Chapter 1 Quick Quiz

1. Most people get their knowledge about psychological topics from
   a. scientific magazines.
   b. academic books.
   c. popular psychology.
   d. research reports.

2. Modern psychology is best considered to be a
   a. collection of pieces of folk wisdom.
   b. series of contradictions to be sorted out.
   c. science.
   d. therapeutic process.

3. Dr. McDonald uses only the testimonies of parents and teachers as support for his treatment of ADHD; this illustrates which warning sign of pseudoscience?
   a. Exaggerated claims
   b. Lack of self-correction
   c. Overreliance on anecdotes
   d. Evasion of peer review

4. One explanation for why people are drawn to pseudoscience or to specific pseudoscientific beliefs is that many people
   a. are rational thinkers.
   b. have a good understanding of scientific findings.
   c. find comfort in ideas that help them to make sense of the world.
   d. are uninterested in scientific research and prefer to develop their own conclusions.

5. A group of scientists is attempting to verify recent data published on the chemical composition of tears and the presence of Alzheimer's disease. This illustrates the critical thinking principle of
   a. ruling out rival hypotheses.
   b. falsifiability.
   c. replicability.
   d. Occam's Razor.

6. According to Occam's Razor, evaluation of psychological phenomena demands the most _____ explanation to account for the available data.
   a. complex
   b. popular
   c. conventional
   d. simple

7. Nico is meeting with his academic adviser. He wishes to pursue a career where he'll work to diagnose and treat mental disorders. Nico aspires to be a(n)
   a. clinical psychologist.
   b. experimental psychologist.
   c. forensic psychologist.
   d. school psychologist.

8. A _____ works in prisons, jails, and other settings to assess inmates and assist in rehabilitation.
   a. clinical psychologist
   b. school psychologist
   c. biopsychologist
   d. forensic psychologist

9. With its concern on the adaptive functions provided by the various psychological systems, evolutionary psychology is most like what early psychological school of thought?
   a. Behaviorism
   b. Functionalism
   c. Psychoanalysis
   d. Structuralism

10. Evolutionary psychology
    a. provides easily testable hypotheses.
    b. focuses only on animal behavior.
    c. applies Darwin's theory of natural selection.
    d. has solved the nature-nurture debate.

Chapter 1 Quick Quiz Answers

1. **Chapter Section:** Introduction
   Answer: c **Page(s):** 4 **Type:** Factual **Diff:** 2
   Rationale: This is a factual question.

2. **Chapter Section:** Psychology as a Science
   Answer: c **Page(s):** 8 **Type:** Conceptual **Diff:** 2
   Rationale: A scientific focus is a central theme of modern psychology.

3. **Chapter Section:** Warning Signs of Pseudoscience
   Answer: c **Page(s):** 14 **Type:** Applied **Diff:** 2
   Rationale: Overreliance on anecdotes involves ignoring large-scale studies and instead using testimonies from people who support the researcher's claim.

4. **Chapter Section:** Why Are We Drawn to Pseudoscience?
   Answer: c **Page(s):** 14–15 **Type:** Factual **Diff:** 2
   Rationale: This is a factual question.

5. **Chapter Section:** Basic Principles of Scientific Thinking
   Answer: c **Page(s):** 22 **Type:** Applied **Diff**: 2
   Rationale: Replicability is the independent duplication of research results.

6. **Chapter Section:** Basic Principles of Scientific Thinking
   Answer: d **Page(s):** 23 **Type:** Conceptual **Diff:** 1
   Rationale: Occam's Razor states that when two explanations account for a set of findings equally well, we should generally choose the one that is simpler.

7. **Chapter Section:** The Multifaceted World of Modern Psychology
   Answer: a **Page(s):** 30–31 **Type:** Applied **Diff:** 1
   Rationale: As shown in Table 1.5, clinical psychologists perform assessment, diagnosis, and treatment of psychological disorders.

8. **Chapter Section:** The Multifaceted World of Modern Psychology
   Answer: d **Page(s):** 31 **Type:** Factual **Diff:** 2
   Rationale: This is a factual question.

9. **Chapter Section:** The Great Debates of Psychology
   Answer: b **Page(s):** 32 **Type:** Applied **Diff:** 3
   Rationale: Functionalism and evolutionary psychology have in common the focus on the adaptive purpose of our behavior and mental processes. In fact, those functions helped our species better adapt to and survive in the environment.

10. **Chapter Section:** The Great Debates of Psychology
    Answer: c **Page(s):** 32 **Type:** Conceptual **Diff:** 2
    Rationale: Evolutionary psychology is a subfield of psychology that explores how our behavior and mental processes might have evolved to help us better adapt to our environment.

Chapter 1: Psychology and Scientific Thinking

Multiple Choice

1.1-1. Knowledge of _____ refers to the use of everyday sources to understand and explain human behavior.
   a. common sense
   b. experimental psychology
   c. popular psychology
   d. psychology

Difficulty: 2
Question ID: 1.1-1
Page Ref: 4
Topic: Introduction
Skill: Factual
Objective: 1.1
Answer: c. popular psychology
% correct 55 a = 25 b = 10 c = 55 d = 10 *r* = .23

1.1-2. Most people get their knowledge about psychological topics from
   a. scientific magazines.
   b. academic books.
   c. popular psychology.
   d. research reports.

Difficulty: 2
Question ID: 1.1-2
Page Ref: 4
Topic: Introduction
Skill: Factual
Objective: 1.1
Answer: c. popular psychology.

1.1-3. Dr. Jones is offering a course this semester in popular psychology. His coverage of topics will likely be focused on the
   a. history of modern psychology.
   b. use of scientific theory in psychological practices.
   c. production of material and knowledge to be used by the general public.
   d. diagnosis and treatment of mental illness.

Difficulty: 2
Question ID: 1.1-3
Page Ref: 4
Topic: Introduction
Skill: Applied
Objective: 1.1
Answer: c. production of material and knowledge to be used by the general public.
Rationale: The popular psychology industry is described as "a sprawling network of everyday sources of information about human behavior."

1.1-4. According to the authors, much of the commonsensical knowledge from popular psychology sources
   a. is consistent with the results of psychological research.
   b. is contradicted by what psychological research has demonstrated.
   c. is not able to be studied empirically.
   d. is of no or very little interest to psychologists.

Difficulty: 2
Question ID: 1.1-4
Page Ref: 4–6
Topic: What Is Psychology? Common versus Uncommon Sense
Skill: Conceptual
Objective: 1.1
Answer: b. is contradicted by what psychological research has demonstrated.
Rationale: Despite the usefulness of common sense in some situations, our understanding of ourselves and the world is frequently erroneous. Ten commonly-held beliefs have been proven wrong by psychological research.

1.1-5. When students begin to read through their introductory psychology textbook, they are often surprised to learn that
   a. commonsense explanations abound in the field of psychology.
   b. many of their beliefs about the causes of thoughts and behaviors are incorrect.
   c. psychologists do not study people's everyday behaviors.
   d. psychology is a unique field of study separate from philosophy and biology.

Difficulty: 2
Question ID: 1.1-5
Page Ref: 5
Topic: What Is Psychology? Common versus Uncommon Sense
Skill: Factual
Objective: 1.1
Answer: b. many of their beliefs about the causes of thoughts and behaviors are incorrect.

1.1-6. The discipline of psychology is best thought of as
   a. a field of self-help principles to eliminate mental problems.
   b. a mixture of anecdotes and personal intuition about human behavior and mental processes.
   c. a process for encouraging people to reach their ultimate potential.
   d. a science of the mind, brain, and behavior.

Difficulty: 1
Question ID: 1.1-6
Page Ref: 5
Topic: Psychology and Levels of Explanation
Skill: Factual
Objective: 1.1
Answer: d. a science of the mind, brain, and behavior.
% correct 89 a = 0 b = 11 c = 0 d = 89 *r* = .30

1.1-7. Psychology is a method for
   a. determining simple answers to complex questions.
   b. gaining deeper insight into how and why people think and act a certain way.
   c. knowing how to turn people from maladaptive to adaptive actions, feelings, and thoughts.
   d. restating commonsense findings in a more convoluted manner.

Difficulty: 2
Question ID: 1.1-7
Page Ref: 5
Topic: Psychology and Levels of Explanation
Skill: Conceptual
Objective: 1.1
Answer: b. gaining deeper insight into how and why people think and act a certain way.
Rationale: Scientific psychologists seek to understand the causes of human behavior and mental processes.

1.1-8. A psychologist is often skeptical of claims suggesting that
   a. people are influenced by others' thoughts and behaviors.
   b. a particular behavior is the result of a single causal factor.
   c. a person's culture is a strong influence on his or her everyday thoughts and behaviors.
   d. that a person's future behavior is often difficult to predict accurately.

Difficulty: 2
Question ID: 1.1-8
Page Ref: 5–6
Topic: What Makes Psychology Challenging—And Fascinating
Skill: Conceptual
Objective: 1.1
Answer: b. a particular behavior is the result of a single causal factor.
Rationale: Almost all behaviors are the result of multiple factors, so we should be wary of single-variable explanations, which are common in popular psychology.

1.1-9. Luis believes in an old southern tradition that eating clay will help his wife deliver a healthy baby. His tendency to believe he sees the world correctly is called
   a. popular psychology.
   b. naive realism.
   c. common sense.
   d. a single-variable explanation.

Difficulty: 2
Question ID: 1.1-9
Page Ref: 6–7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Conceptual
Objective: 1.1
Answer: b. naive realism.
Rationale: Naive realism refers to a person's belief that he or she accurately and objectively sees the world as it is.

1.1-10. _____ refers to the belief that we see the world precisely as it is.
a. Common sense
b. Confirmation bias
c. Single-variable explanation
d. Naive realism
Difficulty: 1
Question ID: 1.1-10
Page Ref: 7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Factual
Objective: 1.1
Answer: d. Naive realism

1.1-11. Common-sense explanations for events
a. can often lead to hypotheses that scientists can later test.
b. are often accurate when examining first impressions about someone's trustworthiness.
c. are often good guides to the truth.
d. All of the above
Difficulty: 2
Question ID: 1.1-11
Page Ref: 8
Topic: Why We Can't Always Trust Our Common Sense
Skill: Conceptual
Objective: 1.1
Answer: d. All of the above
Rationale: We must learn when to trust our common sense and when not to.

1.1-12. Modern psychology is best considered to be a
a. collection of pieces of folk wisdom.
b. series of contradictions to be sorted out.
c. science.
d. therapeutic process.
Difficulty: 2
Question ID: 1.1-12
Page Ref: 8
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: c. science.
Rationale: A scientific focus is a central theme of modern psychology.

1.1-13. A science is defined by
a. knowledge.
b. its concern with solving real-life practical problems.
c. its popularity among the general public.
d. its approach to gathering evidence.
Difficulty: 2
Question ID: 1.1-13
Page Ref: 8
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: d. its approach to gathering evidence.
Rationale: Science is an approach or method for gathering evidence, rather than a body of knowledge.

1.1-14. The tendency to look for supportive evidence rather than actively seeking out contradictory evidence is known as
   a. the availability heuristic.
   b. belief perseverance.
   c. the confirmation bias.
   d. the hindsight bias.

Difficulty: 1
Question ID: 1.1-14
Page Ref: 8
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: c. the confirmation bias.
% correct 80 a = 1 b = 5 c = 80 d = 14 *r* = .34

1.1-15. Gwen has posted a questionnaire on MySpace asking her friends to support her idea of cell phones in the classroom. She ignores anyone opposing her beliefs, which is an example of
   a. naive realism.
   b. conjunctive fallacy.
   c. confirmation bias.
   d. attribution bias.

Difficulty: 3
Question ID: 1.1-15
Page Ref: 8
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: c. confirmation bias.
Rationale: Confirmation bias is the tendency to seek out information that supports our point of view and ignore evidence that contradicts our point of view.

1.1-16. "Seek and ye shall find" is a short and simple way to sum up
   a. naive realism.
   b. belief perseverance.
   c. empiricism.
   d. confirmation bias.

Difficulty: 2
Question ID: 1.1-16
Page Ref: 8
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: d. confirmation bias.
Rationale: Confirmation bias is the tendency to seek out information that supports our point of view and ignore evidence that contradicts our point of view.

1.1-17. Dr. Garonski is testing his hypothesis that people use hand gestures more in communication when emotionally aroused than when clam. When his results were reviewed, it was noted that Dr. Garonski sometimes missed seeing small gestures in the calm condition. This is an example of
   a. conjunctive fallacy.
   b. confirmation bias.
   c. attribution error.
   d. a single-variable explanation.

Difficulty: 3
Question ID: 1.1-17
Page Ref: 8
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. confirmation bias.
Rationale: Confirmation bias is the tendency to seek out information that supports our point of view and ignore evidence that contradicts our point of view.

1.1-18. Douglas believes that females are more polite and respectful than males. He easily recalls examples of this and constantly points out situations to others that support this belief. However, he often ignores evidence to the contrary. Douglas's belief about gender differences in socially appropriate behavior is maintained through
   a. belief perseverance.
   b. the confirmation bias.
   c. the hindsight bias.
   d. the representativeness heuristic.

Difficulty: 3
Question ID: 1.1-18
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. the confirmation bias.
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. In this case, Douglas can recall and chooses only to focus on evidence that supports his belief in the politeness and respectfulness of females.

1.1-19. Police interrogators often assume that persons brought in for questioning have important knowledge about the crime in question. If this leads an interrogator to ask questions that assume the guilt of a particular individual rather than asking questions that would exonerate him or her, _____ may occur.

a. the anchoring and adjustment heuristic
b. the availability heuristic
c. belief perseverance
d. confirmation bias

Difficulty: 2
Question ID: 1.1-19
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: d. confirmation bias
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. When police interrogators have an idea about who committed the crime, they may unintentionally lead the witness toward making statements that support their idea, and/or may misinterpret what the witness said or did to fit their idea.
% correct 67 a = 2 b = 11 c = 20 d = 67 *r* = .20

1.1-20. When people watch a debate they often point out the internal contradictions, flaws in logic, and hypocrisy in positions they oppose while glossing over the same shortcomings for positions they support. This is an example of

a. the availability heuristic.
b. belief perseverance.
c. confirmation bias.
d. healthy skepticism.

Difficulty: 2
Question ID: 1.1-20
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: c. confirmation bias.
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. In the debate example, people with different preexisting beliefs can use the same evidence to support their side of the argument.

1.1-21. Gregg's nose itches as he is walking toward his telephone to call someone. Gregg phones his friend Maurice who tells him, "Man, we were just talking about you. That's freaky!" Gregg takes this as support for the folk wisdom "your nose itches when people are talking about you." In reality, this is an example of the confirmation bias because

a. Gregg failed to consider the times where his nose itched and no one was talking about him.
b. Gregg continues to believe this even though no evidence for it exists.
c. Gregg is not a scientist and therefore cannot answer the question.
d. the folk wisdom "your nose itches when people are talking about you" is an unfalsifiable question.

Difficulty: 1
Question ID: 1.1-21
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: a. Gregg failed to consider the times where his nose itched and no one was talking about him.
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. In this example, Gregg ignores information that would prove the folk wisdom wrong.
% correct 76 a = 76 b = 13 c = 9 d = 0 $r = .31$

1.1-22. Students at a local high school are opposing restrictions the administration has placed on students interacting on social networking websites. The administration believes that the sites promote aggressive behavior among students. The students have offered research findings that show social networking sites do not increase aggression. They believe the administrators are only seeking out evidence that supports their view, which is an example of

a. critical thinking.
b. scientific skepticism.
c. disinterestedness.
d. confirmation bias.

Difficulty: 2
Question ID: 1.1-22
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: d. confirmation bias.
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. The example shows both pieces.

1.1-23. Some traditions dating back hundreds of years believe in psychic phenomena and use it to explain occurrences in nature. These groups actively seek evidence that supports the ideology and discredit any form of scientific information that is opposed to their beliefs. Instead of asking questions that may redefine their traditions, _____ occurs and the traditions continue.

a. selective thinking
b. confirmation bias
c. analytical thinking
d. scientific skepticism

Difficulty: 2
Question ID: 1.1-23
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. confirmation bias
Rationale: Confirmation bias is the tendency to seek out evidence that supports our preexisting beliefs and to neglect contradictory evidence. The example shows both pieces.

1.1-24. According to your authors, _____ is the "mother of all biases."

a. the availability heuristic
b. belief perseverance
c. confirmation bias
d. the hindsight bias

Difficulty: 1
Question ID: 1.1-24
Page Ref: 9
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: c. confirmation bias

1.1-25. Because none of us wants to believe we are wrong, we are usually reluctant to give up cherished notions. This phenomenon is known as

a. belief perseverance.
b. confirmation bias.
c. availability heuristic.
d. the fundamental attribution.

Difficulty: 2
Question ID: 1.1-25
Page Ref: 9
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: a. belief perseverance.
Rationale: Belief perseverance is the tendency to stick to our original beliefs even when evidence contradicts them.

1.1-26. Rona believes that women make better elementary school teachers than men because women are more nurturing and less legalistic. When you present her with data that indicate male teachers perform very well at the elementary level, she tries to discredit the information. Rona is a victim of
   a. confirmation bias.
   b. naive realism.
   c. belief perseverance.
   d. critical thinking.

Difficulty: 3
Question ID: 1.1-26
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: c. belief perseverance.
Rationale: Belief perseverance is the tendency to stick to our original beliefs even when evidence contradicts them.

1.1-27. Milo and Shirley are taking a trip on a cruise ship for their 20th wedding anniversary. They believe they made it to this milestone because they know each other so well. During the trip they take part in a game show where they find out they don't know each other as well as they thought. However, they still maintain they are very much in tune with the other's needs and thoughts. This is an example of
   a. the availability heuristic.
   b. belief perseverance.
   c. the hindsight bias.
   d. the representativeness heuristic.

Difficulty: 3
Question ID: 1.1-27
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. belief perseverance.
Rationale: Belief perseverance is our tendency to continue believing what we currently believe, despite convincing evidence to the contrary. People don't want to believe they are wrong, so they often stick to their original position.
% correct 59 a = 2 b = 59 c = 30 d = 9 *r* = .31

1.1-28. Despite the fact that scientific research has found no support or basis for the belief in "the hot hand" in baseball, basketball, or golf, the idea still persists among athletes, sports commentators, and fans. This is a classic example of
   a. belief perseverance.
   b. gullibility.
   c. the hindsight bias.
   d. scientific illiteracy.

Difficulty: 2
Question ID: 1.1-28
Page Ref: 9
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: a. belief perseverance.

1.1-29. Barry believes that male dogs are better at protection than female dogs. He does research on training exercises that he believes proves males are better in K9 training. When presented with evidence that shows female dogs are just as competent as male dogs, he continues to stick to his original opinion, thus demonstrating

a. belief perseverance.
b. naive realism.
c. analytical thinking.
d. scientific skepticism.

Difficulty: 2
Question ID: 1.1-29
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: a. belief perseverance.
Rationale: Belief perseverance is our tendency to continue believing what we currently believe, despite convincing evidence to the contrary. The example shows Barry's tendency.

1.1-30. A local mental health facility looks for extra employees for their crisis line on the night of a predicted full moon. Past experience has led them to believe that a full moon increases levels of suicidal behavior. Even though the employees were presented with evidence showing there is no link between suicide and full moons, they focus on their own evidence of past behavior and ignore the current scientific evidence by exhibiting

a. scientific skepticism.
b. belief perseverance.
c. critical thinking.
d. hindsight bias.

Difficulty: 2
Question ID: 1.1-30
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. belief perseverance.
Rationale: Belief perseverance is our tendency to continue believing what we currently believe, despite convincing evidence to the contrary. The example shows the employees' tendency.

1.1-31. Sandi is an art major who believes that color affects everything, from how people communicate to their moods. At a recent art show, Sandi discussed this issue with fellow artists who told her that no scientific evidence supported her statements. Sandi still holds to her belief that color affects everything, especially personality, thus demonstrating
   a. belief perseverance.
   b. confirmation bias.
   c. analytical thinking.
   d. naive realism.

Difficulty: 2
Question ID: 1.1-31
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: a. belief perseverance.
Rationale: Belief perseverance is our tendency to continue believing what we currently believe, despite convincing evidence to the contrary. The example shows Sandi's tendency.

1.1-32. A scientific theory is defined as a(n)
   a. educated opinion about the natural world.
   b. explanation for scientific findings.
   c. personal understanding of natural laws.
   d. testable prediction about the natural world.

Difficulty: 2
Question ID: 1.1-32
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: b. explanation for scientific findings.
Rationale: A scientific theory is an explanation for a large number of findings in the natural world. Good theories account for existing findings and predict new findings.
% correct 47 a = 1 b = 47 c = 14 d = 37 *r* = .17

1.1-33. When a psychologist mentions the term "scientific theory," he or she is referring to something that
   a. explains a single event.
   b. explains a wide range of observations.
   c. is no better an explanation than another person's opinion.
   d. refers to an educated guess.

Difficulty: 2
Question ID: 1.1-33
Page Ref: 10
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: b. explains a wide range of observations.

1.1-34. Dr. Rashad offers the class an explanation for an extensive group of research findings connecting emotionality and nonverbal communication. Her explanation for this group of findings is a(n)
   a. hypothesis.
   b. empirical conclusion.
   c. operational definition.
   d. theory.

Difficulty: 2
Question ID: 1.1-34
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: d. theory.
Rationale: A theory is an explanation for a large number of findings in the natural world.

1.1-35. If a psychologist were to develop a theory of cognitive development, he or she would want that theory to explain _____ observations.
   a. a moderate number of
   b. a small number of
   c. a substantial number of
   d. very few

Difficulty: 2
Question ID: 1.1-35
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: c. substantial number of
Rationale: Theories are designed to explain a large number of findings in the natural world, rather than explaining a single, specific event. Consider the difference between someone's "theory" about who committed a crime (which explains only one event), and a scientific theory, which explains a large number of observations or findings.

1.1-36. Professor Clark gives her students an assignment to develop hypotheses on global warming. To be consistent with a scientific method, students should develop their hypotheses based on
   a. their own existing beliefs about the issue.
   b. reports discussed on television.
   c. untestable predictions.
   d. a well-supported scientific theory.

Difficulty: 2
Question ID: 1.1-36
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: d. a well-supported scientific theory.
Rationale: A hypothesis is a testable prediction derived from a scientific theory.

1.1-37. Dr. Richburg's botany class gathers specimens outside of the classroom for further study. Dr. Richburg instructs his students to develop a scientific theory that helps explain the biodiversity of the plants. The resulting theory should

a. provide an educated guess about the biodiversity of the plants.
b. explain observations about the plants and predict new findings about plant biodiversity.
c. explain a few findings about the biodiversity of the plants.
d. interpret what has already been discovered about the biodiversity of the plants.

Difficulty: 3
Question ID: 1.1-37
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: b. explain observations about the plants and predict new findings about plant biodiversity.
Rationale: A scientific theory is an explanation for a large number of findings in the natural world that leads to testable predictions.

1.1-38 Which of the following is a theoretical statement?

a. The most likely suspects for the armed robbery are two former employees.
b. One would expect John not to get a good night's sleep because he has been so stressed.
c. Men will score higher on math tests then females.
d. There is a connection between emotionality and increase in nonverbal communication because emotions cause heightened neural activity.

Difficulty: 3
Question ID: 1.1-38
Page Ref: 10–11
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: d. There is a connection between emotionality and increase in nonverbal communication because emotions cause heightened neural activity.
Rationale: A theory is an explanation for a large number of findings in the natural world.

1.1-39. When attempting to differentiate between useful and useless information from popular psychology, what is a good rule of thumb to follow?

a. All popular psychology claims are misinformation.
b. Common sense is often correct; go with your gut.
c. Insist on evidence to accurately evaluate all claims.
d. Trust nothing that you read or hear in the media about psychology.

Difficulty: 2
Question ID: 1.1-39
Page Ref: 11–12
Topic: Psychological Pseudoscience: Imposters of Science
Skill: Applied/Conceptual
Objective: 1.3
Answer: c. Insist on evidence to accurately evaluate all claims.
Rationale: While common sense is sometimes right, accurate knowledge and the tools of the scientific method are necessary to evaluate claims.
% correct 91 a = 0 b = 6 c = 91 d = 2 *r* = .30

1.1-40. Jan decides to take an online personality quiz to determine her personality characteristics. Though the advice is very useful, Jan should be cautious in believing the results of this inventory because the results
   a. are factual.
   b. are based on scientific methods.
   c. may be part of the misinformation explosion.
   d. may lead to better decision making.

Difficulty: 1
Question ID: 1.1-40
Page Ref: 12
Topic: The Amazing Growth of Popular Psychology
Skill: Applied
Objective: 1.3
Answer: c. may be part of the misinformation explosion.
Rationale: Despite growth and accessibility of popular psychology, the industry has succumbed to the misinformation explosion, with little control over the quality of untested products.

1.1-41. According to the authors, _____ of the claims made by self-help proponents have been scientifically examined.
   a. few
   b. many
   c. none
   d. roughly half

Difficulty: 2
Question ID: 1.1-41
Page Ref: 12
Topic: The Amazing Growth of Popular Psychology
Skill: Factual
Objective: 1.3
Answer: a. few

1.1-42. Imagine that you see the textbook authors on television talking with Larry King about popular psychology. Which of the following points are you most likely to hear them make?
   a. All information from popular psychology and/or self-help is useless.
   b. Beware of claims of miracle cures without supporting evidence.
   c. Psychology and medicine often marginalize those with ideas that differ from conventional wisdom.
   d. Self-help therapies are rigorously tested before people can write books about them.

Difficulty: 2
Question ID: 1.1-42
Page Ref: 12
Topic: The Amazing Growth of Popular Psychology
Skill: Applied
Objective: 1.3
Answer: b. Beware of claims of miracle cures without supporting evidence.
Rationale: Of the points listed, the most likely emphasis would be on interpreting claims cautiously. The authors state that most self-help interventions are untested, and that some may make psychological conditions worse.
% correct 70 a = 5 b = 70 c = 25 d = 0 *r* = .37

1.1-43. Bob is looking for information about mental illness on the Internet. He is not sure where to look and is randomly searching for various terms related to mental illness. Using this method, Bob is most likely to learn about
   a. specific treatment programs for mental illness that have been researched by professionals.
   b. scientists' current understanding of the role of genetics in mental illness.
   c. unproven and misinterpreted information, which may lead to misdiagnosis of mental illness.
   d. effective self-help treatments to relieve symptoms of mental illness.

Difficulty: 3
Question ID: 1.1-43
Page Ref: 12
Topic: The Amazing Growth of Popular Psychology
Skill: Applied
Objective: 1.3
Answer: c. unproven and misinterpreted information, which may lead to misdiagnosis of mental illness.
Rationale: Many websites related to psychology contain misinformation, especially if one does not know where to look for reputable sources.

1.1-44. Websites advertising "love potions" in the form of fragrances are appearing on the internet. There has never been any scientific evidence that can prove love potions really help people attract mates. Regarding these potions, scientists would encourage the general public to
   a. accept the evidence described on the websites and buy the product.
   b. think about the evidence described on the websites and buy the product if it sounds convincing.
   c. insist on more evidence before buying the product.
   d. buy the product or not based on one's own opinion.

Difficulty: 2
Question ID: 1.1-44
Page Ref: 12
Topic: The Amazing Growth of Popular Psychology
Skill: Conceptual
Objective: 1.3
Answer: c. insist on more evidence before buying the product.
Rationale: Scientific thinking is very important in determining whether information is legitimate or not, especially on the Internet.

1.1-45. The major difference between pseudoscience and science is that pseudoscience
   a. addresses different questions than science.
   b. is less similar to popular psychology than science is.
   c. lacks the safeguards against cognitive biases that characterize science.
   d. lacks the general level of public support that characterizes science.

Difficulty: 1
Question ID: 1.1-45
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual
Objective: 1.3
Answer: c. lacks the safeguards against cognitive biases that characterize science.
% correct 65 a = 15 b = 10 c = 65 d = 10 *r* = .41

1.1-46. _____ refers to a claim or statement that superficially appears to be scientific but is not.
a. Misinformation
b. Anecdotal evidence
c. Pseudoscience
d. Common sense
Difficulty: 1
Question ID: 1.1-46
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual
Objective: 1.3
Answer: c. Pseudoscience

1.1-47. Which of the following statements would your authors find the most worrisome?
a. At times, everyone perceives meaningful connections between unrelated phenomena.
b. The majority of Americans believe in the existence of ghosts or witches.
c. Pseudoscience is often very interesting and really pretty harmless.
d. Science cannot answer all of the questions I am interested in, such as "Why am I here?" or "What is my life's purpose?"
Difficulty: 3
Question ID: 1.1-47
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Conceptual
Objective: 1.4
Answer: c. Pseudoscience is often very interesting and really pretty harmless.
Rationale: The authors discuss several reasons why people's attraction to pseudoscience is worrisome, including: (a) what we give up in terms of better treatments, (b) direct harm caused by untested treatments, and (c) forfeiting our ability to think critically as citizens.

1.1-48. A key characteristic of a pseudoscience is that incorrect theories are
a. discarded.
b. formulated and revised as needed.
c. rarely corrected when contrary evidence is published.
d. seldom believed by the general public.
Difficulty: 1
Question ID: 1.1-48
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Factual
Objective: 1.3
Answer: c. rarely corrected when contrary evidence is published.

1.1-49. A classic warning sign of pseudoscience is
   a. evasion of peer review.
   b. overreliance on anecdotal evidence.
   c. lack of self-correction.
   d. all of the above.

Difficulty: 1
Question ID: 1.1-49
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Factual
Objective: 1.3
Answer: d. all of the above.

1.1-50. Which of the following is found in science but NOT in pseudoscience?
   a. Amazing, counterintuitive claims
   b. The presence of difficult-to-understand jargon or technical information
   c. Reliance on anecdotal evidence to support one's theory of human behavior
   d. Self-correction of incorrect hypotheses and theories

Difficulty: 3
Question ID: 1.1-50
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: d. Self-correction of incorrect hypotheses and theories
Rationale: One of the warning signs of pseudoscience is lack of self-correction when contradictory evidence is published. Proponents of pseudoscience typically don't change their theories even when the evidence is clearly not supportive.
% correct 70 a = 5 b = 5 c = 20 d = 70 *r* = .39

1.1-51. One evening, when he couldn't sleep, Mr. Bradley turned on the television and saw an infomercial for a new sleep aid. As a critical thinker, Mr. Bradley should be most cautious about this new product if
   a. the product had been subjected to an experimental study and the scrutiny of a peer-review process.
   b. its makers claim it has been "proven" to induce sleep in one-third the time of competing sleep aids.
   c. its makers discuss the scientific investigations that have compared it to other effective sleep aids rather than relying on testimonials of those with insomnia.
   d. the results of research connect the efficacy of the sleep aid to other widely accepted scientific findings.

Difficulty: 2
Question ID: 1.1-51
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: b. its makers claim it has been "proven" to induce sleep in one-third the time of competing sleep aids.
Rationale: It is important to distinguish science from pseudoscience, using several warning signs. The warning signs include exaggerated claims, overreliance on anecdotes, absence of connectivity to other research, lack of peer review, lack of self-correction, use of "Psychobabble," and discussions of "proof" instead of "evidence."
% correct 54 a = 13 b = 54 c = 20 d = 11 *r* = .34

1.1-52. Recently, ads have appeared on the radio for some natural herbs that will calm you, increase your sense of well-being, and make you happier in a month's time. You are sure this is a pseudoscientific claim because it is
   a. psychobabble.
   b. exaggerated.
   c. anecdotal.
   d. hypothetical.

Difficulty: 2
Question ID: 1.1-52
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: b. exaggerated.
Rationale: Exaggerated claims are one of several warning signs of pseudoscience.

1.1-53. A key issue in science is providing methods to help people distinguish between accurate, helpful claims and those that are inaccurate and unhelpful. Which of the following warning signs most directly prohibits arriving at that distinction?
   a. Evading peer review
   b. Exaggerating claims beyond the available evidence
   c. Relying too heavily on anecdotal information
   d. Using highly technical terms and information

Difficulty: 3
Question ID: 1.1-53
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: a. Evading peer review
Rationale: Replication by others ensures adherence to the scientific method and shows that results are founded on accurate and testable research.

1.1-54. One reason to be wary of programs that promise to teach you speed reading techniques in return for money is that such claims do not fit with the available data on information processing and memory. This is consistent with the pseudoscience warning sign known as
   a. absence of connectivity.
   b. evasion of peer review.
   c. exaggerated claims.
   d. psychobabble.

Difficulty: 1
Question ID: 1.1-54
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Factual
Objective: 1.3
Answer: a. absence of connectivity.

1.1-55. A group of animal behaviorists has discovered several new species of insects in the Amazon jungle. They collect the new species for later study back at the camp. Due to advances in computer technology, they are able to transfer their findings immediately to other researchers studying insects. Their willingness to share these findings with other scientists shows their commitment to
   a. critical thinking.
   b. falsifiability.
   c. peer review.
   d. pseudoscience.

Difficulty: 2
Question ID: 1.1-55
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: c. peer review.
Rationale: Seven warning signs help us to recognize pseudoscience, including lack of peer review. Peer review is necessary for a truly scientific process.

1.1-56. Two competing groups of scientists have published their findings on biological factors in antisocial personality disorder. Both groups' theories are shown to be incorrect, but only one group corrects and changes its theory. The other group sticks to its theory, demonstrating which warning sign of pseudoscience?
   a. Lack of self-correction
   b. Overreliance on anecdotes
   c. Exaggerated claims
   d. Evasion of peer review

Difficulty: 2
Question ID: 1.1-56
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: a. Lack of self-correction
Rationale: One of the warning signs of pseudoscience is lack of self-correction when contrary evidence is published.

1.1-57. Mr. Gleim suffers from generalized anxiety disorder. One day when he was watching a news program on television, a psychologist was interviewed and claimed he has discovered a cure for panic attacks. Mr. Gleim should be cautious of this new treatment if it
   a. has been subjected to scientific experiments and the results have been replicated.
   b. claims to have cured most of the patients.
   c. has been compared to other treatments that have been shown to be helpful.
   d. has been accepted by the scientific community.

Difficulty: 2
Question ID: 1.1-57
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: b. claims to have cured most of the patients.
Rationale: One of the warning signs of pseudoscience is exaggerated claims, such as a complete cure for most patients with anxiety disorders.

1.1-58. Dr. McDonald uses only the testimonies of parents and teachers as support for his treatment of ADHD; this illustrates which warning sign of pseudoscience?
   a. Exaggerated claims
   b. Lack of self-correction
   c. Overreliance on anecdotes
   d. Evasion of peer review

Difficulty: 2
Question ID: 1.1-58
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: c. Overreliance on anecdotes
Rationale: Overreliance on anecdotes involves ignoring large-scale studies and instead using testimonies from people who support the researcher's claim.

1.1-59. Researchers studying the mating behaviors in a rare species of bird found in South Africa are anxious to report their findings, but know the process may take months before their results are published in a peer-reviewed journal. Instead of waiting, they decide to publish their results in a popular nature magazine. This example illustrates which warning sign of pseudoscience?
   a. Absence of connectivity
   b. Use of psychobabble
   c. Lack of self-correction
   d. Evasion of peer review

Difficulty: 2
Question ID: 1.1-59
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: d. Evasion of peer review
Rationale: Peer review is important to ensure that research findings are reliable and valid. Lack of peer review is one of the warning signs of pseudoscience.

1.1-60. Curtis is considering buying a new workout machine that promises weight loss at twice the rate of other machines. When Curtis questioned such a claim with the manufacturer, the customer service representative stated this was a new system and previous research on weight loss was not applicable. This example illustrates which warning sign of pseudoscience?
   a. Evasion of peer review
   b. Absence of connectivity
   c. Overreliance on anecdotes
   d. Lack of self-correction

Difficulty: 3
Question ID: 1.1-60
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: b. Absence of connectivity
Rationale: One of the warning signs of pseudoscience is lack of connectivity to other research (i.e., findings that are vastly different than those of previous research on the same topic).

1.1-61. Steve and Julie have purchased a program that promises to drastically improve marital relations in just two weeks. Although the program has not been tested scientifically, they were impressed by the use of scientific phrasing such as "co-dependency," "holistic healing," and "subjective well-being." This example illustrates which warning sign of pseudoscience?

a. Psychobabble
b. Absence of connectivity
c. Exaggerated claims
d. Lack of self-correction

Difficulty: 1
Question ID: 1.1-61
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: a. Psychobabble
Rationale: To recognize pseudoscience, one should take care not to be persuaded by fancy terms that don't really mean anything (psychobabble).

1.1-62. Pinker (1997) and others have demonstrated that humans display an adaptive predisposition to make order out of disorder and sense out of nonsense. This tendency can account for

a. reliance on confirmation bias.
b. skepticism.
c. the popularity of pseudoscience.
d. belief perseverance.

Difficulty: 2
Question ID: 1.1-62
Page Ref: 14–15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Conceptual
Objective: 1.3
Answer: c. the popularity of pseudoscience.
Rationale: Pseudoscience helps us simplify the world in which we live.

1.1-63. Tiffany spends a great deal of time reading self-help books on relationships. She has had several failed relationships and is bewildered by the events. Even though she knows most of these books are pseudoscience, Tiffany is attracted to them because

a. she is comforted by the realization she is not alone.
b. she is trying to make order out of disorder.
c. she suffers from apophenia.
d. None of the above

Difficulty: 3
Question ID: 1.1-63
Page Ref: 14–15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Conceptual/Applied
Objective: 1.3
Answer: b. she is trying to make order out of disorder.
Rationale**:** Pseudoscience helps us simplify the world in which we live.

1.1-64. One explanation for why people are drawn to pseudoscience or to specific pseudoscientific beliefs is that many people
   a. are rational thinkers.
   b. have a good understanding of scientific findings.
   c. find comfort in ideas that help them to make sense of the world.
   d. are uninterested in scientific research and prefer to develop their own conclusions.

Difficulty: 2
Question ID: 1.1-64
Page Ref: 14–15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Factual
Objective: 1.3
Answer: c. find comfort in ideas that help them to make sense of the world.

1.1-65. Researchers programmed a computer to randomly make dots appear either at the top or bottom of the screen. If you were a student in this research study, you would be likely to _____ identify the pattern of dot presentation and _____ explain the pattern to the researchers.
   a. correctly; correctly
   b. correctly; incorrectly
   c. incorrectly; correctly
   d. incorrectly; incorrectly

Difficulty: 3
Question ID: 1.1-65
Page Ref: 14–15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Applied
Objective: 1.3
Answer: d. incorrectly; incorrectly
Rationale: In an effort to make order from disorder, we tend to perceive patterns even when they are not there. In this case, even if the dots are random, we would be likely to perceive a pattern and attempt to explain it.

1.1-66. The term _____ refers to the tendency to perceive meaningful connections among unrelated phenomena.
   a. apophenia
   b. confirmation bias
   c. parsimony
   d. interconnectivity

Difficulty: 1
Question ID: 1.1-66
Page Ref: 15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Factual
Objective: 1.3
Answer: a. apophenia

1.1-67. We experience the phenomenon of apophenia when we
   a. accept anecdotal evidence in place of scientific evidence.
   b. fall victim to erroneous information given to us by others.
   c. see a connection between related events.
   d. see a pattern where none really exists.

Difficulty: 3
Question ID: 1.1-67
Page Ref: 15
Topic: Why Are We Drawn to Pseudoscience?
Skill: Factual
Objective: 1.7
Answer: d. see a pattern where none really exists.

1.1-68. According to the discussion about Presidents Lincoln and Kennedy, we often
   a. actively seek out parsimonious explanations for complicated problems.
   b. chalk up coincidences as being due to chance rather than to supernatural events.
   c. overestimate the significance of coincidental information.
   d. prefer skepticism to conspiracy theory explanations about presidential assassinations.

Difficulty: 3
Question ID: 1.1-68
Page Ref: 15–16
Topic: Why Are We Drawn to Pseudoscience?
Skill: Conceptual
Objective: 1.3
Answer: c. overestimate the significance of coincidental information.
Rationale: A comparison between Lincoln and Kennedy illustrates how eerie coincidences *could* be due to supernatural forces, but are most likely due to coincidence.

1.1-69. Which of the following categories involves claims that are not testable?
   a. Metaphysics
   b. Pseudoscience
   c. Science
   d. Both a. and b. are correct

Difficulty: 2
Question ID: 1.1-69
Page Ref: 15–16
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Factual
Objective: 1.3
Answer: a. Metaphysics

1.1-70. Dr. Simmons teaches philosophy and discusses several topics in the course including religion. Paulo, a student in the class, believes that when he dies, he will be resurrected. Paulo's claim falls under the area of

a. metaphysics.
b. science.
c. pseudoscience.
d. rational thinking.

Difficulty: 1
Question ID: 1.1-70
Page Ref: 15–16
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Conceptual
Objective: 1.3
Answer: a. metaphysics.
Rationale: Metaphysical claims make assertions that are not testable and relate to subjects like the existence of God, the soul, and the afterlife.

1.1-71. A major reason to be concerned about the dangers of pseudoscience is that

a. harm rarely results from pseudoscientific beliefs or treatments.
b. a lack of scientific thinking may lead to poor decisions that affect many areas of our lives.
c. people are often quite accurate and unbiased in their day-to-day decision making.
d. quackery and pseudoscience are especially easy to detect without exposure to critical thinking or skepticism.

Difficulty: 1
Question ID: 1.1-71
Page Ref: 16–17
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Conceptual
Objective: 1.4
Answer: b. a lack of scientific thinking may lead to poor decisions that affect many areas of our lives.
Rationale: There are three major reasons to face the dangers of pseudoscience: (a) what we give up in terms of better treatments, (b) direct harm caused by untested treatments, and (c) forfeiting our ability to think critically as citizens.

1.1-72. Pseudoscience can be dangerous because

a. it can lead us in the wrong direction when trying to help others or ourselves.
b. it can cause us to do direct harm.
c. it reduces our ability to think scientifically.
d. All of the above.

Difficulty: 2
Question ID: 1.1-72
Page Ref: 17
Topic: The Dangers of Pseudoscience: Why We Should Care?
Skill: Conceptual
Objective: 1.4
Answer: d. All of the above.
Rationale: Pseudoscience is harmful because it can lead to lost opportunities for good care, direct harm from bad care, and the oversimplification of a complex world.

1.1-73. _____ is the approach of evaluating all claims with an open mind but insisting on persuasive evidence before accepting them.
   a. Metaphysics
   b. Pseudoscience
   c. Scientific skepticism
   d. Empiricism

Difficulty: 1
Question ID: 1.1-73
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: c. Scientific skepticism

1.1-74. Scientific skepticism requires that any claim is met with
   a. an open mind.
   b. regard for authority.
   c. healthy resistance to persuasion.
   d. hypothetical aptitude.

Difficulty: 1
Question ID: 1.1-74
Page Ref: 18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: a. an open mind.

1.1-75. A skeptic is someone who
   a. is close-minded when evaluating evidence.
   b. considers the available evidence carefully.
   c. is dismissive of any evidence that contradicts his or her beliefs.
   d. seeks out evidence that is inconsistent with a theory he or she does not believe in.

Difficulty: 3
Question ID: 1.1-75
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: b. considers the available evidence carefully.

1.1-76. Dr. Wolpe designs an experimental test of his theory of aggression against a competing theory. After conducting the appropriate statistical tests, he finds that the data are better explained by the competing theory. His willingness to accept the evidence that another theory is superior is a characteristic of
   a. dogmatism.
   b. gullibility.
   c. pathological skepticism.
   d. scientific skepticism.

Difficulty: 2
Question ID: 1.1-76
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: d. scientific skepticism.
Rationale: Scientific skepticism is a desirable quality that involves evaluating claims with an open mind, but insisting on convincing evidence before accepting them. Scientific skeptics are willing to revise their ideas when the evidence is not supportive of them, as is the case with Dr. Wolpe.

1.1-77. A skeptic is one who accepts claims
   a. on the basis of supportive scientific evidence.
   b. only from trusted authority figures.
   c. only on the basis of logical reasoning.
   d. only on the basis of their popularity with the public.

Difficulty: 2
Question ID: 1.1-77
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Conceptual
Objective: 1.5
Answer: a. on the basis of supportive scientific evidence.
Rationale: Scientific skepticism involves evaluating claims with an open mind, but insisting on persuasive evidence before accepting them. Claims should not be accepted on the basis of authority or popularity, and our logical reasoning is often erroneous.

1.1-78. Thinking skeptically requires that one rely on
   a. authority figures' opinions.
   b. one's own intuition.
   c. objective evidence.
   d. one's subjective understanding of the world.

Difficulty: 2
Question ID: 1.1-78
Page Ref: 18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: c. objective evidence.

1.1-79. According to the authors, we must sometimes look to authorities because we have difficulty evaluating claims of human behavior due to
   a. lack of time.
   b. biases.
   c. susceptibility to pseudoscience.
   d. an inability to think hypothetically.

Difficulty: 2
Question ID: 1.1-79
Page Ref: 18
Topic: Scientific Skepticism
Skill: Conceptual
Objective: 1.5
Answer: a. lack of time.
Rationale: The general population often doesn't possess the expertise, time, or resources to evaluate claims on our own.

1.1-80. Time, expertise, and resources are all obstacles that
   a. diminish skepticism.
   b. diminish metaphysical claims.
   c. increase reliance on authorities.
   d. increase reliance on empiricism.

Difficulty: 3
Question ID: 1.1-80
Page Ref: 18
Topic: Scientific Skepticism
Skill: Conceptual
Objective: 1.5
Answer: c. increase reliance on authorities.
Rationale: The general population often doesn't possess the expertise, time, or resources to evaluate claims on our own.

1.1-81. Why might we be most likely to accept our local weatherman's claim that the air quality in our town is within acceptable limits?
   a. The weatherman is an authority on the subject.
   b. We do not have the resources to evaluate the claim ourselves.
   c. The evidence is not persuasive enough to challenge our own preconceptions.
   d. We tend to keep a closed mind in face of potentially dangerous, uncontrollable conditions.

Difficulty: 3
Question ID: 1.1-81
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: b. We do not have the resources to evaluate the claim ourselves.
Rationale: Scientific skepticism involves evaluating claims with an open mind, but insisting on persuasive evidence before accepting them. Skeptics are unwilling to accept claims on the basis of authority alone, except when we lack the expertise, time, or resources to evaluate claims of everyday life.

1.1-82. After recently reviewing her research results, Dr. Junger is willing to keep an open mind about her results and other research results on the same evidence. She is displaying an attitude of _____ when evaluating claims.

a. closed-mindedness
b. pathological skepticism
c. scientific skepticism
d. belief perseverance

Difficulty: 2
Question ID: 1.1-82
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: c. scientific skepticism
Rationale: Scientific skepticism involves evaluating claims with an open mind, but insisting on persuasive evidence before accepting them. Dr. Junger does both.

1.1-83. Dr. Lim has been studying fruit flies for over 30 years. She has spent this time altering the genetics of the fruit fly so that reproduction stops at the larvae stage. Recent research has produced findings that differ from the findings of Dr. Lim's experiments. What should Dr. Lim do?

a. Ignore the findings of recent research.
b. Evaluate the recent findings with an open mind.
c. Revise the results of her own research.
d. Accept the new evidence immediately.

Difficulty: 1
Question ID: 1.1-83
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: b. Evaluate the recent findings with an open mind
Rationale: Scientific skepticism involves evaluating claims with an open mind, but insisting on persuasive evidence before accepting them.

1.1-84. Dr. Greene was recently presented with evidence of a new treatment for schizophrenia. He plans on keeping an open mind on this new treatment, but will expect the evidence to

a. not challenge any previous findings related to schizophrenia.
b. be consistent with his own beliefs on the treatment of schizophrenia.
c. not influence any other scientific claims.
d. be persuasive and consistent with a scientific method.

Difficulty: 3
Question ID: 1.1-84
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: d. be persuasive and consistent with a scientific method.
Rationale: Scientific skepticism involves evaluating claims with an open mind, but insisting on persuasive evidence before accepting them.

1.1-85. A marketing firm is trying to sell a new product designed to improve memory. They hire a famous athlete to sell their product, because research shows people are more likely to buy a product endorsed by someone famous. Scientists are less likely to fall into this trap because scientists
   a. prefer to believe their own authority figures.
   b. insist on endorsement by at least two authority figures.
   c. wait to see what the general public thinks before supporting the claims.
   d. evaluate the claim themselves and insist on a certain standard of evidence.

Difficulty: 2
Question ID: 1.1-85
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: d. evaluate the claim themselves and insist on a certain standard of evidence.
Rationale: Scientific skeptics do not rely too much on the opinion of authority figures alone, but instead evaluate claims on their own merits.

1.1-86. Professor Gould brings a guest lecturer to class in order to discuss recent findings on birth defects. After class, Professor Gould warns his students that even though his guest is an authority in developmental psychology, they should
   a. objectively evaluate all new evidence.
   b. discount whatever experts say.
   c. look to the popular psychology industry for definitive answers.
   d. accept claims whenever the general public accepts them.

Difficulty: 2
Question ID: 1.1-86
Page Ref: 18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: a. objectively evaluate all new evidence.
Rationale: Scientific skeptics do not rely too much on the opinion of authority figures alone, but instead evaluate claims on their own merits.

1.1-87. A key aspect of scientific skepticism is
   a. critical thinking.
   b. dogmatic belief.
   c. narrow-mindedness.
   d. reliance on authority.

Difficulty: 1
Question ID: 1.1-87
Page Ref: 18
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.5
Answer: a. critical thinking.

1.1-88. Which principle of scientific thinking does anecdotal evidence FAIL to address?
a. Falsifiable claims about the phenomena
b. Generalizability to the population
c. Parsimonious explanation of the phenomena
d. Ruling out rival or alternative explanations

Difficulty: 3
Question ID: 1.1-88
Page Ref: 18–19
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: d. Ruling out rival or alternative explanations
Rationale: Examining only one or a few cases prevents us from ruling out alternative explanations. Generalizability to the population is also a concern, but that is not one of the principles of scientific thinking discussed.

1.1-89. A claim must be falsifiable in order to be useful. However, we also need this claim to be
a. consistent with the available body of evidence.
b. parsimonious in its explanation of the evidence.
c. replicated by others.
d. all of the above.

Difficulty: 1
Question ID: 1.1-89
Page Ref: 18–23
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: d. all of the above.

1.1-90. In the natural world, there often are many different factors associated with the occurrence of a particular outcome. Therefore it is important that we as critical thinkers _____ whenever possible.
a. create unfalsifiable theories
b. propose complex statements of causation
c. remember that correlation equals causation
d. rule out competing explanations

Difficulty: 2
Question ID: 1.1-90
Page Ref: 18
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: d. rule out competing explanations
Rationale: Eye movement desensitization and reprocessing (EMDR) illustrates the importance of ruling out rival hypotheses. EMDR advocates claim that eye movements are crucial to anxiety disorder treatment, but often fail to consider another possibility; that it's the exposure to the anxiety-provoking thoughts that helps patients (i.e., the eye movement part is not necessary).

1.1-91. Developmental psychologists are trying to evaluate different explanations for the effects of poor parenting on behavior problems in children. One important scientific thinking principle that the psychologists should keep in mind is to
   a. rule out alternative hypotheses using additional research.
   b. accept the most popular explanation even if it competes with other explanations.
   c. accept only those explanations which are unfalsifiable.
   d. develop their own explanation and exclude all others.

Difficulty: 3
Question ID: 1.1-91
Page Ref: 18–20
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. rule out alternative hypotheses using additional research.
Rationale: One principle of scientific thinking is ruling out rival hypotheses using additional research.

1.1-92. Which of these is NOT a principle of scientific thinking?
   a. Hypothetico-deductive reasoning
   b. Occam's Razor
   c. Replicability
   d. Falsifiability

Difficulty: 1
Question ID: 1.1-92
Page Ref: 19
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: a. Hypothetico-deductive reasoning

1.1-93. A basic error that nearly all beginning psychology students make is to assume that
   a. correlation is causation.
   b. good theories make safe, not risky, predictions.
   c. research questions or theories must be falsifiable.
   d. simple theories are preferred to complex ones.

Difficulty: 1
Question ID: 1.1-93
Page Ref: 20
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: a. correlation is causation.

1.1-94. In opening her new private preschool, Mrs. Alvarez plans to only accept students who come from upper-middle income families, because she read that students who perform well come from higher socioeconomic families. Mrs. Alvarez is making the critical thinking error of

a. Occam's Razor.
b. extraordinary claims.
c. confirmation bias.
d. correlation-causation fallacy.

Difficulty: 3
Question ID: 1.1-94
Page Ref: 20
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: d. correlation-causation fallacy.
Rationale: In scientific thinking, we must remember that correlation is not causation; the correlation-causation fallacy is the error of assuming that because one thing is associated with another, it must cause the other.

1.1-95. Researchers in Taiwan have found that contraceptive use is strongly related to the number of electrical appliances (e.g., toaster, fans, etc.) in the home. What is the best explanation for this result?

a. The researchers made a mistake and no one else would ever replicate this finding.
b. Contraceptive use causes people to purchase larger numbers of electrical appliances.
c. Having many electrical appliances causes people to use contraceptive devices.
d. A third variable, such as educational level, is associated with each and produces the observed relationship.

Difficulty: 3
Question ID: 1.1-95
Page Ref: 20
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: d. A third variable, such as educational level, is associated with each and produces the observed relationship.
Rationale: The third variable problem impacts our interpretation of correlational studies. It is a problem because it may lead us to mistakenly believe that variable A is causing variable B (or vice-versa) when in truth a third variable, C, causes both A and B.
% correct 65 a = 5 b = 5 c = 25 d = 65 $r = .20$

1.1-96. Suppose that a therapist notices several clients with anxiety disorders also demonstrate symptoms consistent with major depressive disorder. Why should she be cautious in making the assumption that experiencing an anxiety disorder causes one to experience major depressive disorder?
   a. Her observations may not be replicated by other researchers.
   b. The relationship is probably in the opposite direction; having major depressive disorder causes one to experience anxiety disorders.
   c. The relationship may really be the result of a third variable such as lack of personal control.
   d. The observed relationship creates an unfalsifiable research question.

Difficulty: 2
Question ID: 1.1-96
Page Ref: 20–21
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: c. The relationship may really be the result of a third variable such as lack of personal control.
Rationale: The third variable problem impacts our interpretation of correlational studies. It is a problem because it may lead us to mistakenly believe that variable A is causing variable B (or vice-versa) when in truth a third variable, C, causes both A and B.

1.1-97. Philosopher Karl Popper would be most impressed with a hypothesis of yours if it made a(n)
   a. irrefutable prediction.
   b. risky prediction.
   c. safe prediction.
   d. unfalsifiable prediction.

Difficulty: 1
Question ID: 1.1-97
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: b. risky prediction.

1.1-98. For a scientific claim to be meaningful, it must be capable of being disproven. This is the critical thinking principle of
   a. empirical investigation.
   b. falsifiability.
   c. skepticism.
   d. constructive alternativism.

Difficulty: 1
Question ID: 1.1-98
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: b. falsifiability.

1.1-99. Astrologers, before attempting to demonstrate their abilities, often try to explain away inaccurate predictions. Such excuses violate the critical thinking principle of
   a. falsifiability.
   b. skepticism.
   c. Occam's Razor.
   d. replicability.

Difficulty: 2
Question ID: 1.1-99
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. falsifiability
Rationale: Claims must be capable of being disproven, if they are to be of value.

1.1-100. A major problem with commonsense proverbs is that they often coexist with their complete opposite. This violates which principle of scientific thinking?
   a. Extraordinary claims require extraordinary evidence
   b. Falsifiability
   c. Occam's Razor/principle of parsimony
   d. Replicability

Difficulty: 3
Question ID: 1.1-100
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: b. Falsifiability
Rationale: For a claim to be meaningful, it must be falsifiable, or capable of being disproved. Theories that predict every possible outcome in effect explain nothing. A good theory must explain some outcomes, not all outcomes. "Birds of a feather flock together" and "opposites attract" cannot logically coexist, so this violates the principle of falsifiability.

1.1-101. A researcher published an article proposing a theory that body language is central to human communication. He keeps in mind that his theory may or may not be supported by the evidence, and may be proved wrong. The researcher's perspective illustrates the scientific thinking principle of
   a. falsifiability.
   b. replicability.
   c. extraordinary claims.
   d. Occam's Razor.

Difficulty: 1
Question ID: 1.1-101
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. falsifiability.
Rationale: As one of the principles of scientific thinking, falsifiability is the requirement that claims can be disproved (i.e., that there is some conceivable finding that could disprove it).

1.1-102. An astute observer of human nature should state research questions in a manner that leads either to their being supported or refuted by the available evidence. This is the scientific thinking principle of
   a. falsifiability.
   b. parsimony.
   c. replicability.
   d. ruling out rival hypotheses.

Difficulty: 2
Question ID: 1.1-102
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. falsifiability.
Rationale: Falsifiability requires that, for a theory to be meaningful, certain kinds of evidence could disprove it and that findings for and against be clearly stated in advance.

1.1-103. A group of teachers develops a math curriculum to help students increase their scores on required tests in math. The teachers find promising results with the students in their school, so they develop a plan to test the curriculum in all of the schools in their county. This plan shows that the teachers recognize the importance of
   a. proving that their theory is falsifiable.
   b. demonstrating their pathological skepticism.
   c. showing that required math tests are invalid.
   d. replicating the original findings to increase confidence in them.

Difficulty: 2
Question ID: 1.1-103
Page Ref: 21–22
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: d. replicating the original findings to increase confidence in them.
Rationale: Replicability means that a study's findings can be consistently duplicated. Replicated results increase confidence in research findings.

1.1-104. If a person were to say that a scientific finding was replicated, he or she would be saying that the finding was
   a. accurate and truthful.
   b. consistent and dependable.
   c. not the result of correlation.
   d. parsimonious and straightforward.

Difficulty: 2
Question ID: 1.1-104
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: b. consistent and dependable.
Rationale: Findings are replicated when they can be duplicated consistently, decreasing the odds that they were due to chance. Replicated findings are those found by more than one researcher or group of researchers, and in more than one study; replication lends greater credibility to the initial findings.
% correct 80 a = 0 b = 80 c = 15 d = 5 *r* = .24

1.1-105. Even though we may not be able to prove a theory, we can increase our confidence in the theory's validity through
   a. falsifiability.
   b. replicability.
   c. ruling out rival hypotheses.
   d. hypothetico-deductive processes.

Difficulty: 2
Question ID: 1.1-105
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: b. replicability
Rationale: Replicability is the independent duplication of research results.

1.1-106. A group of scientists is attempting to verify recent data published on the chemical composition of tears and the presence of Alzheimer's disease. This illustrates the critical thinking principle of
   a. ruling out rival hypotheses.
   b. falsifiability.
   c. replicability.
   d. Occam's Razor.

Difficulty: 2
Question ID: 1.1-106
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: c. replicability
Rationale: Replicability is the independent duplication of research results.

1.1-107. Initial reports in the media that listening to classical music made students more intelligent were followed by several failed attempts to reproduce the effects in the laboratories of other researchers. This is an example of the failure to
   a. accurately communicate.
   b. achieve parsimony.
   c. correlate.
   d. replicate.

Difficulty: 1
Question ID: 1.1-107
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: d. replicate.
Rationale: Replication of findings is ideally achieved by independent investigators and lends credibility to the initial findings, helping ensure that they weren't due to chance.
% correct 67 a = 9 b = 2 c = 20 d = 67 *r* = .44

1.1-108. If a researcher's initial findings that a particular relationship or effect exists are not reliably demonstrated by other independent researchers, how are these initial findings thought of in the discipline of psychology?

a. As a deliberate, unethical attempt to falsify one's data
b. As an error or fluke in research
c. As a hoax or scam
d. As a real phenomenon that exists for some people but not for everyone

Difficulty: 3
Question ID: 1.1-108
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: b. As an error or fluke in research
Rationale: Replication of findings is important, as it lends credibility to the initial findings and helps ensure that they weren't due to chance. Findings that other researchers can't replicate are generally chalked up to chance or an anomaly that occurred in the original study. A deliberate attempt to mislead or falsify data does not have to be involved; random findings can occur even in well-designed studies.

1.1-109. According to your authors, one of the bottom lines of scientific thinking is

a. If a claim is extraordinary, we should trust what the authorities say.
b. If a claim runs counter to what we already know, we can accept it if it appears in a peer-reviewed journal.
c. If a claim runs counter to what we already know, it should be supported by extraordinary evidence.
d. If a claim contradicts what we already know, we should disregard it even if it appears in a scientific journal.

Difficulty: 3
Question ID: 1.1-109
Page Ref: 22
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: c. If a claim runs counter to what we already know, it should be supported by extraordinary evidence.
Rationale: Extraordinary claims require extraordinary evidence.

1.1-110. A new television show is based on reported paranormal activity or "hauntings" in the United States. The researchers on the show travel around the country collecting evidence based on claims from residents who believe a particular area is haunted. In order to demonstrate that hauntings exist, these researchers must

a. believe what the local residents say and take it at face value.
b. find a large number of local residents who have observed the phenomenon.
c. interview several authority figures who support the idea of hauntings.
d. provide extraordinary evidence of hauntings.

Difficulty: 2
Question ID: 1.1-110
Page Ref: 22–23
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: d. provide extraordinary evidence of hauntings.
Rationale: One of the principles of scientific thinking states that extraordinary claims (such as the existence of hauntings) require extraordinary evidence.

1.1-111. If I propose a hypothesis that counters what is currently known about the relationship between subliminal presentation of information and memory, who is responsible for developing the evidence regarding my hypothesis?

a. Advocates of my position, including myself
b. The general public through their acceptance of my claims in the absence of any evidence
c. Persons who disagree with my assertion on the basis of the current research data in the area
d. Those who most strongly dispute my hypothesis

Difficulty: 3
Question ID: 1.1-111
Page Ref: 22–23
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. Advocates of my position, including myself
Rationale: According to the scientific thinking principle, "extraordinary claims require extraordinary evidence," researchers making a claim that contradicts what is already known need to back up that claim with evidence convincing enough to rival the claim.

1.1-112. Professor Barnes gives her general psychology class an assignment to look for ads promoting instant weight loss or energy-boosting diets. What information should she have the students look for that might mislead the public into buying the product?

a. Ads promising cures instead of treatments
b. Supporting evidence from clinical trials
c. Scientific data from a credible source
d. Objective comparisons to other products

Difficulty: 3
Question ID: 1.1-112
Page Ref: 22–23
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: a. Ads promising cures instead of treatments
Rationale: One of the scientific thinking principles is that extraordinary claims require extraordinary evidence.

1.1-113. Logical simplicity (parsimony) is the notion behind
   a. skepticism.
   b. Occam's Razor.
   c. metaphysical claims.
   d. pseudoscience.

Difficulty: 1
Question ID: 1.1-113
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: b. Occam's Razor.

1.1-114. Residents of a small town on the gulf coast of Florida reported numerous UFO sightings. Military personnel eventually disclosed that they had been running tests on a new missile over the open waters, which would account for the strange lights the local people were witnessing. Which critical thinking principle does this example best demonstrate?
   a. Occam's Razor/parsimony
   b. Extraordinary claims
   c. Ruling out rival hypotheses
   d. Falsifiability

Difficulty: 2
Question ID: 1.1-114
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: a. Occam's Razor/parsimony
Rationale: Occam's Razor holds that simpler explanations for a phenomenon are more often right than wrong. Crop circles provide an example.

1.1-115. According to Occam's Razor, evaluation of psychological phenomena demands the most _____ explanation to account for the available data.
   a. complex
   b. popular
   c. conventional
   d. simple

Difficulty: 1
Question ID: 1.1-115
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: d. simple
Rationale: Occam's Razor states that when two explanations account for a set of findings equally well, we should generally choose the one that is simpler.

1.1-116. A key characteristic of a good scientific theory is that it is a simple explanatory device. This key characteristic is explained as the scientific thinking principle of
   a. falsifiability.
   b. Occam's Razor.
   c. replication.
   d. ruling out rival hypotheses.

Difficulty: 1
Question ID: 1.1-116
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: b. Occam's Razor.
Rationale: Occam's Razor states that when two explanations account for a set of findings equally well, we should generally choose the one that is simpler.
% correct 85 a = 5 b = 85 c = 5 d = 5 *r* = .26

1.1-117. Occam's Razor is another name for what scientific thinking principle?
   a. Correlation differing from causation
   b. Hume's dictum
   c. Principle of falsifiability
   d. Principle of parsimony

Difficulty: 1
Question ID: 1.1-117
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: d. Principle of parsimony

1.1-118. The key message from the authors' discussion of crop circles is that
   a. aliens or some form of extraterrestrial being have been trying to communicate with humans for hundreds of years.
   b. the causes of some real-world events are unexplainable and unknowable.
   c. scientific thinkers must select the simpler of two claims that fit with the available evidence.
   d. hoaxers often impede scientific progress into the understanding of unexplainable events like the English crop circles.

Difficulty: 2
Question ID: 1.1-118
Page Ref: 23
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: c. critical thinkers must select the simpler of two claims that fit with the available evidence.
Rationale: The authors review the phenomenon of crop circles that appeared in England in the late 1970s and 1980s. They state that in 1991, two British men confessed to having created the circles. The authors used this case as an example of the more parsimonious explanation (human-made versus supernatural) being correct.

1.1-119. Psychology was once similar to which of the following disciplines?
a. Biology
b. Journalism
c. Philosophy
d. Theology
Difficulty: 2
Question ID: 1.1-119
Page Ref: 24
Topic: Psychology's Past and Present: What a Long, Strange Trip It's Been
Skill: Conceptual
Objective: 1.7
Answer: c. Philosophy
Rationale: For many centuries, psychology and philosophy were very similar. Psychology gradually emerged as a science.

1.1-120. What individual is often credited with establishing the first psychological laboratory, thus establishing psychology as an experimental science?
a. Sigmund Freud
b. William James
c. John Watson
d. Wilhelm Wundt
Difficulty: 1
Question ID: 1.1-120
Page Ref: 24
Topic: Psychology's Past and Present: What a Long, Strange Trip It's Been
Skill: Factual
Objective: 1.7
Answer: d. Wilhelm Wundt
% correct 75 a = 10 b = 5 c = 10 d = 75 *r* = .27

1.1-121. What early psychologist was most concerned with developing answers to questions about our conscious mental experience?
a. Sigmund Freud
b. B. F. Skinner
c. Wilhelm Wundt
d. John B. Watson
Difficulty: 2
Question ID: 1.1-121
Page Ref: 24
Topic: Psychology's Past and Present: What a Long, Strange Trip It's Been
Skill: Factual
Objective: 1.7
Answer: c. Wilhelm Wundt

1.1-122. Introspection requires
a. metaphysical experiences.
b. self-skepticism about experiences.
c. empiricism.
d. reflection on the self.
Difficulty: 2
Question ID: 1.1-122
Page Ref: 24
Topic: Psychology's Past and Present: What a Long, Strange Trip It's Been
Skill: Factual
Objective: 1.7
Answer: d. reflection on the self.

1.1-123. Wilhelm Wundt is generally acknowledged with
a. developing the first true psychology laboratory.
b. the use of reaction time experiments.
c. the application of introspection.
d. all of the above.
Difficulty: 2
Question ID: 1.1-123
Page Ref: 24
Topic: Psychology's Past and Present: What a Long Strange Trip It's Been
Skill: Factual
Objective: 1.7
Answer: d. all of the above.

1.1-124. What early psychologist yearned to create a periodic table of the elements of consciousness?
a. Sigmund Freud
b. William James
c. B. F. Skinner
d. Edward Titchener
Difficulty: 2
Question ID: 1.1-124
Page Ref: 26
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual
Objective: 1.7
Answer: d. Edward Titchener
Rationale: Titchener sought to identify all of the elements of consciousness, mainly using the technique of introspection.

1.1-125. E. B. Titchener founded which perspective of psychology?
a. Cognitivism
b. Functionalism
c. Structuralism
d. Psychoanalysis
Difficulty: 2
Question ID: 1.1-125
Page Ref: 26
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: c. Structuralism

1.1-126. The lasting contribution of the psychological school of thought known as structuralism is
   a. its concern with understanding the adaptive purposes of consciousness.
   b. the importance it placed on systematic observation in studying consciousness.
   c. its concern with developing a scientific model of human learning.
   d. its findings that underscored the importance of unconscious mental processes in daily life.

Difficulty: 2
Question ID: 1.1-126
Page Ref: 26
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual
Objective: 1.7
Answer: b. the importance it placed on systematic observation in studying consciousness.
Rationale: Though structuralism eventually lost favor, it benefitted the movement toward scientific psychology by emphasizing the role of careful observation in the study of conscious experience.

1.1-127. Understanding the functions or adaptive purposes of our thoughts, feelings, and behaviors is the goal behind
   a. cognitivism.
   b. behaviorism.
   c. functionalism.
   d. psychoanalysis.

Difficulty: 2
Question ID: 1.1-127
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: c. functionalism.

1.1-128. Suppose you were one of the early graduate students in the newly developed field of psychology. Your mentor is interested in discovering the answers to questions like, "Why is the ability to forget helpful?" "How do emotions assist us in social situations?" and "Why is self-presentation a useful technique for gaining social rewards?" Your mentor's approach is most consistent with the _____ perspective.
   a. behaviorist
   b. functionalist
   c. psychoanalytic
   d. structuralist

Difficulty: 3
Question ID: 1.1-128
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Applied
Objective: 1.7
Answer: b. functionalist
Rationale: Psychologists with a functionalist perspective seek to understand the adaptive purposes (i.e., functions) of our thoughts, feelings, and behaviors.

1.1-129. Uncovering the general principles of learning that explain all behaviors, especially observable behaviors, is the goal of which perspective?
   a. Psychoanalysis
   b. Behaviorism
   c. Functionalism
   d. Structuralism

Difficulty: 2
Question ID: 1.1-129
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: b. Behaviorism

1.1-130. What psychological school of thought was most concerned with the influence of external factors on an organism's or a person's actions?
   a. Behaviorism
   b. Cognitivism
   c. Psychoanalysis
   d. Structuralism

Difficulty: 1
Question ID: 1.1-130
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual
Objective: 1.7
Answer: a. Behaviorism
Rationale: Behaviorists focus on the external influences on our observable behavior, such as rewards and punishments.
% correct 80 a = 80 b = 10 c = 5 d = 5 *r* = .37

1.1-131. Behaviorism is associated with which two leading figures?
   a. John Watson and B. F. Skinner
   b. Jean Piaget and Ulric Neisser
   c. William James and Charles Darwin
   d. Sigmund Freud and E. B. Titchener

Difficulty: 2
Question ID: 1.1-131
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: a. John Watson and B.F. Skinner

1.1-132. B. F. Skinner is most associated with which perspective?
a. Cognitivism
b. Behaviorism
c. Functionalism
d. Psychoanalysis
Difficulty: 2
Question ID: 1.1-132
Page Ref: 27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: b. Behaviorism

1.1-133. You are listening in on a discussion among a group of psychology majors. One major says that the field will only move forward if we use objective methods for understanding the principles that guide human actions. This statement is most consistent with
a. behaviorism.
b. functionalism.
c. psychoanalysis.
d. structuralism.
Difficulty: 2
Question ID: 1.1-133
Page Ref: 27–28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Applied
Objective: 1.7
Answer: a. behaviorism.
Rationale: Behaviorists tend to focus on objective measures and observation as research tools, and seek to understand the principles of learning that underlie human and animal behavior.

1.1-134. A classmate tells you the following, "It's not how a teacher answers your question that matters but how you interpret his or her attempt at answering your question that leaves you satisfied or unsatisfied with his or her answer." This statement fits most closely with ideas from the school of thought known as
a. behaviorism.
b. cognitivism.
c. psychoanalysis.
d. structuralism.
Difficulty: 3
Question ID: 1.1-134
Page Ref: 28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Applied
Objective: 1.7
Answer: b. cognitivism.
Rationale: Cognitivism focuses on our internal activities of thinking and places particular importance on how people interpret or evaluate information.
% correct 70 a = 10 b = 70 c = 0 d = 20 *r* = .65

1.1-135. The key to understanding human behavior, according to Sigmund Freud, was to focus on _____ and the _____ level of the human mind.
a. external factors; conscious
b. external factors; unconscious
c. internal psychological processes; conscious
d. internal psychological processes; unconscious
Difficulty: 1
Question ID: 1.1-135
Page Ref: 28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: d. internal psychological processes; unconscious
% correct 50 a = 15 b = 30 c = 5 d = 50 *r* = .37

1.1-136. The goal of _____ is to uncover the role of unconscious psychological processes and early life experiences in behavior.
a. cognitivism
b. behaviorism
c. functionalism
d. psychoanalysis
Difficulty: 2
Question ID: 1.1-136
Page Ref: 28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: d. psychoanalysis

1.1-137. Sigmund Freud was a leading figure in which perspective of psychology?
a. Cognitivism
b. Behaviorism
c. Functionalism
d. Psychoanalysis
Difficulty: 2
Question ID: 1.1-137
Page Ref: 28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: d. Psychoanalysis

1.1-138. All types of psychology involve
   a. interactions between patients and therapists.
   b. replicating what is already known via common sense.
   c. treating people's behavioral and emotional problems.
   d. the use of scientific methods.

Difficulty: 2
Question ID: 1.1-138
Page Ref: 30
Topic: The Multifaceted World of Modern Psychology
Skill: Conceptual
Objective: 1.8
Answer: d. the use of scientific methods.
Rationale: The authors state that despite their differences, most psychologists in all of the subfields rely on scientific methods to gain knowledge.

1.1-139. Psychologists are most frequently found working
   a. in private companies.
   b. for a governmental agency.
   c. in self-employed, clinical practice.
   d. at universities and 4-year colleges.

Difficulty: 1
Question ID: 1.1-139
Page Ref: 30
Topic: The Multifaceted World of Modern Psychology
Skill: Factual
Objective: 1.8
Answer: d. at universities and 4-year colleges.

1.1-140. Nico is meeting with his academic adviser. He wishes to pursue a career where he'll work to diagnose and treat mental disorders. Nico aspires to be a(n)
   a. clinical psychologist.
   b. experimental psychologist.
   c. forensic psychologist.
   d. school psychologist.

Difficulty: 1
Question ID: 1.1-140
Page Ref: 30–31
Topic: The Multifaceted World of Modern Psychology
Skill: Applied
Objective: 1.8
Answer: a. clinical psychologist.
Rationale: As shown in Table 1.5, clinical psychologists perform assessment, diagnosis, and treatment of psychological disorders.
% correct 90 a = 90 b = 5 c = 0 d = 5 *r* = .25

1.1-141. Imagine that you were a psychology professor lecturing on the nature-nurture debate in 1920. You would have likely emphasized the importance of _____. Now imagine that you are a psychology professor lecturing on the same topic today. You would be likely to emphasize the importance of _____.

a. nature; the interaction of nature and nurture
b. nurture; the interaction of nature and nurture
c. nurture; nature
d. nature; nurture

Difficulty: 3
Question ID: 1.1-141
Page Ref: 30, 32
Topic: The Great Debates of Psychology
Skill: Applied
Objective: 1.9
Answer: b. nurture; the interaction of nature and nurture
Rationale: For much of the twentieth century, learning (nurture) was emphasized as a cause of behavior. Modern psychologists focus on the interaction of nature and nurture.

1.1-142. A _____ examines the physiological bases of behavior in animals and humans.

a. clinical psychologist
b. school psychologist
c. biopsychologist
d. forensic psychologist

Difficulty: 2
Question ID: 1.1-142
Page Ref: 31
Topic: The Multifaceted World of Modern Psychology
Skill: Factual
Objective: 1.8
Answer: c. biopsychologist

1.1-143. A _____ works in prisons, jails, and other settings to assess inmates and assist in rehabilitation.

a. clinical psychologist
b. school psychologist
c. biopsychologist
d. forensic psychologist

Difficulty: 2
Question ID: 1.1-143
Page Ref: 31
Topic: The Multifaceted World of Modern Psychology
Skill: Factual
Objective: 1.8
Answer: d. forensic psychologist

1.1-144. With its concern on the adaptive functions provided by the various psychological systems, evolutionary psychology is most like what early psychological school of thought?
a. Behaviorism
b. Functionalism
c. Psychoanalysis
d. Structuralism

Difficulty: 3
Question ID: 1.1-144
Page Ref: 32
Topic: The Great Debates of Psychology
Skill: Applied
Objective: 1.9
Answer: b. Functionalism
Rationale: Functionalism and evolutionary psychology have in common the focus on the adaptive purpose of our behavior and mental processes. In fact, those functions helped our species better adapt to and survive in the environment.

1.1-145. Evolutionary psychology
a. provides easily testable hypotheses.
b. focuses only on animal behavior.
c. applies Darwin's theory of natural selection.
d. has solved the nature-nurture debate.

Difficulty: 2
Question ID: 1.1-145
Page Ref: 32
Topic: The Great Debates of Psychology
Skill: Conceptual
Objective: 1.9
Answer: c. applies Darwin's theory of natural selection.
Rationale: Evolutionary psychology is a subfield of psychology that explores how our behavior and mental processes might have evolved to help us better adapt to our environment.

1.1-146. Which of the following ideas is the most compelling evidence AGAINST the idea of free will?
a. Most of people's behavior is deliberate and controlled.
b. People often lack direct access to the causes of their behavior.
c. Recent brain imaging studies have shown that readiness potential and conscious intention to behave co-occur.
d. We select when, where, and how to assert our option to engage in one behavior rather than in another.

Difficulty: 3
Question ID: 1.1-146
Page Ref: 32–33
Topic: The Great Debates of Psychology
Skill: Conceptual
Objective: 1.9
Answer: b. People often lack direct access to the causes of their behavior.
Rationale: In the discussion on the free will-determinism debate, the authors explain that people do NOT typically have much insight into the causes of their own behavior. If they did have this insight, that would support the idea of free will (i.e., if you're freely choosing your behavior, you should be able to explain why you made that choice).

1.1-147. _____ research examines how the mind works, then _____ research examines how we can use the former to solve real-world problems.
   a. Simple; formal
   b. Applied; basic
   c. Basic; applied
   d. Formal; applied
Difficulty: 1
Question ID: 1.1-147
Page Ref: 33
Topic: Applying Psychological Science and Thinking to Everyday Life
Skill: Factual
Objective: 1.10
Answer: c. Basic; applied

1.1-148. Brandon is an industrial-organizational psychologist who has been hired by a large hotel chain to determine why the company's turnover rate for housekeeping staff is so high. This is an example of _____ research.
   a. applied
   b. basic
   c. experiential
   d. laboratory
Difficulty: 1
Question ID: 1.1-148
Page Ref: 33
Topic: Applying Psychological Science and Thinking to Everyday Life
Skill: Factual
Objective: 1.10
Answer: a. applied

1.1-149. What famous American psychologist also heavily influenced the field of advertising?
   a. William James
   b. Carl Rogers
   c. B. F. Skinner
   d. John Watson
Difficulty: 3
Question ID: 1.1-149
Page Ref: 34
Topic: Applying Psychological Science and Thinking to Everyday Life
Skill: Factual
Objective: 1.10
Answer: d. John Watson

Fill-in-the-Blank

1.2-1. Most people get their knowledge about psychological topics not from scientific journals or academic-related books but rather from _____.

Difficulty: 1
Question ID: 1.2-1
Page Ref: 4
Topic: Introduction
Skill: Factual
Objective: 1.1
Answer: popular psychology

1.2-2. Barry believes in an old southern tradition that hanging a dead snake on the fence will bring rain to his crops. His tendency to believe he sees the world correctly is also called _____.

Difficulty: 2
Question ID: 1.2-2
Page Ref: 7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Applied
Objective: 1.1
Answer: naive realism

1.2-3. _____ refers to a person's belief that he or she accurately and objectively sees the world as it is.

Difficulty: 2
Question ID: 1.2-3
Page Ref: 7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Conceptual
Objective: 1.1
Answer: Naive realism

1.2-4. Kori has posted a questionnaire on My Space asking her friends to support her idea of cell phones in the classroom. She ignores anyone opposing her beliefs, which is an example of the _____.

Difficulty: 2
Question ID: 1.2-4
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: confirmation bias

1.2-5. Tatiana is a manager of a large grocery store and believes that, if left to their own devices, her high school and college-age workers would do nothing but text and talk on their cell phones. She constantly watches and warns these employees about being written up or fired for repeated violations of the no cell-phone use policy. However, she often ignores the same behavior by her older adult employees. It would be wise to warn her of the dangers of the _____.

Difficulty: 3
Question ID: 1.2-5
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: confirmation bias

1.2-6. Steven believes his mare will give birth tonight because a thunderstorm is predicted. The veterinarian tells him no evidence exists for this idea, but Steven still prepares the stall for his mare to give birth, thus demonstrating _____.

Difficulty: 2
Question ID: 1.2-6
Page Ref: 9
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: belief perseverance

1.2-7. Kari Ann is listening to the mayoral debate on a local access channel. She has strong feelings for one of the candidates and strong feelings against the other. If these feelings influence her evaluation of their performance because she is seeking supportive evidence for her beliefs, we can say that the _____ has occurred.

Difficulty: 2
Question ID: 1.2-7
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: confirmation bias

1.2-8. A(n) _____ is an explanation for a large number of findings in the natural world.

Difficulty: 2
Question ID: 1.2-8
Page Ref: 10
Topic: Psychology as a Science
Skill: Factual
Objective: 1.2
Answer: scientific theory

1.2-9. _____ refers to claims or statements that superficially appear to be scientific but are not.

Difficulty: 1
Question ID: 1.2-9
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual
Objective: 1.3
Answer: Pseudoscience

1.2-10. Louise has a horse who was recently diagnosed with hay allergies. She searched the Internet and found a company that sells homeopathic medicine. The company provides customer testimonials and a description of the product's effectiveness, but lacks scientific evidence to back its claims. These claims can be categorized as an example of _____.

Difficulty: 2
Question ID: 1.2-10
Page Ref: 13–14
Topic: What Is Pseudoscience?
Skill: Applied
Objective: 1.3
Answer: pseudoscience

1.2-11. Dr. Loveland is attempting to use the testimonies of his patients to support his memory enhancement product instead of the scientific research that shows it is not effective. Dr. Loveland's behavior illustrates the pseudoscience warning sign of being overly reliant on _____.

Difficulty: 2
Question ID: 1.2-11
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: anecdotal evidence

1.2-12. Three key components of scientific research that are lacking in pseudoscience are connectivity to other research, peer review, and _____.

Difficulty: 3
Question ID: 1.2-12
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: self-correction

1.2-13. One of the weakest forms of evidence in the scientific method is reliance on individual cases, also known as _____ evidence.

Difficulty: 3
Question ID: 1.2-13
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: anecdotal

1.2-14. Before one's research is published in a scientific journal, it must be evaluated in terms of its accuracy and contribution to the field. This evaluation is referred to as _____.

Difficulty: 2
Question ID: 1.2-14
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3
Answer: peer review

1.2-15. A group of behavioral geneticists has discovered a subspecies of chimpanzee in central Africa. The scientists are keeping an open mind but are still questioning their findings, based on an approach called _____.

Difficulty: 3
Question ID: 1.2-15
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: scientific skepticism

1.2-16. Scientific skepticism requires that any claim is met with a(n) _____.

Difficulty: 2
Question ID: 1.2-16
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: open mind

1.2-17. Even in attempting to be scientifically skeptical, we sometimes must look to authorities because we cannot devote the _____ to the evaluation of claims about human behavior.

Difficulty: 1
Question ID: 1.2-17
Page Ref: 18
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.5
Answer: expertise or time or resources

1.2-18. During a class discussion on the effects of day care on later social adjustment, Dr. Barnes frequently reminded his students to focus on the scientific evidence rather than on their feelings about day care. Dr. Barnes was attempting to encourage his students' use of _____.

Difficulty: 1
Question ID: 1.2-18
Page Ref: 18
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: critical thinking or scientific thinking

1.2-19. In a classroom experiment, a teacher has her students develop scenarios to support one position or another on bullying behavior on the playground. She is demonstrating the scientific thinking principle of _____.

Difficulty: 2
Question ID: 1.2-19
Page Ref: 18, 20
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: ruling out rival hypotheses

1.2-20. In an experiment, a researcher attempts to create situations where support for one position indicates a lack of support for other positions. This is an application of the scientific thinking principle of _____.

Difficulty: 3
Question ID: 1.2-20
Page Ref: 18, 20
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: ruling out rival hypotheses

1.2-21. For a scientific claim to be meaningful, it must be capable of being disproven. This is the scientific thinking principle of _____.

Difficulty: 2
Question ID: 1.2-21
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: falsifiability

1.2-22. Psychics, before attempting to demonstrate their abilities, often offer caveats to explain away their inability to make accurate predictions. Such excuses violate the scientific thinking principle of _____.

Difficulty: 3
Question ID: 1.2-22
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: falsifiability

1.2-23. A group of scientists is attempting to verify recent data published on heart attacks and diabetes by duplicating the original findings. The scientists' process illustrates the scientific thinking principle of _____.

Difficulty: 2
Question ID: 1.2-23
Page Ref: 21–22
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: replicability

1.2-24. _____ refers to the idea that a study's results have been independently verified by others and are not simply the result of chance or coincidence.

Difficulty: 2
Question ID: 1.2-24
Page Ref: 21–22
Topic: Basic Principles of Scientific Thinking
Skill: Factual
Objective: 1.6
Answer: Replicability

1.2-25. The development of psychology as a discipline focused on scientific experimentation after 1879, leading to a split from its roots in _____.

Difficulty: 1
Question ID: 1.2-25
Page Ref: 24
Topic: Psychology's Past and Present: What a Long, Strange Trip It's Been
Skill: Factual
Objective: 1.7
Answer: philosophy

1.2-26. The psychological school of _____ was concerned with scientific efforts to understand the basic foundations of everyday conscious experience.

Difficulty: 3
Question ID: 1.2-26
Page Ref: 26–27
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual
Objective: 1.7
Answer: structuralism

1.2-27. _____ was the psychological school that argued most strongly for the importance of an observable and objective science of psychology.

Difficulty: 2
Question ID: 1.2-27
Page Ref: 27–28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual
Objective: 1.7
Answer: Behaviorism

1.2-28. Randi is giving a talk on theoretical frameworks in psychology. In her talk she mentions the importance of understanding internal psychological processes and that we are frequently unaware of the underlying causes for many of our thoughts, feelings, and behaviors. Randi's talk is most likely on _____.

Difficulty: 3
Question ID: 1.2-28
Page Ref: 28–29
Topic: The Great Theoretical Frameworks of Psychology
Skill: Applied
Objective: 1.7
Answer: psychoanalysis

1.2-29. Many psychologists believe that free will is a(n) _____ because of the automaticity of many behaviors.

Difficulty: 2
Question ID: 1.2-29
Page Ref: 32–33
Topic: The Great Debates of Psychology
Skill: Factual
Objective: 1.9
Answer: illusion

1.2-30. Antonio is investigating the best method for using what is known about persuasion to develop an effective anti-littering campaign in his town and county. This is an example of _____ research.

Difficulty: 1
Question ID: 1.2-30
Page Ref: 33
Topic: Applying Psychological Science and Thinking to Everyday Life
Skill: Applied/Conceptual
Objective: 1.10
Answer: applied

Essay

1.3-1. Evaluate critically the kind of information that one gains from common sense.

Difficulty: 3
Question ID: 1.3-1
Page Ref: 6–8
Topic: Why We Can't Always Trust Our Common Sense
Skill: Applied/Conceptual
Objective: 1.1
Answer: Answers will vary but should contain the following information for full credit.

- Much of common sense is demonstrably incorrect.
- We often believe contradictory ideas with equal strength in their accuracy (which leads to commonsense proverbs being unfalsifiable).
- Naive realism can be used to buttress claims of the accuracy of common sense.
- Common sense can guide us to the truth through intuition or help us develop hypotheses to be tested, but to make smart decisions we must evaluate commonsensical ideas scientifically.

1.3-2. Explain how the concepts of naive realism and confirmation bias may cause Ashley to stay in a bad relationship with her fiancee David, when her friends are all telling her that he is not a very nice person.

Difficulty: 2
Question ID: 1.3-2
Page Ref: 7, 8–9
Topic: Why We Can't Always Trust Our Common Sense
Skill: Applied
Objective: 1.1
Answer: Define the concept of naive realism and explain why this can lead individuals to see what they want to see. Once Ashley believes David is a good person, she then has a tendency to seek out evidence that confirms only the positive side of his behaviors.

1.3-3. Many individuals believe that a full moon is linked to increased crime and suicide rates. Explain how the concept of confirmation bias promotes this misconception.

Difficulty: 2
Question ID: 1.3-3
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Conceptual
Objective: 1.2
Answer: Define confirmation bias and identify the tendency for individuals to use available or anecdotal evidence to support their beliefs (e.g., My brother goes crazy every time the moon is full), while conveniently dismissing contrary evidence.

1.3-4. Individuals in cults continue to hold on to their beliefs even when faced with evidence to the contrary. Explain the concept of belief perseverance within this scenario.

Difficulty: 2
Question ID: 1.3-4
Page Ref: 9–10
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: Provide a clear statement demonstrating an understanding of belief perseverance, such as when a cult leader fails to accurately predict the end of the world and followers attribute this to misunderstanding by the general public as opposed to a flaw in the leader himself.

1.3-5. Identify the flaws in this proposed scientific theory: The man who assaulted the clerk was desperate and out of work.

Difficulty: 2
Question ID: 1.3-5
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied
Objective: 1.2
Answer: Student should recognize that a theory attempts to explain a broader range of behaviors, not just a specific event. Also, theories are often more than simple educated guesses, but rather explanations based on a multitude of data and supporting evidence.

1.3-6. Analyze how the warning signs of pseudoscience are often examples of violations of the principles of scientific thinking.

Difficulty: 3
Question ID: 1.3-6
Page Ref: 14, 18–23
Topic: Warning Signs of Pseudoscience
Skill: Conceptual
Objective: 1.3, 1.6
Answer: Answers will vary but should contain the following information for full credit.

- Exaggerated claims violate the principle of extraordinary claims requiring extraordinary evidence. The kind of evidence needed for most claims either cannot be obtained or is much more ordinary that the proponents of pseudoscience would wish to admit.
- Overreliance on anecdotes violates the principle of correlation versus causation. People assume that the world operates in the way they have observed, but just having an example of something does not mean that one has established a cause-and-effect relationship.
- Overreliance on anecdotes may also violate the spirit of falsifiability because anecdotes are difficult at best, impossible at worst, to verify.
- Overreliance on anecdotes violates the principle of replicability. It's often hard, if not impossible, to verify the truthfulness of the supposed claims from testimonials or anecdotes.
- Absence of connectivity is a violation of ruling out rival hypotheses and Occam's Razor/parsimony.
- Lack of self-correction violates replicability because a lack of replication should lead to self-correction but many pseudoscientific beliefs persist anyway.

1.3-7. Provide an example of the pseudoscientific warning sign of exaggerated claims.

Difficulty: 1
Question ID: 1.3-7
Page Ref: 14
Topic: Warning Signs of Pseudoscience
Skill: Applied
Objective: 1.3
Answer: Provide an example where the treatment or outcome is extraordinary (e.g., Increase your intelligence quotient by 50 points using our two-week memory course).

1.3-8. Describe the dangers of pseudoscience and why the dangers should matter to everyone.

Difficulty: 2
Question ID: 1.3-8
Page Ref: 16–17
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Applied
Objective: 1.4
Answer: Student should touch on the three major reasons for full credit.

- People use valuable resources (primarily money), time, and energy on pseudoscientific treatments that either don't work or have no research on their effectiveness as treatments. Meanwhile, they are missing out on scientifically documented, effective treatments that could relieve their suffering.
- People may be directly harmed, psychologically or physically, when opinion rather than scientific proof is used in the application of a treatment.
- Pseudoscience impacts people in their daily lives when it prohibits them from making educated decisions (it impacts the education their children may get, it impacts the workplace, it impacts their community through politics and other means).

1.3-9. Dr. Kildow was recently presented with evidence of a new treatment for autism. Explain why he should keep an open mind before reaching any conclusions about the data.

Difficulty: 2
Question ID: 1.3-9
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Applied/Conceptual
Objective: 1.5
Answer: Define the concept of scientific skepticism. Identify the importance of evaluating claims before accepting them.

1.3-10. Samantha tells her psychology professor that she heard a doctor on the radio say, "If you eat more vegetables, you can increase your intelligence." Explain why her professor wanted Samantha to provide evidence for this claim, beyond that of the doctor on the radio.

Difficulty: 2
Question ID: 1.3-10
Page Ref: 17–18
Topic: Scientific Skepticism
Skill: Applied
Objective: 1.5
Answer: Discuss the role of authority as it relates to scientific skepticism and acknowledge that even experts require hard data before accepting the claims of their peers.

1.3-11. Dr. Chin has reported that he can decrease stress levels in elderly patients who have experienced a severe fall by exposing them to pictures of their grandchildren. What might a psychologist do before abandoning his or her previous treatment program and adopting the new one proposed by Dr. Chin?

Difficulty: 3
Question ID: 1.3-11
Page Ref: 18, 20
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: Student should indicate that some attempt should be made to find an alternative explanation (rival hypothesis) for the reduction in the patient's stress levels before accepting Dr. Chin's new program (e.g., pictures of dogs, cats, and fruit were also shown; or the patients had increased interaction with a staff member, etc.).

1.3-12. Dr. Jones reported a positive correlation between the number of hours a student studies each week and his or her grade point average (GPA). Explain why we cannot conclude that studying is causing students to have higher GPAs.

Difficulty: 2
Question ID: 1.3-12
Page Ref: 20–21
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: Define the correlation-causation fallacy and discuss the idea that correlation does not mean causation. Student should also demonstrate understanding of the third variable problem by providing a possible variable that might account for this finding (e.g., Brighter students may have figured out that studying is important to earn better grades, so intelligence and not necessarily studying is responsible for higher GPAs).

1.3-13. Provide an example of a theory that is not falsifiable.

Difficulty: 3
Question ID: 1.3-13
Page Ref: 21
Topic: Basic Principles of Scientific Thinking
Skill: Conceptual
Objective: 1.6
Answer: Provide an example of a theory that cannot be disproved (e.g., Disruptions in "psychic energy" are responsible for the high number of traffic accidents reported each year).

1.3-14. A new reading program was developed by graduate education students for increasing scores on standardized tests. Explain why the students and other researchers must replicate their findings before the program is implemented in schools.

Difficulty: 2
Question ID: 1.3-14
Page Ref: 21–22
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: Define replicability and identify the importance of replicability in psychological research.

1.3-15. According to the scientific thinking principle of extraordinary claims, why would proving the existence of the famous Loch Ness monster in Scotland require extraordinary evidence?

Difficulty: 2
Question ID: 1.3-15
Page Ref: 22–23
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: Demonstrate knowledge of the scientific thinking principle of extraordinary claims by citing that this "monster," living in a finite body of water, has never been successfully photographed. Despite the fact that there are numerous examples of eyewitness testimony, researchers have not been able to locate this monster for many, many years. Therefore, to prove that "Nessie" actually exists (an extraordinary claim), extraordinary evidence must be presented.

1.3-16. Discuss the concerns that John Watson had with either or both the structuralist perspective and the psychoanalytic perspective on psychology.

Difficulty: 3
Question ID: 1.3-16
Page Ref: 27–28
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual
Objective: 1.7
Answer: Answers will vary but should include any three of the following for full credit.

- Behaviorists are concerned with studying observable behavior that contains no subjectivity on the part of the individual reporting the data or recording the data. Both structuralism and psychoanalysis would include unobservable information that would be subjective rather than objective.
- Behaviorists were more concerned with the external world. Psychoanalysis and structuralism focused on issues internal to the individual.
- Behaviorists focused more on the importance of research and the use of the scientific method than did psychoanalysts.
- Behaviorists focused more on the importance of the conscious level of the mind, whereas psychoanalysts were most interested in studying the unconscious level.

1.3-17. According to your authors, how does the field of psychology approach the evidence regarding the nature-nurture debate and the free will-determinism debate?

Difficulty: 2
Question ID: 1.3-17
Page Ref: 30–33
Topic: The Great Debates of Psychology
Skill: Conceptual
Objective: 1.9
Answer: Answers will vary but should contain the following information for full credit. Student needs to include supportive evidence for each of the following for full credit as well.

- Most psychologists agree that both genes and our social environment play critical roles in our behavior. However, research continues to explore when the two will interact together and when one is more important than the other for specific behaviors.
- Many psychologists believe that human behavior is largely deterministic and that we are unaware of so many of the influences on our behavior that we mistakenly believe we are free actors.

Critical Thinking Short Answer

1.4-1. Discuss how the ideas from the section "What Makes Psychology Challenging--And Fascinating" can help one to better understand the two great debates of nature-nurture and free will-determinism.

Difficulty: 3
Question ID: 1.4-1
Page Ref: 5–6, 30, 32–33
Topic: What Makes Psychology Challenging—And Fascinating
Skill: Applied
Objective: 1.1
Answer: Answers will vary but should include the following for full credit. A full-credit answer should also include student-generated examples (either their own or items from the text) to support their main points.

- Behavior is multiply determined and should alert us to the fact that both nature and nurture can play a role in causing our behavior.
- The fact that people affect each other, people know they are being studied, and the importance of culture on people's behavior suggests that certain behaviors are more likely to be learned than innate (result more from nurture factors than nature factors).
- Certain factors emphasize the importance of conscious choices and intentions (e.g., knowing you are being studied influences your behavior), while other factors emphasize the role of determinism (e.g., psychological influences are often unknown).
- Individual differences in people's responses to life situations might suggest the importance of subjective interpretation and the influence of free will in our behavior.
- Both areas of debate also suggest the importance of defining terms so that they can be observed and studied to better understand why we do what we do. However, the human brain is not necessarily proficient in helping one to understand all of his or her inner workings.

1.4-2. Explain how the confirmation bias has created a problem for a friend or family member in the past.

Difficulty: 2
Question ID: 1.4-2
Page Ref: 8–9
Topic: Psychology as a Science
Skill: Applied/Conceptual
Objective: 1.2
Answer: Answers will vary but should include the following information for full credit.

- Mention the basic idea of the confirmation bias (seek out supportive evidence but fail to seek out, ignore, or distort contradictory information).
- Clearly and correctly identify a situation where they observed an individual using the confirmation bias and how the person came to an erroneous conclusion.

1.4-3. Explain how the principles of scientific thinking can assist a person in making more informed, and hopefully more accurate, decisions in his or her daily life.

Difficulty: 3
Question ID: 1.4-3
Page Ref: 18–23
Topic: Basic Principles of Scientific Thinking
Skill: Applied
Objective: 1.6
Answer: Answers will vary but should include *at least four* of the following ideas for full credit.

- Ruling out rival hypotheses ensures that we have gathered the evidence in such a way that our explanation/understanding is the only possible rational reason for the data.
- We must remember that just because two things are related doesn't mean that one caused the other (third variable explains each and the relationship we observe comes from that).
- The principle of falsifiability helps to inform us of the kinds of questions that we can ask and actually find a scientific answer for.
- The principles of replicability and extraordinary claims requiring extraordinary evidence address the ability to verify other people's claims (we need concurrence from independent sources) and that this is especially true when our claims contradict what is "known."
- Extraordinary claims also require stronger evidence because they are asking us to put aside our current beliefs in favor of a new theory that explains both the known and the new information we have gathered.
- The principle of parsimony (Occam's Razor) reminds us to focus on the simplest explanation with the fewest assumptions as being the best.

1.4-4. Describe how the fact that psychological influences are often unknown plays a key role in the philosophical debate over the relative influences of free will and determinism.

Difficulty: 3
Question ID: 1.4-4
Page Ref: 32–33
Topic: The Great Debates of Psychology
Skill: Conceptual
Objective: 1.9
Answer: Answers will vary but should contain the following information for full credit.

- Many key influences are often overlooked by people or their importance is discounted by people.
- Because of the previous factor, many people often come to view their behavior as intentional and self-directed when it is really not.
- Also, much of human behavior is the result of well-learned, automatic responses. Despite this fact we continue to believe that we control our destiny and can influence real-life circumstances even when we cannot.
- We then come up with after the fact explanations that sound reasonable to us, despite the fact that they are completely erroneous explanations for our behavior.