) flow.
  - B) task leadership.
  - C) human factors psychology.
  - D) 360-degree feedback.
8. Alonso is so absorbed in solving complex engineering problems that he loses track of time as he spends entire weekends working. Alonzo's experience best illustrates the concept of
- A) strengths-based selection.
  - B) managing by objectives.
  - C) 360-degree feedback.
  - D) flow.
9. Which profession is most directly involved in the application of psychology's principles to the workplace?
- A) social psychology
  - B) personality psychology
  - C) developmental psychology
  - D) industrial-organizational psychology
10. Developing assessment tools for selecting and placing employees is of most direct relevance to
- A) clinical psychology.
  - B) organizational psychology.
  - C) human factors psychology.
  - D) personnel psychology.
11. Organizational psychologists are most likely to be involved in
- A) matching job applicants with specific work assignments.
  - B) modifying work environments in order to improve employee engagement.
  - C) contributing to the design of user-friendly industrial machines.
  - D) designing training programs to prepare unemployed persons for existing jobs.

12. Human factors psychologists are most likely to be involved in
- A) designing training programs to prepare unemployed persons for existing jobs.
  - B) exploring how machines can be optimally designed to fit human abilities.
  - C) assessing the impact of supervisors' management styles on business productivity.
  - D) matching people's strengths with specific job assignments.
13. Dr. Thompson develops interview questions that will effectively predict job applicants' success in specific work positions. Her work best illustrates that of a(n) \_\_\_\_\_ psychologist.
- A) personnel
  - B) organizational
  - C) human factors
  - D) clinical
14. The main goal of a career counseling science is to
- A) match people to vocations with a good person-environment fit.
  - B) design machines that optimally fit human abilities.
  - C) determine which leadership style is best for eliciting employee engagement.
  - D) design training programs for specific knowledge-related jobs.
15. A study that followed 400,000 high school students over time found that their subsequent income success was best predicted by the extent to which their vocations were well-matched to their
- A) ability levels.
  - B) personality traits.
  - C) physical appearance.
  - D) personal interests.
16. Work activities that are specifically suited to your strengths are most likely to be those associated with the experience of
- A) flow.
  - B) 360-degree feedback.
  - C) implementation intentions.
  - D) external rewards.



17. Hiring job applicants who have the qualities best suited for success in the job for which they are applying illustrates
- A) human factors psychology.
  - B) 360-degree feedback.
  - C) strengths-based selection.
  - D) employee engagement.
18. After discovering that their company's best software developers are highly analytical, personnel psychologists focused their employment ads for additional software developers less on applicants' experience and more on their ability to engage in logical problem solving. This best illustrates their commitment to
- A) 360-degree feedback.
  - B) social leadership.
  - C) structured interviews.
  - D) a strengths-based selection system.
19. Unstructured interviews provide a \_\_\_\_\_ predictor of on-the-job performance than aptitude tests and a \_\_\_\_\_ predictor of on-the-job performance than job knowledge tests.
- A) better; worse
  - B) worse; better
  - C) better; better
  - D) worse; worse
20. Personnel selection research indicates that for all but less-skilled jobs, the quality of a job applicant's on-the-job performance is best predicted by the applicant's
- A) implementation intentions.
  - B) general mental ability.
  - C) leadership style.
  - D) optimism.
21. Mr. Walters has many years of experience as a personnel officer for a large corporation. He does not review most job applicants' reference files because he is confident of his ability to predict their future work performance based on his direct face-to-face conversations with them. Mr. Walters' confidence best illustrates
- A) 360-degree feedback.
  - B) the experience of flow.
  - C) transformational leadership.
  - D) the interviewer illusion.

22. When meeting job applicants, employers often discount the influence of varying situations on applicants' behaviors and presume that what they observe applicants do and say reflects the applicants' enduring personality traits. This most clearly contributes to
- A) 360-degree feedback.
  - B) the interviewer illusion.
  - C) strengths-based selection systems.
  - D) the experience of flow.
23. If interviewers instantly like a job applicant because of his or her good looks, they may judge the person's complimentary remarks as indicating "polite manners" rather than "manipulative flattery." This best illustrates the impact of \_\_\_\_\_ on the interpretation of interviewees' responses.
- A) transformational leadership
  - B) interviewers' preconceptions
  - C) 360-degree feedback
  - D) a strengths-based selection system
24. To predict effectively the job success of various applicants for a specific work position, psychologists would recommend the development of
- A) flow.
  - B) task leadership.
  - C) structured interviews.
  - D) human factors psychology.
25. Dr. MacCollum analyzes a job, scripts interview questions, and trains interviewers to ask the same questions, in the same order, to all applicants, rating each applicant on an established scale. Her work best illustrates that of a(n) \_\_\_\_\_ psychologist.
- A) personnel
  - B) organizational
  - C) human factors
  - D) clinical
26. Scales and checklists on which supervisors indicate the extent to which a worker is productive, follows correct procedures, and attends to customers' needs are designed primarily for the purpose of improving
- A) unstructured interviews.
  - B) social leadership.
  - C) performance appraisal.
  - D) a directive style of management.

27. Full and clear communication regarding Kelsey's effectiveness as a customer service manager is enhanced by the performance appraisals she periodically receives from fellow managers, subordinates, customers, and her supervisor. This best illustrates the value of
- A) experiencing flow.
  - B) structured interviews.
  - C) 360-degree feedback.
  - D) task leadership.
28. The practice of 360-degree feedback is especially likely to involve
- A) a democratic management style.
  - B) the experience of flow.
  - C) behavior checklists and rating scales.
  - D) transformational leadership.
29. Carlos is so friendly and likable that his job supervisors and co-workers often appraise his work skills and performance more positively than is actually warranted. This best illustrates evaluators' vulnerability to
- A) human factors psychology.
  - B) the interviewer illusion.
  - C) the experience of flow.
  - D) halo errors.
30. When performance appraisal is based only on the employee's latest behavior, which may not be indicative of her overall performance, the employer is committing
- A) a severity error.
  - B) a recency error.
  - C) 360-degree feedback.
  - D) a halo error.
31. Satisfied employees' positive moods at work have most clearly been found to enhance
- A) a directive leadership style.
  - B) 360-degree feedback.
  - C) creativity and persistence.
  - D) strengths-based selection.

32. A business setting in which workers have regular opportunities to do what they do best and perceive that they are part of something significant is one that promotes
- A) 360-degree feedback.
  - B) implementation intentions.
  - C) employee engagement.
  - D) unstructured interviews.
33. Organizational psychologists are most likely to be involved in
- A) matching people's strengths with specific job assignments.
  - B) modifying work environments to improve employee engagement.
  - C) contributing to the design of user-friendly industrial machines.
  - D) designing training programs to prepare unemployed persons for existing jobs.
34. Engaged employees are likely to
- A) practice human factors psychology.
  - B) view their work as a job rather than a calling.
  - C) prefer working for managers with a directive management style.
  - D) know what is expected of them at their workplace.
35. Jeremy is enthusiastically committed to his work within a company whose customer service goals are aligned with his own personal sense of occupational calling. Jeremy best illustrates
- A) strengths-based leadership.
  - B) transformational leadership.
  - C) 360-degree feedback.
  - D) employee engagement.
36. Employees who put in work time but invest little passion or energy in their work are described as
- A) resilient.
  - B) outsourced.
  - C) not engaged.
  - D) actively disengaged.
37. Expecting every faculty member at a university to teach the same number of courses and engage in the same amount of research would
- A) interfere with the practice of 360-degree feedback.
  - B) help to promote social leadership.
  - C) fail to adequately develop the unique strengths of each professor.
  - D) facilitate the professors' experience of flow.

38. By praising their employees' positive behaviors, managers often encourage their workers to continue laboring productively. This best illustrates the value of
- A) reinforcement.
  - B) 360-degree feedback.
  - C) a democratic management style.
  - D) experiencing flow.
39. As a business manager, Julie often calls her employees' attention to their occasional mistakes while withholding praise for their many accomplishments. Julie fails to take full advantage of a basic principle of
- A) 360-degree feedback.
  - B) operant conditioning.
  - C) task leadership.
  - D) human factors psychology.
40. The on-time completion of major work projects is most clearly facilitated by
- A) reducing flow.
  - B) scripting structured interviews.
  - C) receiving 360-degree feedback.
  - D) stating implementation intentions.
41. A specification of when, where, and how to achieve the subgoals necessary for completion of a major task is called a(n)
- A) psychological contact.
  - B) state of flow.
  - C) action plan.
  - D) engagement.
42. Leaders who set target dates for the completion of specific measurable goals best illustrate
- A) transformational leadership.
  - B) managing by objectives.
  - C) 360-degree feedback.
  - D) the experience of flow.

43. Managers who excel at task leadership typically
- A) demonstrate charisma.
  - B) use a directive style.
  - C) discourage performance appraisals.
  - D) use a democratic style.
44. Alex is a company manager who dictates workplace rules and task assignments without giving employees much opportunity to voice their task preferences or workplace concerns. Alex best illustrates
- A) strengths-based selection.
  - B) transformational leadership.
  - C) 360-degree feedback.
  - D) a directive leadership style.
45. Managers with a task-leadership style would be most likely to
- A) mediate a conflict between two argumentative employees.
  - B) give employees a high degree of freedom to develop their own work procedures.
  - C) remind employees of the exact deadlines for the completion of work projects.
  - D) avoid closely monitoring the productivity of individual employees.
46. A group-oriented manager who mediates conflicts and builds effective teamwork demonstrates
- A) 360-degree feedback.
  - B) the experience of flow.
  - C) social leadership.
  - D) a directive management style.
47. Leaders with a goal-based vision that they clearly communicate in a way that inspires their group to follow them are said to demonstrate
- A) flow.
  - B) charisma.
  - C) 360-degree feedback.
  - D) human factors psychology.
48. Motivating workers who identify with and commit themselves to a group mission best illustrates
- A) a strengths-based selection system.
  - B) 360-degree feedback.
  - C) a directive management style.
  - D) transformational leadership.

49. Women are more likely than men to exhibit the qualities associated with
- A) a voice effect.
  - B) recency errors.
  - C) transformational leadership.
  - D) a directive management style.
50. Effective managers often demonstrate \_\_\_\_\_ levels of task leadership and \_\_\_\_\_ levels of social leadership.
- A) high; low
  - B) low; high
  - C) low; low
  - D) high; high
51. If given a chance to express their own opinions during a decision-making process, people will respond more positively to the decision. This illustrates
- A) task leadership.
  - B) a voice effect.
  - C) 360-degree feedback.
  - D) a strengths-based selection system.
52. Effectively designing physical environments—such as the layout of a kitchen in a way that maximizes safe and efficient meal preparation—is of special interest to
- A) personnel psychologists.
  - B) organizational psychologists.
  - C) clinical psychologists.
  - D) human factors psychologists.
53. Human factors psychologists would be most likely to aid in the design of
- A) computer keyboards.
  - B) weight-reduction programs.
  - C) protective clothing.
  - D) classroom management techniques.

54. An engineer who understands how to design and use a home theater system may find it hard to mentally simulate what it's like not to know how to operate the system. The engineer's difficulty illustrates
- A) a voice effect.
  - B) 360-degree feedback.
  - C) the curse of knowledge.
  - D) the interviewer illusion.



## **Answer Key**

1. B
2. D
3. D
4. B
5. D
6. D
7. A
8. D
9. D
10. D
11. B
12. B
13. A
14. A
15. D
16. A
17. C
18. D
19. D
20. B
21. D
22. B
23. B
24. C
25. A
26. C
27. C
28. C
29. D
30. B
31. C
32. C
33. B
34. D
35. D
36. C
37. C
38. A
39. B
40. D
41. C
42. B
43. B
44. D

- 45. C
- 46. C
- 47. B
- 48. D
- 49. C
- 50. D
- 51. B
- 52. D
- 53. A
- 54. C

1. A completely focused state of consciousness resulting from optimal engagement of one's skills is called
  - A) charisma.
  - B) 360-degree feedback.
  - C) transformational leadership.
  - D) flow.
  
2. Personnel psychology is one of the main subfields of
  - A) organizational psychology.
  - B) industrial-organizational psychology.
  - C) human factors psychology.
  - D) social psychology.
  
3. Analyzing job requirements and optimizing worker placement are of most direct relevance to
  - A) human factors psychology.
  - B) clinical psychology.
  - C) organizational psychology.
  - D) personnel psychology.
  
4. By scripting specific job-relevant questions to be asked of all those applying for a particular work position, a personnel psychologist is most clearly developing a framework for
  - A) the experience of flow.
  - B) transformational leadership.
  - C) structured interviews.
  - D) 360-degree feedback.
  
5. For each performance review, Professor Donnell is evaluated by her students, colleagues, department chair, and research assistants. This best illustrates
  - A) managing by objectives.
  - B) the experience of flow.
  - C) human factors psychology.
  - D) 360-degree feedback.

6. Assessing the impact of different management styles on the motivation and productivity of employees best illustrates the professional concerns of
- A) personnel psychology.
  - B) clinical psychology.
  - C) organizational psychology.
  - D) human factors psychology.
7. Human factors psychologists would be most likely to aid in the design of
- A) employee weight-reduction programs.
  - B) management training seminars.
  - C) user-friendly factory machinery.
  - D) work-skills assessment tests.

## **Answer Key**

1. D
2. B
3. D
4. C
5. D
6. C
7. C

1. Lisbeth views her work only as a way to make the money she needs to do the things she enjoys. Lisbeth apparently views her work as a
  - A) calling.
  - B) job.
  - C) contract.
  - D) career.
  
2. Work is most likely to be satisfying for employees if it is associated with
  - A) task leadership.
  - B) the experience of flow.
  - C) 360-degree feedback.
  - D) unstructured interviews.
  
3. Dr. Eisenberg develops behavior rating scales for use by company supervisors to appraise the performance of workers and make decisions about job promotions. His work best illustrates that of a(n) \_\_\_\_\_ psychologist.
  - A) clinical
  - B) personnel
  - C) organizational
  - D) human factors
  
4. A feeling that one's workplace setting offers many opportunities to learn and grow is most likely to promote
  - A) strengths-based selection.
  - B) transformational leadership.
  - C) employee engagement.
  - D) 360-degree feedback.
  
5. Compared with ineffective managers, those who are effective are more likely to
  - A) use informal, unstructured interviews when selecting new employees.
  - B) exercise a directive management style for achieving organizational goals.
  - C) celebrate employees' productivity by providing them with recognition and rewards.
  - D) do all of these things.
  
6. Managers who delegate authority and welcome team members' participation are said to excel in
  - A) structured interviews.
  - B) social leadership.
  - C) performance appraisal.
  - D) a directive management style.

7. Regan has been programming computers for so long that she does not understand why some people have difficulty following what she considers the easy instructions to “drag and drop” files into a new folder. She is exhibiting what psychologists call
- A) strengths-based selection.
  - B) transformational leadership.
  - C) the curse of knowledge.
  - D) a directive management style.

## **Answer Key**

1. B
2. B
3. B
4. C
5. C
6. B
7. C