

1. Psychology is the scientific study of:
 - A) mind and body.
 - B) mind and behavior.
 - C) mood and behavior.
 - D) mood and body.

2. Psychology is the scientific study of mind and behavior. Behavior refers to:
 - A) perceptions, thoughts, memories, and feelings.
 - B) explanations.
 - C) urges.
 - D) observable actions of humans and nonhuman animals.

3. Today, psychologists believe that mental processes:
 - A) arise from electrical and chemical activities of the brain.
 - B) arise from a nonphysical mind interacting with the pineal gland in the brain.
 - C) are not proper subject matter for science research.
 - D) usually are not adaptive in helping us function effectively in the world.

4. Today, most psychologists would agree with which statement concerning mental processes?
 - A) The scientific method cannot be applied to mental processes.
 - B) Mental processes are nonphysical entities that control the brain and body.
 - C) Mental processes arise from brain functioning.
 - D) Mental processes are the only subject matter worthy of study in psychology.

5. Using _____, Krings et al. (2000) demonstrated that the brains of professional piano players were _____ active than novice players when both groups made finger movements like those involved in piano play.
 - A) fMRI; more
 - B) fMRI; less
 - C) CT scans; more
 - D) CT scans; less

6. The case of Elliot, as documented by Damasio (1994), suggests that:
 - A) cognitive functioning can be severely impaired while emotion remains unaffected.
 - B) emotions usually interfere with adaptive behavior.
 - C) even negative emotions such as anxiety and sorrow have adaptive functions.
 - D) emotion and intelligence share a common neural substrate.

7. William James (1890) believed that the influence of _____ could help explain absentmindedness.
- A) habit
 - B) sleep deprivation
 - C) emotions
 - D) personality
8. Which is the primary reason why modern psychologists study lapses, errors, and mistakes in behavior and cognition?
- A) They are more intriguing than normal psychological functioning.
 - B) They allow us to learn about the normal operations of mental life and behavior.
 - C) They provide a window into the sexual urges of the unconscious.
 - D) They vividly illustrate the fact that most psychological functioning is not adaptive.
9. The early roots of psychology are firmly planted in physiology and in:
- A) anatomy.
 - B) logic.
 - C) dualism.
 - D) philosophy.
10. Some early philosophers believed that certain kinds of knowledge were innate or inborn, a theory known as:
- A) functionalism.
 - B) nativism.
 - C) philosophical empiricism.
 - D) structuralism.
11. Which early philosopher was interested in certain kinds of knowledge as being innate or inborn?
- A) Hippocrates
 - B) Plato
 - C) Aristotle
 - D) Descartes
12. The older position of nativism is reflected in _____ psychological views that emphasize the effect of _____ on behavior.
- A) nurture
 - B) intuition
 - C) schemas
 - D) nature

13. Plato is to _____ as Aristotle is to _____.
A) philosophical structuralism; nativism
B) nativism; philosophical empiricism
C) nativism; dualism
D) dualism; nativism
14. Nature is to nurture as nativism is to:
A) experience.
B) adaptation.
C) behaviorism.
D) phrenology.
15. Some early philosophers believed that all knowledge was acquired through experience, an idea now known as:
A) functionalism.
B) philosophical empiricism.
C) structuralism.
D) nativism.
16. The notion that the mind at birth is a *tabula rasa* is consistent with the views of:
A) Plato.
B) Descartes.
C) Aristotle.
D) Gall.
17. The fact that very young children almost universally master the basics of language without formal training is most consistent with:
A) Plato's nativism.
B) Gall's phrenology.
C) Aristotle's philosophical empiricism.
D) Locke's *tabula rasa*.
18. The major limitation of the works of the classical Greek philosophers to an understanding of human behavior is that:
A) much of these works remains lost to history.
B) differences among translations have fueled misunderstanding and debate.
C) the works tended to underestimate the role of nurture in shaping human behavior.
D) these philosophers did not develop ways to test their theories.

19. _____ believed that the mind and body are different from each other, and linked by the pineal gland.
- A) Gall.
 - B) Hobbes.
 - C) Descartes.
 - D) Aristotle.
20. Descartes believed that the mind influences the body through the:
- A) pituitary gland.
 - B) hippocampus.
 - C) prefrontal cortex.
 - D) pineal gland.
21. A spiritual leader believes that the soul and the body are fundamentally different from each other, but are linked via a special structure in the brain. His beliefs are similar to those of:
- A) Gall.
 - B) Descartes.
 - C) Hobbes.
 - D) Broca.
22. The modern view that the subjective experience of having a mind is the result of brain activity can be traced to which philosopher?
- A) Hobbes
 - B) Plato
 - C) Descartes
 - D) James
23. The problem of dualism refers to how:
- A) different areas in the brain control different types of behavior and cognition.
 - B) mental activity can be reconciled and coordinated with physical behavior.
 - C) brain activity produces consciousness.
 - D) both genetic and environmental factors influence human behavior.
24. Phrenology suggested that specific mental abilities and characteristics were located in specific regions of the brain. It was developed by:
- A) Descartes.
 - B) Flourens.
 - C) Gall.
 - D) Broca.

25. Dr. Quack touches specific bumps on a patient's skull and then indicates specific character traits for the patient, for example, "This patient is cautious." Dr. Quack is engaging in:
- A) structuralism.
 - B) phrenology.
 - C) mesmerism.
 - D) psychoanalysis.
26. After suffering a stroke, Lisa was able to understand what people said to her but was unable to speak to them. The stroke probably damaged her:
- A) pineal gland.
 - B) Broca's area.
 - C) hippocampus.
 - D) temporal lobe.
27. The research of Flourens and Broca:
- A) established phrenology as a true science.
 - B) confirmed Descartes' belief that the mind and body were linked via the pineal gland.
 - C) is consistent with the view of the mind held by Thomas Hobbes.
 - D) demonstrated that mental processes can occur independently of brain activity.
28. The study of biological processes, especially those of the human body, is called:
- A) psychology.
 - B) anatomy.
 - C) phrenology.
 - D) physiology.
29. Penny wanted to find out how long it would take her sister Cathy to remove her finger from the flame of a lighted match. Penny is studying what type of process?
- A) classical conditioning
 - B) introspection
 - C) reaction time
 - D) stimulus time

30. Hermann von Helmholtz is most remembered for:
- A) debunking phrenology.
 - B) opening the first laboratory to conduct purely psychological experiments.
 - C) being the first to measure the speed of a nervous impulse.
 - D) discovering the relation between emotion and the amygdala.
31. An acupuncturist asks you to respond as soon as you feel a pinprick as she stimulates your upper thigh, hamstring, calf, and foot with a needle. Based on Helmholtz's research, you will react most quickly when the _____ is stimulated.
- A) upper thigh
 - B) hamstring
 - C) calf
 - D) foot
32. Hermann von Helmholtz is to _____ as Wilhelm Wundt is to _____.
- A) phrenology; functionalism
 - B) reaction time; structuralism
 - C) reaction time; functionalism
 - D) phrenology; structuralism
33. Historians generally credit the emergence of psychology as a science to:
- A) Wundt.
 - B) Helmholtz.
 - C) Watson.
 - D) Titchener.
34. The first laboratory devoted exclusively to psychology as an independent field of study opened in:
- A) Paris in 1859.
 - B) Leipzig in 1879.
 - C) Berlin in 1889.
 - D) Cornell University in 1909.
35. Wundt believed that scientific psychology should focus on analyzing the basic elements comprising consciousness, an approach he called:
- A) functionalism.
 - B) psychoanalysis.
 - C) structuralism.
 - D) dualism.

36. The analysis of the basic elements that constitute the mind is:
- A) psychoanalysis.
 - B) functionalism.
 - C) structuralism.
 - D) consciousness.
37. A person's subjective experience of the world and the mind is:
- A) empiricism.
 - B) dualism.
 - C) structuralism.
 - D) consciousness.
38. What technique did psychologists who studied structuralism use?
- A) conditioning
 - B) introspection
 - C) psychoanalysis
 - D) hypnosis
39. Presented with a stimulus, student observers in Wundt's lab were asked to report on their "raw" sensory experience, a technique known as:
- A) inspection.
 - B) circumsppection.
 - C) retrospection.
 - D) introspection.
40. A participant seated in an otherwise dark room stares at the flickering of a lit candle and reports on her subjective experiences, such as the visual experience of the candle flickering and the hepatic sensation of warmth. The psychologist conducting this experiment is most likely to be _____, and the method being used is _____.
- A) Wundt; psychoanalysis
 - B) Wundt; introspection
 - C) James; functionalism
 - D) Titchener; functionalism

41. In one experiment, Wundt instructed participants in one group to concentrate on perceiving a tone when it sounded before pressing a button. Participants in another group were simply instructed to press the button as soon as the tone sounded. Wundt found that participants in the first group responded slightly more slowly. This experiment was designed to distinguish between:
- A) the sensation and perception of a stimulus.
 - B) reaction time and accuracy.
 - C) the perception and interpretation of a stimulus.
 - D) the sensation of a stimulus and reaction time.
42. Which psychologist established the structuralism school of psychology in the United States?
- A) John Watson
 - B) Edward Titchener
 - C) G. Stanley Hall
 - D) William James
43. Edward Titchener is known for:
- A) establishing structuralism in the United States.
 - B) writing a devastating critique of the functionalist works of John Watson.
 - C) establishing the behaviorist concentration within psychology.
 - D) writing *Beyond Freedom and Dignity*.
44. Whereas Wundt was interested in the relationship between the elements of consciousness, Titchener was interested in identifying the:
- A) basic elements themselves.
 - B) functional value of those elements.
 - C) behavioral correlates of those elements.
 - D) cross-cultural differences in those elemental relationships.
45. The unpredictable nature of results from introspection contributed to the decline of:
- A) empiricism.
 - B) functionalism.
 - C) humanism.
 - D) structuralism.

46. The major reason why structuralism ultimately failed as a school of psychology was that:
- A) by associating itself with Darwin it drew harsh criticism from some religious authorities.
 - B) there was no evidence suggesting that Freud's theories were accurate.
 - C) the methods used by structuralists did not produce replicable observations.
 - D) it denied the existence of the mind.
47. William James was a noted:
- A) structuralist.
 - B) behaviorist.
 - C) functionalist.
 - D) empiricist.
48. The study of the purpose mental processes serve in enabling us to adapt to our environment is called:
- A) structuralism.
 - B) social Darwinism.
 - C) functionalism.
 - D) behaviorism.
49. William James is to _____ as Wilhelm Wundt is to _____.
- A) functionalism; behaviorism
 - B) functionalism; structuralism
 - C) structuralism; behaviorism
 - D) structuralism; functionalism
50. Which school of psychology was most concerned with the adaptive importance of mental processes?
- A) structuralism
 - B) functionalism
 - C) behaviorism
 - D) empiricism
51. William James's school of functionalism was most influenced by the works of:
- A) B. F. Skinner.
 - B) Wilhelm Wundt.
 - C) Charles Darwin.
 - D) René Descartes.

52. William James viewed consciousness as similar to:
- A) a flowing stream.
 - B) the parts of an atom.
 - C) an explanatory fiction.
 - D) the parts of a clock.
53. The functionalist approach was MOST influenced by the theory of:
- A) phrenology.
 - B) nativism.
 - C) natural selection.
 - D) psychodynamics.
54. Research participants are asked to rotate a three-dimensional object in their minds. William James would be MOST interested in which research question?
- A) What are the subjective experiences of the participants as they do this task?
 - B) In what ways does the ability to manipulate objects in the mind aid problem solving in the real world?
 - C) At what age does this ability develop?
 - D) What are the unconscious processes underlying this task?
55. Studies have demonstrated that we attend to only a fraction of the sensory information that the brain receives. Based on this information, William James would be MOST interested in which research question?
- A) What are the basic elements of sensory information?
 - B) Do unattended sensory experiences exist in the unconscious?
 - C) Will more information be perceived if participants are reinforced by cash incentives for better attention?
 - D) Why might it be advantageous for the mind to filter out most sensory information?
56. Wundt argued that James's approach to psychology was flawed because James:
- A) relied too much on introspection as a research method.
 - B) did not conduct much laboratory research.
 - C) unnecessarily constrained his research to observable behavior.
 - D) advocated a theory inconsistent with the tenets of natural selection.
57. G. Stanley Hall is to _____ as _____ is to Wilhelm Wundt.
- A) William James; Charles Darwin
 - B) William James; Edward Titchener
 - C) Edward Titchener; Charles Darwin
 - D) Hermann von Helmholtz; William James

58. Who opened the first psychological laboratory in North America?
- A) G. Stanley Hall
 - B) William James
 - C) John Watson
 - D) Wilhelm Wundt
59. G. Stanley Hall is known for his contributions in the research areas of:
- A) language and memory.
 - B) sensation and perception.
 - C) development and education.
 - D) reinforcement and punishment.
60. Which accomplishment was G. Stanley Hall NOT the first to achieve?
- A) Open a psychological laboratory in the United States.
 - B) Establish an empirical journal devoted to publishing psychological research.
 - C) Establish a professional association for psychologists.
 - D) Measure the speed of a nervous impulse.
61. In the late 1800s, a temporary loss of cognitive or motor function, usually as a result of emotionally upsetting experiences, was termed:
- A) agoraphobia.
 - B) hysteria.
 - C) neurosis.
 - D) generalized anxiety.
62. In the late 1800s, Charcot and Janet noted that symptoms of hysteria were eliminated when patients:
- A) were paid for not exhibiting those symptoms.
 - B) received electroconvulsive shock therapy.
 - C) were hypnotized.
 - D) introspected on the causes of their hysteria.
63. Freud emphasized that the problems of many patients could be traced to:
- A) effects of painful childhood experiences that could not be remembered.
 - B) "mind bugs," or curious failures of otherwise adaptive cognitive processes.
 - C) feelings of shame and inadequacy acquired during adolescent sexual development.
 - D) maladaptive patterns of behavior that could be observed during infancy.

64. Sigmund Freud is to Edward Titchener as _____ is(are) to _____.
A) the elements of the unconscious; the elements of consciousness
B) psychoanalysis; behaviorism
C) empiricism; structuralism
D) structuralism; functionalism
65. Freud termed the _____ as the part of the mind that operates outside of conscious awareness but influences conscious thoughts, feelings, and actions.
A) preconscious
B) unconscious
C) self-conscious
D) subconscious
66. The theory that emphasizes the importance of unconscious mental processes in shaping feelings, thoughts, and behaviors is called:
A) Gestalt theory.
B) structuralism.
C) functionalism.
D) psychoanalytic theory.
67. Carrie is working with a patient to uncover the patient's early experiences as well as trying to bring unconscious anxieties and conflicts into awareness. Carrie is using which approach to work with her patient?
A) cognitive
B) psychoanalytical
C) Gestalt
D) humanistic
68. Psychoanalysis focuses on:
A) the adaptability of certain psychological disorders.
B) deconstructing consciousness into its component parts.
C) bringing unconscious material into conscious awareness.
D) ways to banish anxiety into the unconscious.
69. Which psychologist was NOT part of the psychoanalytic movement?
A) Sigmund Freud
B) Alfred Adler
C) Carl Jung
D) Carl Rogers

70. Psychoanalysis became quite controversial in American culture because it:
- A) proposed that behavior was governed, in part, by unconscious sexual desires.
 - B) lacked empirical support for its effectiveness.
 - C) denied the existence of the mind and human free will.
 - D) focused only on observable behavior and ignored the role of cognition.
71. Within psychology, psychoanalysis had its greatest influence on:
- A) cognitive psychology.
 - B) clinical practice.
 - C) developmental psychology.
 - D) social psychology.
72. Which statement is NOT a reason why psychoanalysis gradually lost influence within psychology?
- A) It failed to advance from a theory to a clinical practice.
 - B) Its themes of unconscious sexual motivations were too risqué for scientific discussion.
 - C) Freud's theories were difficult to test.
 - D) There was a rise of humanistic psychologists who opposed Freud's pessimistic view of humanity.
73. Freud's view of human nature was largely _____, whereas the view of humanistic psychologists was largely _____.
- A) objective; subjective
 - B) optimistic; pessimistic
 - C) negative; positive
 - D) positive; negative
74. A psychological approach that stressed a person's potential for positive growth was developed by:
- A) Freud and Jung.
 - B) Skinner and Watson.
 - C) Rogers and Maslow.
 - D) Gall and Broca.

75. The branch of psychology that emphasizes the positive potential of human beings is called:
- A) humanistic.
 - B) Gestalt.
 - C) cognitive.
 - D) idealistic.
76. Mariah is a teacher and believes that all her students have an inherent need to develop, grow, and reach their full potential. Mariah's beliefs are best characterized by which approach?
- A) social-cultural
 - B) behaviorism
 - C) psychoanalysis
 - D) humanistic
77. The term “patient” is to psychoanalysis as the term “client” is to:
- A) cognition.
 - B) behaviorism.
 - C) humanism.
 - D) functionalism.
78. An approach that advocates that psychologists restrict themselves to the scientific study of objectively observable behavior is called:
- A) objectivism.
 - B) behaviorism.
 - C) absolutism.
 - D) relativism.
79. _____ is described as the scientific study of objectively observable behavior.
- A) Functionalism
 - B) Structuralism
 - C) Behaviorism
 - D) Psychoanalysis
80. In terms of its subject matter for analysis, which school of psychology most differs from the others?
- A) structuralism
 - B) functionalism
 - C) psychoanalysis
 - D) behaviorism

81. "You don't know what she thinks, but you know how she acts." This statement characterizes which approach?
- A) psychoanalysis
 - B) humanism
 - C) behaviorism
 - D) Gestalt
82. William James is to _____ as John Watson is to _____.
- A) functionalism; behaviorism
 - B) functionalism; structuralism
 - C) structuralism; behaviorism
 - D) structuralism; functionalism
83. Watson criticized the introspective methods of the structuralists and functionalists primarily because:
- A) the use of these methods necessitated a belief in the existence of mental events.
 - B) introspection cannot produce replicable and objective measures required by science.
 - C) the stimulus-response introspective model was overly simplistic.
 - D) reaction time was an unreliable dependent measure.
84. "The goal of scientific psychology should be to predict and control behavior that benefits society." This statement is associated with which psychologist?
- A) Freud
 - B) Washburn
 - C) Watson
 - D) Rogers
85. According to John Watson, the goal of a scientific psychology was to:
- A) predict and control behavior.
 - B) understand both the structure and function of consciousness.
 - C) determine the neural mechanisms underlying behavior and thought.
 - D) ease psychological distress and help people reach their fullest potential.
86. Who was the first woman to receive a PhD degree in psychology?
- A) Rosalie Rayner
 - B) Anna Freud
 - C) Margaret Floy Washburn
 - D) Mary Whiton Calkins

87. The work of animal behavior specialist Margaret Washburn was:
- A) warmly received by John Watson for thoroughly describing animals' perceptual and memory processes.
 - B) critical to the development of the theories of B. F. Skinner.
 - C) instrumental to Ivan Pavlov's research on conditioning.
 - D) intellectually attacked by John Watson for ascribing conscious mental experiences to animals.
88. Ivan Pavlov, a Russian physiologist, is best known for his experiments:
- A) conditioning a salivation response in dogs to environmental stimuli.
 - B) measuring the speed at which a bell can be perceived in a dog's auditory cortex.
 - C) demonstrating the effectiveness of positive reinforcement in dogs.
 - D) investigating salivation in dogs when the olfactory bulb is surgically removed.
89. In Pavlov's research, a tone was sounded prior to delivering food to hungry dogs. After a number of trials, what did Pavlov notice?
- A) The dogs salivated prior to the tone being sounded.
 - B) The dogs salivated to the sound of the tone alone.
 - C) The dogs salivated only after the food was presented.
 - D) The dogs began doing spontaneous tricks as soon as the tone sounded.
90. In Pavlov's research, the sound of a tone was a _____ for salivating.
- A) stimulus
 - B) response
 - C) construal
 - D) reinforcer
91. In Pavlov's research, dogs' salivation is an example of a:
- A) stimulus
 - B) response
 - C) construal of a stimulus
 - D) reinforcer
92. If you are having trouble finding your cat, you may try shaking the can that contains its treats. The sound of the treats as you shake the can would be a:
- A) response.
 - B) stimulus.
 - C) stimulus–response relation.
 - D) reinforcer.

93. The behaviorism of John Watson has been described as _____ psychology.
- A) animal
 - B) stimulus–response
 - C) subjective
 - D) humanistic
94. Response is to stimulus as the:
- A) firing of a gun at the start of the race is to running.
 - B) scurrying of a white rat at his feet is to fear in Little Albert.
 - C) pressing of the brakes is to a red traffic light.
 - D) ringing of the alarm clock is to rolling out of bed.
95. Who conditioned a fear of a harmless white rat in “Little Albert”?
- A) Ivan Pavlov
 - B) Sigmund Freud
 - C) B. F. Skinner
 - D) John Watson
96. Every time friendly dogs approach her toddler at the park, a very overprotective parent whisks her son away and yells “Stay away from the dog!” After a few of these experiences, the toddler starts crying at the mere sight of dogs. The parent has unknowingly replicated the classic research of which psychologist?
- A) Ivan Pavlov
 - B) Margaret Floy Washburn
 - C) B. F. Skinner
 - D) John Watson
97. Which statement about John Watson is correct?
- A) He completely denied the existence of mental events.
 - B) He denied that genetic factors influence behavior.
 - C) He believed that environmental factors were the most important influences on behavior.
 - D) He believed that nature was more important than nurture in determining behavior.
98. William James is to _____ as John Watson is to _____.
- A) Charles Darwin; Ivan Pavlov
 - B) Wilhelm Wundt; B. F. Skinner
 - C) Edward Titchener; Rosalie Rayner
 - D) B. F. Skinner; Margaret Floy Washburn

99. Leslie thinks that we learn to act in certain ways because of the consequences of our behavior. Her belief is probably influenced by the findings of:
- A) William James.
 - B) Sigmund Freud.
 - C) B. F. Skinner.
 - D) Abraham Maslow.
100. The behavior studied by Ivan Pavlov can be described as ____; whereas the behavior studied by B. F. Skinner can be described as ____.
- A) passive; active
 - B) purposeful; controllable
 - C) subjective; objective
 - D) reinforced; triggered
101. Who invented a conditioning chamber in which rats pressed levers to earn food rewards?
- A) Ivan Pavlov
 - B) B. F. Skinner
 - C) John Watson
 - D) G. Stanley Hall
102. A husband and wife observe a toddler throwing a temper tantrum at a toy store. The husband comments under his breath, "What an annoying little beast!" His wife, noticing that the mother of the toddler just gave the boy a toy to calm him down, states "It's not his fault. He's behaving exactly as ____ would predict."
- A) William James
 - B) B. F. Skinner
 - C) Ivan Pavlov
 - D) John Watson
103. When 4-year-old Isabel hears the sound of the ice cream truck's music, she runs outside in hopes of getting another ice cream bar. The ice cream bar is a ____ running outside when she hears the music.
- A) response to
 - B) stimulus eliciting
 - C) reinforcement for
 - D) construal triggering

104. Sandy's children would accidentally drop pieces of food under the table during family dinners, so Sandy's dog, Lola, learned to sit under the dinner table as a good place to receive food. Lola's behavior has been influenced by:
- A) consciousness.
 - B) reinforcement.
 - C) punishment.
 - D) reaction time.
105. Which scenario represents the principle of reinforcement?
- A) doing the same thing over and over again regardless of the consequences
 - B) blinking when a particle lands in your eye
 - C) studying hard because it results in good grades
 - D) introspecting about a pleasurable experience in your life
106. John Watson was interested in how _____ behavior and B. F. Skinner focused on how _____ control behavior.
- A) reinforcers strengthen; free will
 - B) emotions trigger; reinforcers
 - C) stimuli produce; mental processes
 - D) stimuli elicit; consequences
107. In his best-selling book, *Beyond Freedom and Dignity*, _____ argued that behavior is determined by its consequences and that free will is an illusion.
- A) Abraham Maslow
 - B) B. F. Skinner
 - C) Ivan Pavlov
 - D) Carl Rogers
108. In his best-selling book, *Beyond Freedom and Dignity*, B. F. Skinner argued that behavior is:
- A) an outcome of the innate capacity of persons to choose freely.
 - B) partly the result of a limited free will that has evolved as a result of natural selection.
 - C) completely determined by genetic factors and free will is an illusion.
 - D) determined largely by its consequences and free will is an illusion.

109. Beginning in the 1950s, behaviorism began to receive intense criticism. Which statement is NOT one of the criticisms against behaviorism?
- A) It ignores the mental processes underlying behavior.
 - B) It uses subjective measures in its research.
 - C) It ignores the role of evolutionary history on behavior.
 - D) It presents an inadequate account of language development.
110. Errors of perception, memory, or judgment in which subjective experience differs from objective reality are called:
- A) memory lapses.
 - B) Gestalts.
 - C) Freudian slips.
 - D) illusions.
111. When you go to a movie theater that uses film projection, you might see the fast movement of a superhero flying through the air. What you are really seeing is a series of still photographs flashed quickly onto the screen. What area of psychology studied this phenomenon?
- A) structuralism
 - B) Gestalt
 - C) functionalism
 - D) behaviorism
112. Gestalt psychologists used _____ to show how perception of a whole object or scene can influence judgments about its individual elements.
- A) illusions
 - B) visual hallucinations
 - C) reinforcement
 - D) dream analysis
113. _____ pioneered the Gestalt psychology movement.
- A) Max Wertheimer
 - B) Frederic Bartlett
 - C) Kurt Lewin
 - D) Hermann Ebbinghaus

114. Gestalt psychologists believed that:
- A) visual illusions are caused by faulty thinking.
 - B) the whole is greater than the sum of its parts.
 - C) images are produced in different parts of the brain.
 - D) hallucinations are the result of a chemical imbalance in the brain.
115. Through research on visual illusions, Gestalt psychologists demonstrated that:
- A) visual illusions can be used as screens for psychological disorders.
 - B) visual illusions allow access to the unconscious mind.
 - C) the mind imposes organization on what it perceives.
 - D) the mind often fails to perceive a unified whole from a disjointed image.
116. Hermann Ebbinghaus is best known for research involving:
- A) interpreting the flashing light illusion.
 - B) memorizing nonsense syllables.
 - C) inventing a conditioning chamber.
 - D) examining cognitive errors in children.
117. Frederic Bartlett differed from Hermann Ebbinghaus in that Bartlett believed that:
- A) memory is an unobservable construct that cannot be empirically studied.
 - B) memory operates like a photographic reproduction of past experience.
 - C) nonsense syllables should be used in memory research to control for previous learning.
 - D) memory studies should involve information that people encounter in everyday life.
118. Dee and Soleila watch a YouTube clip of “Mrs. Memory” reciting pi for thousands of digits. Dee is impressed but Soleila wonders if Mrs. Memory can remember what her husband asked her to purchase at the grocery store. Soleila's concern echoes _____ critique of the research of _____.
- A) Noam Chomsky's; B. F. Skinner
 - B) John Watson's; William James
 - C) Frederic Bartlett's; Hermann Ebbinghaus
 - D) Kurt Lewin's; B. F. Skinner
119. Frederic Bartlett's research on memory demonstrated that people tend to remember:
- A) what actually happened instead of what should have happened.
 - B) what should have happened instead of what actually happened.
 - C) nonsense syllables with more accuracy than meaningful words.
 - D) meaningful words with more accuracy than nonsense syllables.

120. A cognitive psychologist who studied the perceptual and cognitive errors of children in order to gain insight into the nature and development of the human mind was:
- A) Jean Piaget.
 - B) Frederic Bartlett.
 - C) Kurt Lewin.
 - D) Max Wertheimer.
121. A college student taking introductory psychology decides to test Piaget's theories of mental development on her 3-year-old brother who loves hot dogs and is very hungry. She shows him two hot dogs. Then, while he is watching, she breaks one of the hot dogs in half. She asks if he would like one hot dog (the intact hot dog) or two hot dogs (the hot dog cut in half). Consistent with Piaget's findings, the child:
- A) selects the intact hot dog.
 - B) selects the hot dog cut in half.
 - C) says she is silly because both are the same.
 - D) becomes confused and starts crying.
122. A college student taking introductory psychology decides to test Piaget's theories of mental development on his 10-year-old sister who loves hot dogs and is very hungry. He shows her two hot dogs. Then, while she is watching, he breaks one of the hot dogs in half. He asks if she would like one hot dog (the intact hot dog) or two hot dogs (the hot dog cut in half). Consistent with Piaget's findings, the girl probably will:
- A) select the intact hot dog.
 - B) select the hot dog cut in half.
 - C) state that both choices are the same.
 - D) become confused and have trouble deciding.
123. A cognitive psychologist who argued that it wasn't an environmental stimulus, but rather the subjective experience—or construal—of the stimulus that led to behavior, was:
- A) Karl Lashley.
 - B) John Watson.
 - C) Kurt Lewin.
 - D) Noam Chomsky.
124. A teacher praises a student for asking a good question. Which psychologist would state that the effect of praise on subsequent behavior depended on the student's subjective experience of it?
- A) B. F. Skinner
 - B) Kurt Lewin
 - C) Jean Piaget
 - D) Frederic Bartlett

125. Psychologist Kurt Lewin believed that stimulus–response psychology was too simplistic to predict human behavior. In his theories, he inserted which terms between stimulus and response?
- A) construal of the stimulus
 - B) structure of the stimulus
 - C) reinforcement by the stimulus
 - D) informational value of the stimulus
126. Psychologist Kurt Lewin used a special mathematical theory called _____ to model the subjective experiences of the mind.
- A) relativity
 - B) quantum theory
 - C) game theory
 - D) topology
127. The advent of _____ in the 1950s had an enormous conceptual impact on the development of cognitive psychology.
- A) statistical programming
 - B) television
 - C) conditioning chambers
 - D) computers
128. The scientific study of mental processes, including perception, thought, memory, and reasoning, is called:
- A) behavioral neuroscience.
 - B) physiology.
 - C) cognitive psychology.
 - D) mental psychology.
129. Which topic is LEAST likely to be studied by cognitive psychologists?
- A) attention
 - B) memory
 - C) decision making
 - D) conformity

130. In the early 1940s, the pressing need of the _____ for more research on attention, memory, and decision making was an early impetus behind the movement away from behaviorism.
- A) American Psychological Association
 - B) military
 - C) film industry
 - D) automobile industry
131. By studying pilots, Donald Broadbent investigated the:
- A) limited capacity of the mind to handle incoming information.
 - B) possibility of creating a computerized artificial intelligence.
 - C) effects of sleep deprivation on performance.
 - D) optical illusions that underlie airline accidents.
132. George Miller discovered that we can briefly hold in memory only about _____ (give or take two) pieces of information at any given time.
- A) three
 - B) five
 - C) seven
 - D) nine
133. In the 1950s, the advent of computers had an enormous influence on how psychologists conceptualized the mind. In this conceptualization, the brain was analogous to:
- A) computer hardware
 - B) computer software
 - C) an electrical source
 - D) programming language
134. In the 1950s, the advent of computers had an enormous influence on how psychologists conceptualized the mind. In this conceptualization, the mind was analogous to:
- A) computer hardware
 - B) computer software
 - C) an electrical source
 - D) data storage devices

135. Which linguist published a devastating critique of Skinner's theory of language development?
- A) George Miller
 - B) Noam Chomsky
 - C) Donald Broadbent
 - D) Ulric Neisser
136. According to Chomsky, which observation of language in children challenges a behavioral account?
- A) Children can generate new grammatically correct sentences.
 - B) Young children tend to repeat what they just heard.
 - C) If you give a child a cookie every time they say "please," they will say "please" more often.
 - D) Grammar rules are highly individualistic and the result of childhood learning experiences.
137. Who wrote the landmark book entitled *Cognitive Psychology* (1967)?
- A) George Miller
 - B) Noam Chomsky
 - C) Donald Broadbent
 - D) Ulric Neisser
138. The French physician Paul Broca discovered a brain region that was associated with the:
- A) production and understanding of speech.
 - B) production of speech.
 - C) understanding of speech.
 - D) ability to understand novel speech.
139. Jamie suffered a stroke and damaged her Broca's area. Jamie will have problems:
- A) reading out loud.
 - B) understanding the plot of her favorite television show.
 - C) remembering the names of her family members.
 - D) recognizing facial emotions.
140. Which early neuropsychologist trained rats to run mazes, surgically removed parts of their brains, and then measured how well they could run the maze again?
- A) Noam Chomsky
 - B) Karl Lashley
 - C) Jean Piaget
 - D) Paul Broca

141. After conducting repeated experiments in which he first trained rats to navigate a maze and then removed tiny sections of their brains to see if that brain region eliminated learning, Lashley reported that:
- A) learning the maze could be erased by removing a tiny section of Broca's area.
 - B) the memory of the maze was localized in the right hemisphere of the brain.
 - C) the memory of the maze was localized in the left hemisphere of the brain.
 - D) no one brain region seemed to uniquely and reliably eliminate maze learning.
142. Which approach to psychology links psychological processes to activities in the nervous system and other bodily processes?
- A) cognitive psychology
 - B) cognitive psychotherapy
 - C) behavioral neuroscience
 - D) evolutionary psychology
143. Research using scanning technology of the brain has demonstrated that when a person who has been deaf from birth learns American Sign Language at an early age, that person uses _____ hemisphere when communicating with American Sign Language.
- A) the left
 - B) the right
 - C) both the right and the left
 - D) neither the right nor the left
144. A field that attempts to understand the links between cognitive processes and brain activity is:
- A) cognitive neuroscience.
 - B) cognitive psychotherapy.
 - C) physiological psychology.
 - D) evolutionary psychology.
145. Research using scanning technology of the brain has demonstrated that _____ hemisphere of the brain is activated when a person who hears normally uses American Sign Language to communicate.
- A) the left
 - B) the right
 - C) both the right and the left
 - D) neither the right nor the left

146. Kerrie wants to understand how perceptions, beliefs, and memories activate different regions in the brain. Which field of psychology would you suggest Kerrie explore?
- A) cognitive psychology
 - B) structuralism
 - C) evolutionary psychology
 - D) cognitive neuroscience
147. Rats are more likely to form a smell-sickness association than a light-sickness association, demonstrating that rats have:
- A) rats have poor eyesight because they evolved under low-light conditions.
 - B) rats have evolved to not associate lights with smell.
 - C) learned some associations more easily than others because of natural selection.
 - D) rats have evolved to easily associate sickness with any stimulus in their environment.
148. _____ demonstrated that rats are more likely to form a smell-sickness association than a light-sickness association.
- A) Karl Lashley
 - B) John Garcia
 - C) E. O. Wilson
 - D) Charles Darwin
149. Kayla doesn't know it yet, but she has just contracted a stomach virus from her roommate, Beverly. Kayla puts on a new dress and goes on a first date with Jermaine, where they eat oysters. Later that night, Kayla becomes violently ill. Kayla is most likely to associate the sickness with:
- A) the oysters.
 - B) Beverly.
 - C) Jermaine.
 - D) her new dress.
150. What type of psychology explains mind and behavior in terms of the adaptive value of abilities that are preserved over time by natural selection?
- A) behaviorism
 - B) physiological psychology
 - C) evolutionary psychology
 - D) cognitive neuroscience

151. The psychological approach that emphasizes that the mind is a collection of specialized components that are designed to overcome problems that our ancestors faced over millions of years is:
- A) psychoanalysis.
 - B) existential psychology.
 - C) cultural psychology.
 - D) evolutionary psychology.
152. According to evolutionary psychology, jealousy:
- A) hindered reproduction in our ancestors through a decrease in “jealous genes.”
 - B) aided reproductive success in our ancestors.
 - C) facilitates reproductive success today.
 - D) hinders the ability to attract but facilitates the ability to keep a mate today.
153. Dr. O'Leary believes that most men prefer to choose young, healthy women for their life partners because so doing boosts their chances for producing healthy offspring. This outlook illustrates the _____ perspective.
- A) cultural
 - B) evolutionary
 - C) behavioral
 - D) developmental
154. How might an evolutionary psychologist explain the fact that people tend to enjoy high-fat foods?
- A) When food was scarce in our ancestral past, people who ate high-fat food tended to obtain the calories that they needed to survive and, ultimately, reproduce.
 - B) High-fat food activates areas in the brain corresponding to reward.
 - C) Over one's lifetime, many interpersonal relationships revolve around eating these “comfort” food items.
 - D) Although eating high-fat food resulted in great mortality rates among our ancestors, the availability of medication today allows people to consume larger amounts of high-fat food.
155. The study of the causes and consequences of sociality is called:
- A) cultural psychology.
 - B) cognitive psychology.
 - C) sociobiology.
 - D) social psychology.

156. Dr. Aguilera studies the influence of peer pressure on adolescents. Which area of psychology does her research BEST represent?
- A) cognitive psychology
 - B) social psychology
 - C) clinical psychology
 - D) cultural psychology
157. The birth of social psychology is credited to:
- A) E.O. Wilson.
 - B) Kurt Lewin.
 - C) Margaret Mead.
 - D) Norman Triplett.
158. Norman Triplett reported that children reeled in a fishing line:
- A) faster if other children were present.
 - B) faster if they were by themselves.
 - C) at different rates depending on their culture.
 - D) at different rates depending on their gender.
159. Lance notices that when he jogs with Cheryl, he runs faster than when he jogs by himself. Which psychological approach BEST explains this behavior?
- A) sports psychology
 - B) psychoanalysis
 - C) social psychology
 - D) evolutionary psychology
160. Which of these did NOT contribute to the development of social psychology in its early years?
- A) the invention of the computer
 - B) Gestalt psychology
 - C) the rise of Nazi Germany
 - D) the civil rights movement in the United States
161. Which type of research fits a social psychologist's interest?
- A) unconscious motives for behavior
 - B) stereotyping
 - C) which brain region is activated in vision
 - D) stages of sleep

162. Solomon Asch was a social psychologist whose research interests were shaped, in part, by the:
- A) American civil rights movement.
 - B) development of computers.
 - C) Holocaust.
 - D) theory of language development.
163. Gordon Allport was a social psychologist whose research interests on stereotyping were shaped, in large part, by:
- A) the American civil rights movement.
 - B) Gestalt psychology.
 - C) his experiences in Nazi Germany.
 - D) the emergence of cognitive neuroscience.
164. _____ developed a “field theory” that viewed social behavior as governed by forces both internal and external to the individual.
- A) Norman Triplett
 - B) Solomon Asch
 - C) Gordon Allport
 - D) Kurt Lewin
165. Gordon Allport proposed that prejudice was:
- A) primarily reinforced behavior.
 - B) the result of a perceptual error.
 - C) highly dependent upon culture.
 - D) highly dependent upon group size.
166. Values, traditions, and beliefs that are shared by a particular group of people are called:
- A) customs.
 - B) ceremonies.
 - C) culture.
 - D) backgrounds.
167. Which of these is LEAST likely to define a culture?
- A) age
 - B) nationality
 - C) sexual orientation
 - D) diversity

168. Brice travels to remote places and examines how the people live. He pays particular attention to their values and traditions. What type of psychologist is Brice?
- A) evolutionary
 - B) cultural
 - C) social
 - D) Gestalt
169. One of the first psychologists interested in the contributions of culture to psychology was:
- A) Karl Lashley.
 - B) Noam Chomsky.
 - C) B. F. Skinner.
 - D) Wilhelm Wundt.
170. Cultural psychology blossomed in the 1980s when psychologists began to communicate with:
- A) psychologists from different cultures.
 - B) economists.
 - C) anthropologists.
 - D) political scientists.
171. Cultural psychologists interested in the body mutilation and blood-letting rituals in mountainous tribes of New Guinea would be informed by independent research conducted by:
- A) political scientists.
 - B) anthropologists.
 - C) evolutionary psychologists.
 - D) behavioral economists.
172. Julie believes that the society in which one grows up does not have an impact on psychological issues. Which approach BEST fits her view?
- A) absolutism
 - B) behaviorism
 - C) humanistic
 - D) relativism

173. If you believe that the results of a study on conformity conducted on college students in the United States may differ considerably had the study taken place among older adults in Asia, you are thinking like a cultural:
- A) absolutist.
 - B) behaviorist.
 - C) functionalist.
 - D) relativist.
174. The belief that psychological phenomena are likely to vary considerably across cultures and should be viewed only in the context of a specific culture is in accordance with:
- A) absolutism.
 - B) evolutionary psychology.
 - C) humanistic psychology.
 - D) relativism.
175. Which statement about depression and culture is true?
- A) Depression primarily occurs in Western cultures.
 - B) Worthlessness is a symptom of depression common in most cultures.
 - C) Depressed people living in Eastern cultures are likely to report symptoms of fatigue.
 - D) Depressed people living in Western cultures are likely to report symptoms of fatigue.
176. Who was one of the seven psychologists to start the American Psychological Association?
- A) Karl Lashley
 - B) John Watson
 - C) Wilhelm Wundt
 - D) William James
177. The American Psychological Association was formed in:
- A) 1892, on the campus of Clark University.
 - B) 1939, at the beginning of World War II.
 - C) 1900, at the turn of the century.
 - D) 1855, in conjunction with Howard University's psychology club.

178. The American Psychological Association was formed at a meeting called by:
- A) Wilhelm Wundt.
 - B) G. Stanley Hall.
 - C) Sigmund Freud.
 - D) Edward Titchener.
179. The American Psychological Association was originally made up of academic psychologists; today nearly _____ percent of its members work in clinical and health-related settings.
- A) 90
 - B) 70
 - C) 40
 - D) 10
180. The Association for Psychological Science was formed:
- A) by cognitive psychologists rebelling against John Watson's behaviorism.
 - B) before the founding of the American Psychological Association.
 - C) when academic psychologists wanted an organization that focused on the needs of psychologists carrying out scientific research.
 - D) as a result of a union of the American Psychological Association and the European Psychological Association.
181. Compared to the typical APA member in 1910, the typical APA member in 2010 is more likely to be all of these EXCEPT a(n):
- A) academic researcher.
 - B) woman.
 - C) racial minority.
 - D) professional in health-related fields.
182. Although all 32 of the founding members of the American Psychological Association were White and male, today about half of all APA members are:
- A) Latino.
 - B) non-White.
 - C) African American.
 - D) female.

183. In which year did the first woman become president of the American Psychological Association?
- A) 1995
 - B) 1905
 - C) 2005
 - D) 1970
184. Who was the first female president of the American Psychological Association?
- A) Mary Whiton Calkins
 - B) Francis Cecil Sumner
 - C) Anna Freud
 - D) Margaret Floy Washburn
185. Today, over 70 percent of individuals receiving their PhDs in psychology are:
- A) white males.
 - B) males.
 - C) racial minorities.
 - D) females.
186. Who was the first African American to receive a PhD in psychology?
- A) Mary Whiton Calkins
 - B) Kenneth Clark
 - C) Francis Cecil Sumner
 - D) Margaret Floy Washburn
187. Who was the first non-White president of the American Psychological Association?
- A) Mary Whiton Calkins
 - B) Francis Cecil Sumner
 - C) Kenneth Clark
 - D) Mary Floy Washburn
188. In which year did the first non-White person become president of the American Psychological Association?
- A) 1995
 - B) 1905
 - C) 2005
 - D) 1970

189. _____ conducted research on the developmental effects of prejudice, discrimination, and segregation on children in the 1950s. The research was cited by the U.S. Supreme Court in its decision in the landmark *Brown v. Board of Education* case.
- A) Francis Sumner
 - B) Margaret Washburn
 - C) William James
 - D) Kenneth Clark
190. Kenneth Clark's research on prejudice, discrimination, and segregation was fundamental in which Supreme Court ruling?
- A) *Stewart v. Board of Education*
 - B) *Brown v. Board of Education*
 - C) *Roe v. Wade*
 - D) *NAACP v. Board of Education*
191. What is the difference between a clinical psychologist and a psychiatrist?
- A) A clinical psychologist can only work in schools.
 - B) A psychiatrist is a medical doctor, whereas a clinical psychologist is a PhD.
 - C) Only a clinical psychologist can prescribe medication.
 - D) A psychiatrist goes to graduate school for years longer than a clinical psychologist.
192. Karen received a PhD in psychology and now treats psychological disorders. Which type of psychologist is Karen?
- A) clinical
 - B) research
 - C) social
 - D) academic
193. Cliff's therapist prescribes Xanax to treat his anxiety. Cliff's therapist is probably a:
- A) counseling psychologist.
 - B) clinical psychologist.
 - C) psychiatrist.
 - D) health psychologist.
194. Gary, a 16-year-old, is suffering from severe depression. Of these professionals, Gary should receive treatment from a:
- A) counseling psychologist.
 - B) clinical psychologist.
 - C) school psychologist.
 - D) health psychologist.

195. Psychologists work in a wide variety of settings, but the largest percentage work in:
- A) business.
 - B) clinical settings.
 - C) academia.
 - D) governmental agencies.
196. Which mental health professionals assist people in dealing with work/career issues, life changes, and common crises?
- A) social psychologists
 - B) industrial/organizational psychologists
 - C) counseling psychologists
 - D) health psychologists
197. As an elementary school student, Dan met with a psychologist at school who helped him with speech and reading. Which type of psychologist did Dan see?
- A) clinical psychologist
 - B) industrial/organizational psychologist
 - C) school psychologist
 - D) health psychologist
198. Jeff thinks it would be beneficial for his employees to attend a seminar on how to become more productive at work. Which type of psychologist would conduct this seminar?
- A) clinical psychologist
 - B) industrial/organizational psychologist
 - C) school psychologist
 - D) cognitive psychologist
199. Liz is the CEO of a major company. Liz is fearful of how her employees are going to react to the company's downsizing and reorganization. She decides to contact a(n) _____ psychologist to help her employees.
- A) industrial/organizational
 - B) clinical
 - C) school
 - D) health

200. In an article entitled “Mapping the Backbone of Science,” Kevin Boyack and his colleagues (2005) characterized psychology as a(n) _____ science.
- A) basic
 - B) applied
 - C) hub
 - D) health
201. In an article entitled “Mapping the Backbone of Science,” Kevin Boyack and his colleagues (2005) identified how many hub sciences?
- A) 3
 - B) 7
 - C) 12
 - D) 20
202. Which of these is NOT a hub science as identified by Kevin Boyack and his colleagues (2005) in their article “Mapping the Backbone of Science”?
- A) neuroscience
 - B) psychology
 - C) chemistry
 - D) physics
203. The defining feature of a “hub science” is a science that:
- A) focuses mainly on laboratory research.
 - B) receives a large amount of federal grant funds.
 - C) links with and influences smaller subfields.
 - D) grants doctoral degrees.

Answer Key

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

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

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

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

- 183. B
- 184. A
- 185. D
- 186. C
- 187. C
- 188. D
- 189. D
- 190. B
- 191. B
- 192. A
- 193. C
- 194. B
- 195. B
- 196. C
- 197. C
- 198. B
- 199. A
- 200. C
- 201. B
- 202. A
- 203. C

Use the following to answer questions 1-6:

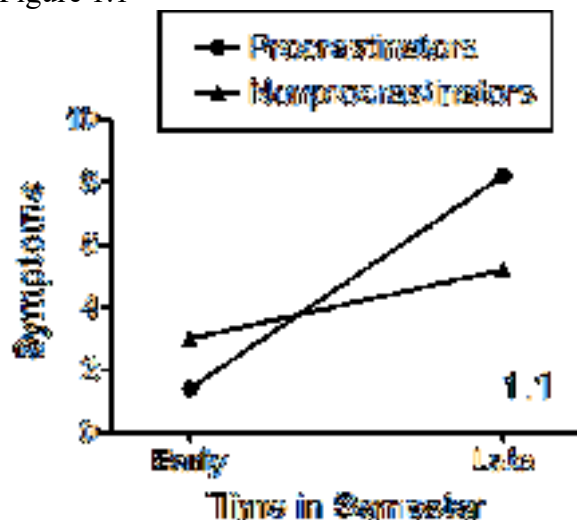
Scenario I

Scenario I is based on and presents fabricated data consistent with the following study:

Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8(6), 454–458. doi:10.1111/j.1467-9280.1997.tb00460.x

Tice and Baumeister (1997) studied the relationship between procrastination and symptoms of physical illness in college students during an academic semester. Participants completed a questionnaire measuring procrastination. From this, they were classified as either procrastinators or nonprocrastinators. All participants also were instructed to record the number of negative health symptoms that they experienced during the first (early) and last (late) month of the semester. Figure 1.1 shows the major results of the study.

Figure 1.1



1. (Scenario I) Which statement is true?
- A) Procrastinators reported more symptoms than nonprocrastinators at both time points.
 - B) The end of the semester was associated with more symptoms than the beginning for both procrastinators and nonprocrastinators.
 - C) Procrastination appears to negatively affect health as early as the first month of the semester.
 - D) The beginning of the semester was the most likely time that nonprocrastinators became ill.

2. (Scenario I) Which benefit of procrastination is supported by the results shown in Figure 1.1?
- A) If all instances of illness are considered over the course of the entire semester, procrastinators would have fewer symptoms of physical illness than nonprocrastinators.
 - B) Procrastinators appear to have studied harder than nonprocrastinators later in the semester and, thus, may have performed better on final examinations.
 - C) There may be health benefits to procrastinating when assignment due dates are not soon.
 - D) Procrastinators have no increased risk of negative health symptoms at any time point, and experience savings in work, relative to nonprocrastinators.
3. (Scenario I) A defender of procrastination argues that while it is true that procrastinators suffer in terms of physical illness later in the semester, because this period of suffering is limited to a very brief period of time, overall they suffer less than nonprocrastinators. How could the study described in Scenario I be altered to test this claim?
- A) For both groups, all instances of adverse health symptoms should be recorded for the entire semester.
 - B) The study should be replicated almost exactly with the exception that participants should be randomly assigned to groups.
 - C) The study should consider only serious instances of physical illness, such as hospitalizations.
 - D) The experiment described in Scenario I actually tested this claim and the results shown in Figure 1.1 clearly refute it.
4. (Scenario I) William James might have been MOST interested in which question about procrastination?
- A) Does the number of people in a class affect individuals' decisions to procrastinate on an assignment?
 - B) Can a procrastinator be taught to not procrastinate by harsh late penalties on assignments?
 - C) What areas of the brain become active when a person consciously decides to procrastinate?
 - D) In what way does procrastination reflect an adaptive mental process?
5. (Scenario I) The claim that students tend to procrastinate because most of the time there are no negative consequences for doing so is consistent with the school of psychology developed by:
- A) Sigmund Freud.
 - B) E. O. Wilson.
 - C) B. F. Skinner.
 - D) Wilhelm Wundt.

6. (Scenario I) Which type of psychologist would be LEAST likely to study the adverse effects of procrastination on overall health and academic performance?
- A) clinical
 - B) health
 - C) school/educational
 - D) cognitive

Use the following to answer questions 7-12:

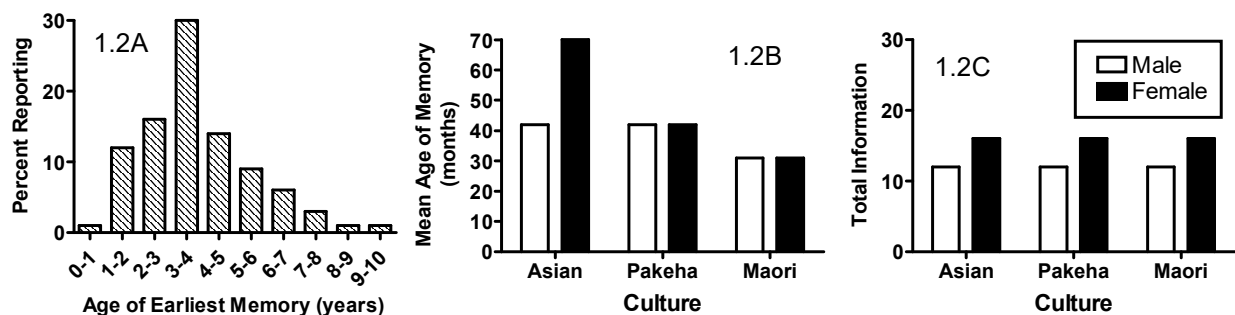
Scenario II

Scenario II is based on and presents fabricated data consistent with the following study:

MacDonald, S., Uesiliana, K., & Hayne, H. (2000). Cross-cultural and gender differences in childhood amnesia. *Memory*, 8(6), 365–376. doi:10.1080/09658210050156822

MacDonald and colleagues (2000) investigated cultural and gender influences on the age and quality of first childhood memories. Specifically, they interviewed males and females from three cultures—Asian, Pakeha, and Maori—and asked them to describe their earliest childhood memory in as much detail as possible. The researchers recorded the age of the earliest memory and also quantified the total amount of information given in the memory description. Figure 1.2A shows the number of participants reporting their first memory as a function of age not separated by gender or culture. Figure 1.2B shows the mean age of the first memory as a function of gender and culture, and Figure 1.2C shows the mean total information present in that memory as a function of gender and culture.

Figure 1.2A (left), Figure 1.2B (middle), and 1.2C (right)



7. (Scenario II) A psychologist is interested in whether cultural factors affect the composition of memories. She instructs participants to deconstruct each piece of information from their earliest memory into its visual and auditory elemental parts, such as perceptions of brightness and loudness. This research program is most consistent with that developed by:
- A) William James.
 - B) Wilhelm Wundt.
 - C) B. F. Skinner.
 - D) Jean Piaget.
8. (Scenario II) A cognitive neuroscientist argues that the age of first memory is determined largely by brain development. Which of these findings is consistent with the results in Figures 1.2A–C and would MOST support this claim?
- A) Females had earlier first memories than males.
 - B) Age of first memory was positively correlated with the amount of information associated with that memory.
 - C) The percentage of people reporting that their first memory increased from ages 0 to 4.
 - D) Age of first memory was a decreasing function of the amount of information associated with that memory.
9. (Scenario II) Which finding is consistent with the results shown in Figures 1.2A–C and constitutes the BEST evidence that cultural variables influence first memories?
- A) For all three cultures, females recalled more information than males about their first memories.
 - B) For all three cultures, the most common age of earliest memory was between 3 and 4 years.
 - C) Asian males had earlier first memories than Pakeha males.
 - D) Participants from the Maori culture had earlier memories than those from the other two cultures.
10. (Scenario II) Someone who reads this study and concludes that females have more accurate childhood memories than males is:
- A) making a mistake because the study did not investigate this issue.
 - B) making a mistake because gender differences in memory accuracy were not found in all cultures.
 - C) reaching a reasonable conclusion given the results in Figure 1.2C.
 - D) reaching a reasonable conclusion only if the conclusion is limited to the Maori culture.

11. (Scenario II) A participant reports that his or her first memory is from the age of 6. In the absence of any other information, the BEST conclusion that can be reached is:
- A) the person is more likely to be male than female.
 - B) the person is more likely to be Maori than Pakeha.
 - C) of the six combinations of gender and culture, the person is most likely to be an Asian female.
 - D) of the six combinations of gender and culture, the person is most likely to be a Maori female.
12. (Scenario II) Which type of psychologists would be LEAST likely to investigate why gender differences in age of first memory are observed only in Asian cultures?
- A) social
 - B) cognitive
 - C) developmental
 - D) evolutionary

Answer Key

1. B
2. C
3. A
4. D
5. C
6. A
7. B
8. C
9. D
10. A
11. C
12. D

1. Psychology is universally defined as the scientific study of observable behavior.
A) True
B) False
2. Today, most psychologists believe that the mind and brain are separate physical entities.
A) True
B) False
3. Today, most psychologists believe that the mind is what the brain does.
A) True
B) False
4. As one progresses from novice to expert at playing the piano, the brain areas controlling finger movement become less active while playing.
A) True
B) False
5. Experiencing emotion usually interferes with the ability to engage in adaptive behavior.
A) True
B) False
6. The Greek philosopher most associated with philosophical empiricism is Aristotle.
A) True
B) False
7. Philosophical empiricists believe that certain knowledge is innate.
A) True
B) False
8. Plato believed that certain types of knowledge are innate or inborn.
A) True
B) False
9. The classical Greek philosophers tested their theories using the scientific method.
A) True
B) False

10. René Descartes believed that the brain and the mind are fundamentally the same thing.
A) True
B) False
11. Franz Joseph Gall asserted that the size of bumps or indentations on the skull reflected the size of the brain regions beneath and thus indicated personality traits.
A) True
B) False
12. Broca's research was consistent with Hobbes' philosophical position that mental processes were grounded in the brain.
A) True
B) False
13. Broca's research was consistent with Descartes' philosophical position that mental processes were grounded in the brain.
A) True
B) False
14. Wilhelm Wundt first used reaction time to measure the speed of a nervous impulse.
A) True
B) False
15. Wilhelm Wundt opened the first psychology laboratory in Leipzig in 1879.
A) True
B) False
16. Helmholtz developed introspection as a tool for understanding the structure of consciousness.
A) True
B) False
17. Introspection as a scientific method failed because it did not generate replicable observations.
A) True
B) False

18. Functionalists depended on introspection to study subjective observations of personal experience.
A) True
B) False
19. Wilhelm Wundt believed that consciousness could be broken down into its component parts.
A) True
B) False
20. Wilhelm Wundt was most interested in how consciousness is an adaptive feature of the human existence.
A) True
B) False
21. William James brought Wundt's structuralist school of psychology to the United States.
A) True
B) False
22. Wilhelm Wundt opened an early psychology laboratory in the United States at Cornell University.
A) True
B) False
23. The structuralist approach gradually faded, mostly because of the inadequacies of psychoanalysis.
A) True
B) False
24. The work of William James was largely influenced by Darwin's theory of natural selection.
A) True
B) False
25. Functionalists focused their attention on the adaptive features of observable behavior.
A) True
B) False

26. William James did not believe that consciousness could be broken down into basic elements.
A) True
B) False
27. Functionalism was the dominant school of psychology from the 1890s until the advent of the computer in the 1950s.
A) True
B) False
28. G. Stanley Hall established the first psychological laboratory in the United States.
A) True
B) False
29. Charcot used hypnosis to treat patients with hysteria.
A) True
B) False
30. Freud believed that unconscious mental processes shape feelings, thoughts, and behaviors.
A) True
B) False
31. Psychoanalysis emphasizes the function of conscious mental processes that occur during sexual experiences.
A) True
B) False
32. The goal of psychoanalysis is to banish unwanted feelings and memories into the unconscious.
A) True
B) False
33. The greatest contribution of psychoanalysis was the research in experimental psychology that it generated.
A) True
B) False

34. Freud's theories have proven difficult to test.
A) True
B) False
35. Maslow and Rogers are regarded as being more optimistic about the human condition than Freud.
A) True
B) False
36. Humanistic psychologists called people in treatment “patients” to emphasize the biological nature of psychological disorders.
A) True
B) False
37. Behaviorism focused on the scientific study of objectively observable behavior.
A) True
B) False
38. Behavioral measures typically are more subjective than introspective measures.
A) True
B) False
39. Behaviorists define psychology as the scientific study of mental processes and behavior.
A) True
B) False
40. Behaviorists deny the existence of all mental processes, such as thinking and consciousness.
A) True
B) False
41. Behaviorists believe that the behavior of nonhuman animals—not human behavior—is the proper subject matter of psychology.
A) True
B) False

42. Margaret Floy Washburn was an early female behaviorist who denied the existence of animal minds.
A) True
B) False
43. The founder of behaviorism was William James.
A) True
B) False
44. John Watson was largely influenced by the work of Ivan Pavlov.
A) True
B) False
45. John Watson taught “Little Albert” to fear a harmless white rat.
A) True
B) False
46. John Watson believed that fears were largely innate and the result of our evolutionary history.
A) True
B) False
47. John Watson can be labeled a response–stimulus (R–S) psychologist.
A) True
B) False
48. John Watson developed the concept of reinforcement with rats pressing levers for food.
A) True
B) False
49. B. F. Skinner focused on the consequences of behavior as determinants of whether or not it would reoccur.
A) True
B) False

50. If a behavior is reinforced, it is more likely to occur again.
A) True
B) False
51. To test his theories, B. F. Skinner raised his daughter in a conditioning chamber, or "Skinner Box."
A) True
B) False
52. B. F. Skinner believed that humans did not have free will.
A) True
B) False
53. B. F. Skinner was a communist who strongly advocated that governments should strip individuals of their personal freedoms.
A) True
B) False
54. Gestalt psychology was a Russian movement influenced by the work of Ivan Pavlov.
A) True
B) False
55. Gestalt psychologists believed that the mind imposes organization on what it perceives.
A) True
B) False
56. The Gestaltists' view was diametrically opposed to the functionalists' claim that experience can be broken down into separate elements.
A) True
B) False
57. Gestalt psychologists believed that the entirety of a perceptual experience can be greater than the sum of its component parts.
A) True
B) False

58. In his classic studies on memory, Hermann Ebbinghaus demonstrated that meaningful information is easily forgotten.
A) True
B) False
59. Frederic Bartlett demonstrated that our expectancies play a large role in the accuracy of our memories.
A) True
B) False
60. Frederic Bartlett conceptualized memory as a photographic representation of a past experience.
A) True
B) False
61. Jean Piaget studied the perceptual and cognitive errors of children in order to understand the development of the human mind.
A) True
B) False
62. Jean Piaget demonstrated that even toddlers grasp the concept that the mass of an object remains constant even if it is divided.
A) True
B) False
63. The advent of computers led, in part, to the rise of cognitive psychology.
A) True
B) False
64. George Miller demonstrated that we can briefly hold only about 12 pieces of information in memory at any given moment.
A) True
B) False
65. With the advent of computers, cognitive psychologists began conceptualizing the mind as hardware and the brain as software.
A) True
B) False

66. Noam Chomsky was an outspoken supporter of B. F. Skinner's theory of language.
A) True
B) False
67. By studying how accurately rats could run mazes before and after surgery that removed parts of their brains, Karl Lashley hoped to discover the precise spot in the brain where memories are stored.
A) True
B) False
68. By studying how quickly rats pressed levers for food pellets before and after surgery that removed parts of their brains, Karl Lashley hoped to discover the precise spot in the brain where learning occurs.
A) True
B) False
69. Karl Lashley discovered that by removing small sections of a rat's brain, he could completely erase its memory of a previously learned maze.
A) True
B) False
70. Karl Lashley discovered that maze learning tends to be localized to a small area in the left brain hemisphere termed the Broca's area.
A) True
B) False
71. Physiological psychology was the forerunner of behavioral neuroscience.
A) True
B) False
72. Someone with damage to their Broca's area cannot understand spoken words.
A) True
B) False

73. Behavioral neuroscience is a field of psychology that attempts to understand the links between the mind and the brain.
A) True
B) False
74. Behavioral and cognitive psychology have benefited greatly from the knowledge obtained from invasive experimental brain surgery techniques in human participants.
A) True
B) False
75. PET is an example of a noninvasive scanning technique used to study activity in the brain.
A) True
B) False
76. Cognitive psychology is a field of psychology that attempts to understand the links between brain activity and cognitive processes.
A) True
B) False
77. John Garcia demonstrated that it is easier for rats to form associations between lights and sickness than scents and sickness.
A) True
B) False
78. Darwin's theory of natural selection no longer plays a prominent role among today's evolutionary psychologists.
A) True
B) False
79. The anthropologist Margaret Mead introduced the evolutionary psychology movement.
A) True
B) False
80. An evolutionary psychologist would argue that traits such as jealousy exist because they are reinforced at an early age.
A) True
B) False

81. Critics of evolutionary psychology argue that evolutionary hypotheses are extremely difficult to test.
A) True
B) False
82. An advantage of the evolutionary over the behavioral approach to psychology is that evolutionary hypotheses can more easily be tested.
A) True
B) False
83. Social psychologists believe that the presence of others can influence performance on complicated, but not simple, tasks.
A) True
B) False
84. Psychological historians trace the beginnings of social psychology to the functionalist research of William James.
A) True
B) False
85. Social psychology began as a rejection of Gestalt psychology.
A) True
B) False
86. Attempting to understand the atrocities of the Nazis gave rise, in part, to the field of social psychology.
A) True
B) False
87. Gordon Allport believed that prejudice was primarily learned behavior.
A) True
B) False
88. Gordon Allport believed that prejudice was a natural result of a perceptual error.
A) True
B) False

89. Structuralists, such as Wilhelm Wundt, denied the importance of culture to psychology.
A) True
B) False
90. Cultural psychology began to emerge as a strong force in psychology in the early 1900s.
A) True
B) False
91. Cultural psychology represents a merger of psychology and anthropology.
A) True
B) False
92. Cultural psychology represents a merger of psychology and geography.
A) True
B) False
93. Absolutism holds that psychological phenomena are never absolute because the results always depend on the culture in which they are studied.
A) True
B) False
94. Most members of the American Psychological Association (APA) are also members of the Association for Psychological Science (APS).
A) True
B) False
95. Today, the Association for Psychological Science (APS) is the largest professional organization of psychologists in the world.
A) True
B) False
96. Today, most members of the American Psychological Association work in academic settings.
A) True
B) False

97. Today, a fourth of the members of the American Psychological Association are women.
A) True
B) False
98. The American Psychological Association existed for nearly 100 years before it elected a woman as president.
A) True
B) False
99. Currently, the majority of people earning their PhD in psychology are females.
A) True
B) False
100. Mary Calkins was the first female president of the American Psychological Association.
A) True
B) False
101. The results of Kenneth Clark's research on the developmental effects of prejudice, discrimination, and segregation on children was cited by the U.S. Supreme Court in the landmark case *Brown v. Board of Education*, decided in 1954.
A) True
B) False
102. A majority of psychologists today work in clinical or health-related fields.
A) True
B) False
103. After earning their PhDs, most psychologists today continue to teach or engage in research activities.
A) True
B) False
104. A psychiatrist has a medical degree.
A) True
B) False

105. Counseling psychologists usually focus on psychological issues that occur in the workplace.
A) True
B) False
106. A hub science is any scientific discipline that cannot be reduced to another discipline.
A) True
B) False
107. A hub science is a scientific discipline that links and influences its subfields.
A) True
B) False
108. Physics, chemistry, and psychology are all examples of hub sciences.
A) True
B) False

Answer Key

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

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

- 91. A
- 92. B
- 93. B
- 94. B
- 95. B
- 96. B
- 97. B
- 98. B
- 99. A
- 100. A
- 101. A
- 102. A
- 103. B
- 104. A
- 105. B
- 106. B
- 107. A
- 108. A

1. Nature is to nurture as:
 - A) Aristotle is to Plato.
 - B) behaviorism is to evolutionary psychology.
 - C) nativism is to philosophical empiricism.
 - D) Skinner is to Chomsky.

2. Helmholtz was a(n) _____ who studied _____.
 - A) philosopher; the mind-body problem
 - B) behavioral neuroscientist; rats' maze learning
 - C) personality theorist; the shape of skulls
 - D) physiologist; reaction time

3. By asking people to pay attention to and record their feelings and perceptions of an event, Wilhelm Wundt used the method of _____ to analyze the basic elements of the mind.
 - A) psychoanalysis
 - B) brain scanning
 - C) introspection
 - D) reinforcement

4. William James suggested that consciousness should be examined depending on the purpose of the mental processes involved, as suggested by _____, rather than trying to break it down into specific elements as suggested by _____.
 - A) functionalism; structuralism
 - B) functionalism; natural selection
 - C) structuralism; functionalism
 - D) structuralism; empiricism

5. The school of psychology developed by William James is most similar to which more modern field of psychology?
 - A) behaviorism
 - B) evolutionary psychology
 - C) industrial-organizational psychology
 - D) social psychology

6. Audrey is a clinical psychologist who emphasizes the positive potential in her clients and who feels it is her job to gently guide them in realizing this potential. Audrey is which type of therapist?
- A) behaviorist
 - B) cognitive
 - C) humanistic
 - D) psychoanalytic
7. _____ stresses the importance of studying observable behaviors and ignores the mental processes involved in different tasks.
- A) Behaviorism
 - B) Natural selection
 - C) Humanism
 - D) Cognitive psychology
8. In Pavlov's classic experiment, the sound of a tone was the _____ that produced a _____ of salivating in dogs, even in the absence of food.
- A) response; stimulus
 - B) stimulus; response
 - C) reinforcer; stimulus
 - D) stimulus; reinforcer
9. Which statement is NOT true about B. F. Skinner?
- A) He developed a specialized chamber in which rats could press levers to earn food.
 - B) He taught "Little Albert" to fear rats.
 - C) He denied the existence of free will.
 - D) He developed the principle of reinforcement.
10. Cognitive psychology addressed the critiques of behaviorism by applying scientific methods to the study of:
- A) mental processes, such as memory, perception, and thought.
 - B) stimulus-response learning.
 - C) the unconscious mind.
 - D) neurological mechanisms underlying observable behavior.

11. The research of _____, in which rats' maze performance was measured before and after brain surgery, was a forerunner of today's behavioral neuroscience.
- A) E. O. Wilson
 - B) B. F. Skinner
 - C) Karl Lashley
 - D) Frederic Bartlett
12. Chad explains his irresponsible spending by speculating that he shares genes with ancestors who had no need to save for the future because their lives were brutish and short. Which field of psychology is most consistent with his view?
- A) evolutionary psychology
 - B) behaviorism
 - C) cognitive neuroscience
 - D) behavioral neuroscience
13. To better understand Nazi atrocities, social psychologists began to study:
- A) the evolutionary basis of aggression.
 - B) conformity and obedience.
 - C) cultural differences between the United States and Germany.
 - D) differences in brain functioning between violent criminals and normal controls.
14. A psychologist develops a new treatment for depression in the United States that involves teaching people techniques to increase their self-esteem. Assuming that the treatment is successful in the United States, should the same treatment be used to treat depression in Japan?
- A) Yes, because if a treatment is effective in one culture, it will be effective in all cultures.
 - B) Yes, because previous research has demonstrated that depression manifests itself in exactly the same way across these cultures.
 - C) No, because depressed people in Eastern cultures do not devalue themselves like depressed people in Western cultures.
 - D) No, because since all behavior is culturally dependent, it is highly unlikely that any therapy would be effective in more than one culture.
15. A _____ treats individuals with psychological problems and is allowed to prescribe medication.
- A) psychiatrist
 - B) counseling psychologist
 - C) clinical psychologist
 - D) cognitive neuroscientist

16. Most psychologists today work:
- A) as behavioral neuroscientists.
 - B) in academia.
 - C) as government researchers.
 - D) in clinical or health-related fields.

Answer Key

1. C
2. D
3. C
4. A
5. B
6. C
7. A
8. B
9. B
10. A
11. C
12. A
13. B
14. C
15. A
16. D

1. Psychology is defined as the scientific study of:
 - A) conscious experience.
 - B) consciousness and the brain.
 - C) observable behavior.
 - D) mind and behavior.

2. _____ believed that the mind was a *tabula rasa*, or blank slate.
 - A) Nativists
 - B) Philosophical empiricists
 - C) Functionalists
 - D) Structuralists

3. Although the overall theory was incorrect, _____ was one of the first theories to propose that certain traits are localized in specific regions of the brain.
 - A) stimulus-response theory
 - B) phrenology
 - C) dualism
 - D) psychoanalysis

4. Edward Titchener used _____ as a technique to determine the _____ of consciousness.
 - A) introspection; basic elements
 - B) introspection; basic functions
 - C) reaction time; adaptability
 - D) reaction time; perceptual errors

5. Wundt viewed consciousness as analogous to _____, and James viewed it as analogous to _____.
 - A) a river; building blocks
 - B) a chemical compound; a river
 - C) an atom; a chemical compound
 - D) building blocks; an atom

6. The functionalism of William James was most influenced by the work of:
 - A) Edward Titchener
 - B) Sigmund Freud
 - C) Ivan Pavlov
 - D) Charles Darwin

7. The work of _____ had the greatest influence on the early development of clinical psychology.
- A) G. Stanley Hall
 - B) John Watson
 - C) Sigmund Freud
 - D) Jean Piaget
8. Fred and Yvonne notice that their 10-year-old daughter is beginning to use sexually explicit curse words. The parents think that their daughter's friends might be rewarding her swearing with attention and laughter. This reflects a _____ perspective.
- A) Watsonian
 - B) Freudian
 - C) Pavlovian
 - D) Skinnerian
9. Scientists such as Max Wertheimer, Frederic Bartlett, Jean Piaget, and Kurt Lewin paved the way for _____ by renewing interest in phenomena such as perception, memory, and subjective experiences.
- A) behaviorism
 - B) clinical psychology
 - C) cognitive psychology
 - D) behavioral neuroscience
10. Why was the advent of the computer so important for the development of cognitive psychology?
- A) Psychologists could now use the computer to analyze large amounts of data.
 - B) Computers processed information through complex circuits, which provided a model and shaped theory as to how mental processes might work.
 - C) Computer technology allowed psychologists to develop useful tools and software programs to run complex experiments that were not previously possible.
 - D) The computer supported the views of behaviorists that people were essentially robots programmed by their environment.
11. The physician _____ described a patient who, after damage to a localized area in the _____ brain hemisphere, could not produce words, even though he could comprehend them.
- A) Paul Broca; right
 - B) Paul Broca; left
 - C) Karl Lashley; right
 - D) Karl Lashley; left

12. Social psychology examines issues such as conformity, racism, and stereotyping by:
- A) focusing on the physical environment in which people grew up.
 - B) accounting for people's cultural background and personal beliefs.
 - C) localizing regions of the brain responsible for these issues.
 - D) considering the effects of other people on our thoughts, feelings, and behaviors.
13. Someone who takes a cultural absolutist stance on the issue of arranged marriages and marital satisfaction might state that:
- A) arranged marriages are morally wrong and typically lead to marital dissatisfaction in all cultures.
 - B) some people in arranged marriages can learn to love their partners using principles of reinforcement.
 - C) arranged marriages might result in satisfied couples in some cultures but not others.
 - D) arranged marriages are effective agents of social control but do not necessarily result in marital satisfaction.
14. The Association for Psychological Science was formed because the membership of the American Psychological Association was:
- A) becoming too research-oriented.
 - B) dominated by White males.
 - C) requiring new members to have a doctorate degree to join.
 - D) predominantly clinical and health-related psychologists.
15. While some psychologists engage in research, many psychologists, such as _____, are involved in clinical and other work focused on helping people dealing with family or career issues.
- A) counseling psychologists
 - B) social psychologists
 - C) school psychologists
 - D) neuropsychologists
16. The most commonly awarded PhD in psychology is in which specialty area?
- A) social psychology
 - B) counseling psychology
 - C) clinical psychology
 - D) neuroscience

Answer Key

1. D
2. B
3. B
4. A
5. B
6. D
7. C
8. D
9. C
10. B
11. B
12. D
13. A
14. D
15. A
16. C

1. Contrast the views of Plato and Aristotle on the nature vs. nurture debate. What position do modern psychologists take on this issue?
2. Differentiate between a structuralist and functionalist approach to understanding consciousness. Identify the founders of both approaches and the earlier influences that gave rise to these schools of psychology.
3. Discuss Sigmund Freud's influence on the field of psychology. What are the contributions and critiques of psychoanalytic theory?
4. Why would John Watson disagree with the definition of psychology as stated in the textbook?
5. While the underlying views of B. F. Skinner about the human condition differ markedly from humanistic views, interestingly his goals for the advancement of humanity are remarkably similar. Compare and contrast Skinner's views with humanistic psychology.
6. Discuss some benefits that behaviorism brought to the field of psychology. Then, discuss some problems associated with behaviorism.
7. Discuss how technological advancements, along with work in the field of linguistics, advanced cognitive psychology and ultimately led to the downfall of behaviorism as the dominant field within psychology.
8. How might an evolutionary psychologist explain human behavior that is largely detrimental to the individual or the culture, such as aggression or a preference for a high-fat diet?
9. Humans have a tendency to be afraid of the dark. Provide an explanation of this phenomenon within the framework of both behaviorism and evolutionary psychology. Are the two explanations necessarily incompatible?
10. Discuss the growing impact on psychology of women and non-White minorities, and identify some pioneering women and minorities within psychology.

11. Describe four non-research career specializations within psychology.

Answer Key

1. The answer should provide the following information: (1) Plato argued that the infant is born with certain kinds of knowledge that are innate, or inborn, such as the ability to learn language. This philosophical viewpoint, termed nativism, is consistent with a view of psychology based partly on nature; (2) Aristotle argued that the mind is a *tabula rasa*, or blank slate, and thus every experience an infant has contributes to his or her personality, thought processes, emotions, and so on. This corresponds to a view of psychology based entirely on nurture; (3) Nature versus nurture has been strongly debated in psychology. Most psychologists today argue that a combination of nature and nurture influences who we are.
2. The answer should indicate that Wilhelm Wundt began structuralism and was greatly influenced by the physiological research of Helmholtz. Structuralism attempts to identify the basic elements that constitute the mind by deconstructing the conscious experience through techniques such as introspection. William James began functionalism. He did not believe that consciousness can be broken down into basic elements; rather, he believed consciousness was more like a flowing stream than a collection of component parts. Functionalism sought to identify the adaptive significance, or functions, of consciousness rather than deconstructing it into elements. James was highly influenced by Darwin's theory of natural selection.
3. The answer should provide the following information: (1) Though many people disagree with Sigmund Freud's psychoanalytic theory, he is one of the most influential psychologists ever; (2) Freud had been educated as a physician and noticed that women were coming into his office with problems that had no physical justification. Freud decided to talk with these women about their psychosomatic symptoms. Over time, he developed a therapy called psychoanalysis. As a result, today he is considered one of the pioneers of clinical psychology; (3) Freud developed a theory of how the mind works and how people may be governed by forces of which they are unaware. This idea of an unconscious has had a tremendous impact on psychology, literature, and art. It also formed the basis of psychoanalysis, which involves bringing unconscious motivations, desires, and thoughts into the conscious mind; (4) One limitation of psychoanalytic theory is that it does not lend itself to testable predictions. Because there is little empirical support for Freud's theories, his influence has diminished over the decades. Another criticism of psychoanalytic theory is that it portrayed the human condition pessimistically, positing that human behavior was governed by rather dark forces that were outside of our conscious awareness.
4. The answer should indicate that psychology can be defined as the scientific study of behavior and mental processes. John Watson was the founder of behaviorism. He believed that mental processes could not be studied scientifically because they were not objectively observable. He believed that, if psychology was to be a science, it should confine its subject matter to objectively observable behavior. For this reason, Watson would disagree with the definition of psychology as presented in the textbook. In fairness to Watson, however, he lived before modern brain-scanning devices allowed psychologists to make objective observations of the neurological processes underlying cognition.
5. The answer should provide the following information: (1) Skinner denied the existence

of free will. According to Skinner, behavior was largely determined by a history of reinforcement; (2) Humanistic psychologists, such as Maslow and Rogers, believed that humans have free will and are active agents in trying to fulfill their own potential; (3) Nevertheless, both Skinner and the humanists shared an optimistic goal that psychologists could help improve the human condition. This is in contrast to the dark views of humanity advanced by Freud; (4) Skinner and the humanists attempted to better humanity using radically different methods. Skinner advocated arranging environments in which desirable behavior would be reinforced. The principles of reinforcement thus could be used to increase social welfare. Humanistic psychologists, on the other hand, focused on the power of a person's free choice in reaching his or her full potential, and developed therapies to facilitate this process.

6. The answer should provide the following information: (1) Behaviorists highlighted the need for psychologists to study phenomena that were objectively observable. This advanced the science of psychology; (2) The research of Ivan Pavlov and John Watson demonstrated how associations between stimuli and responses are formed; (3) Using rats, B. F. Skinner developed a methodology demonstrating that the consequences of behavior determine its future occurrence. This work has taught psychologists how people—and not just rats—learn. His principle of reinforcement pervades modern psychology; (4) By focusing their study only on observable behavior, however, behaviorists neglected important areas of study such as perception, memory, cognitive and brain processes, and language. As a result, most psychologists ultimately shifted away from the behaviorist approach.
7. The answer should indicate that the advent of the computer gave psychologists a useful model of mental processes. For example, both computers and people seem to register, store, and retrieve information. This computer model inspired much research in the field of cognitive psychology. This growing field of cognitive psychology studied important processes that behaviorists largely ignored, such as perception, memory, and attention, and ultimately supplanted behaviorism as the dominant theoretical position within psychology. Contributing to the downfall of behaviorism was Noam Chomsky's scathing review of B. F. Skinner's *Verbal Behavior*. Skinner believed that language (he called it verbal behavior) was essentially the product of reinforcement. For example, if saying “please” is reinforced, that person may become more polite. Chomsky charged that Skinner's theory of language was overly simplistic. Children use grammar rules that are not explicitly taught and generate novel phrases that were never explicitly reinforced.
8. The answer should provide the following information: (1) Evolutionary psychologists believe that human behavior is the product of millions of years of natural selection. Although these behaviors are largely detrimental today, they were adaptive in the environment of our ancestors; (2) Our ancestors who aggressively procured food and sexual partners tended to be the ones who lived and passed on their genes; (3) In an ancestral environment where food was scarce, those ancestors who had a preference for high-fat foods obtained the calories that they needed to survive; (4) In today's environment where food is abundant and behaving aggressively can send one to prison, these behaviors are largely detrimental. But we are stuck with the genes of our ancestors. To the extent that these behaviors are, in part, biologically determined, we will continue to have a propensity to engage in these behaviors.

9. The answer should provide the following information: (1) Humans tend not to see well at night. As such, we are prone to accidents when navigating in the dark. In addition, we are at a disadvantage if surrounded by large nocturnal animals that could possibly harm us. In contrast, hunkering down and sleeping in small groups at night provides some measure of safety; (2) Behaviorists would focus on the learning that occurs within an individual's lifetime. For example, the last time Bob went hunting at night he broke his ankle and almost got eaten by a lion. Hunting at night, then, has been punished by its consequences. Conversely, seeking a safe shelter is reinforced with warmth, safety, and companionship. As a result of these learning experiences, Bob fears the dark and would rather stay inside; (3) Evolutionary psychologists would note that, during the course of mammalian evolution, our ancestors who ventured outside in the dark tended not to reproduce in great numbers, perhaps because they fell off cliffs or got eaten by crocodiles. Those ancestors, who just so happened to be leery of the dark, lived to pass on their genes. Thus, we are left with the genes of those who did not particularly enjoy nightly jaunts through the forest; (4) On the surface, the two explanations are very different. While behaviorists do not deny the role of genetics, they point to the environment as the major determinant of behavior. As such, a behaviorist would first seek to understand the learning experiences that shaped an individual's fear of the dark. On the other hand, an evolutionary psychologist will focus on differential reproductive success as a result of the behavior of our ancestors. We are left with their genes, and thus, their behavior patterns; (5) The two explanations are not incompatible but rather represent different levels of analysis. For example, early mammals might learn to avoid the dark through natural consequences within their lifetime. Principles of reinforcement and punishment from a behavioral account would explain this behavior. These are the mammals that live to reproduce and pass on their genes. To the extent that susceptibility to reinforcement is, in part, genetically based, we are genetically predisposed to fear the dark due to the learning experiences of our remote ancestors.
10. The answer should provide the following information: (1) Today, women and non-White minorities play leading roles in all areas of psychology; (2) Kenneth Clark, an African American who became the first President of the American Psychological Association in 1970, worked extensively on the self-image of African American children and argued that segregation of the races created great psychological harm. Clark's research was fundamental and contributed to the Supreme Court's 1954 ruling (*Brown v. Board of Education*) to outlaw segregation in public schools. Clark's interest in psychology was sparked by taking a course taught by Francis Cecil Sumner, the first African American to receive a Ph.D. in psychology in 1920; (3) In 1894, Margaret Floy Washburn became the first woman to receive a Ph.D. in psychology; (4) Mary Calkins, the first woman elected as president of the APA in 1905, was mentored by William James and advanced a theory of the role of "self" in psychology. She argued that self is a single unit that cannot be broken down; (5) Women now earn the majority of Ph.D. degrees granted in psychology. Psychology is becoming a female-dominated field. In addition, the number of Ph.D. degrees granted to minorities has more than doubled since 1985.
11. The answer should provide the following information: (1) Clinical psychologists assess and treat people with psychological disorders. They work closely with psychiatrists, who have a medical degree and can prescribe medication. Clinical psychology makes up

almost half of the doctorates awarded with psychology; (2) Counseling psychologists assist people dealing with career issues, or common personal problems such as divorce, unemployment, or the loss of a loved one; (3) School psychologists work in educational settings and provide guidance to students, parents, and teachers; (4) Industrial/organizational psychologists work in business and industry and focus on issues such as improving productivity, developing effective planning strategies, and dealing with change.