Chapter 1: PSYCHOLOGY AND SCIENTIFIC THINKING
Multiple Choice Questions

1) The term _____ refers to the use of everyday sources to understand and explain human behaviour.
a. common sense
b. psychology
c. popular psychology
d. experimental psychology

Answer: c
Question ID: Lil 2ce 1.1-1
Diff: 2
Type: MC
Page Ref: 4
Topic: Psychology and Scientific Thinking: A Framework for Everyday Life
Skill: Factual

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

Answer: c
Question ID: Lil 2ce 1.1-2
Diff: 3
Type: MC
Page Ref: 4
Topic: Psychology and Scientific Thinking: A Framework for Everyday Life
Skill: Conceptual

3) 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 behaviours are incorrect.
c. psychology is a unique field of study separate from philosophy and biology.
d. psychologists do not study people's everyday behaviours.

Answer: b
Question ID: Lil 2ce 1.1-3
Diff: 2
Type: MC
Page Ref: 4-5
Topic: What Is Psychology? Science Versus Intuition
Skill: Conceptual

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

Answer: c
Question ID: Lil 2ce 1.1-4
Diff: 3
Type: MC
Page Ref: 4-5
Topic: What Is Psychology? Science Versus Intuition
Skill: Conceptual

5) Evaluating personal relationships and the way we relate to other people involves the _____ level of analysis.
a. biological
b. social-cultural
c. psychological
d. interpersonal

Answer: b
Question ID: Lil 2ce 1.1-5
Diff: 2
Type: MC
Page Ref: 5
Topic: Psychology and Levels of Analysis
Skill: Factual

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

Answer: b
Question ID: Lil 2ce 1.1-6
Diff: 2
Type: MC
Page Ref: 5
Topic: What Makes Psychology Challenging—and Fascinating
Skill: Factual

7) Trying to explain complex human behaviours, like violence, in terms of one causal factor, such as genes or video games, fails to acknowledge that _____.
a. biological roots to behaviour are more important than other causes
b. actions are multiply determined
c. individual differences prevent us from making any conclusions
d. behaviour is always reciprocally determined

Answer: b
Question ID: Lil 2ce 1.1-7
Diff: 2
Type: MC
Page Ref: 5-6
Topic: What Makes Psychology Challenging—and Fascinating
Skill: Conceptual

8) Johanna is a researcher in Spain, and conducts research on how Spanish culture shapes body image in young Spanish teenage girls. Johanna is using a(n) _____ approach to cross-cultural psychology.
a. etic
b. emic
c. apophenic
d. pareidolic

Answer: b
Question ID: Lil 2ce 1.1-8
Diff: 3
Type: MC
Page Ref: 5-6
Topic: What Makes Psychology Challenging—and Fascinating
Skill: Applied

9) _____ refers to the fact that we mutually influence each other's behaviour.
a. Mutual exclusion
b. Kin selection
c. Reciprocal determinism
d. Naïve realism

Answer: c
Question ID: Lil 2ce 1.1-9
Diff: 1
Type: MC
Page Ref: 6
Topic: What Makes Psychology Challenging—and Fascinating
Skill: Factual

10) We trust our common sense and may believe in popular psychology claims because we are prone to
a. the confirmation bias.
b. naïve realism.
c. logical fallacies.
d. communalism.

Answer: b
Question ID: Lil 2ce 1.1-10
Diff: 2
Type: MC
Page Ref: 6-7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Factual

11) A major problem with common sense proverbs is that they often coexist with their complete opposite. This violates which principle of critical thinking?
a. Replicability
b. Extraordinary claims require extraordinary evidence
c. Parsimony/Occam's razor
d. Falsifiability

Answer: d
Question ID: Lil 2ce 1.1-11
Diff: 3
Type: MC
Page Ref: 6-7, 23-25
Topic: Why We Can't Always Trust Our Common Sense & A Basic Framework for Scientific Thinking
Skill: Conceptual

12) You could tell one friend that "haste makes waste," and tell another friend that they should "strike while the iron is hot." That both claims sound reasonable would appear to violate the critical thinking principle of
a. Replicability
b. Extraordinary claims require extraordinary evidence
c. Parsimony/Occam's razor
d. Falsifiability

Answer: d
Question ID: Lil 2ce 1.1-12
Diff: 3
Type: MC
Page Ref: 6-7, 23-25
Topic: Why We Can't Always Trust Our Common Sense & A Basic Framework for Scientific Thinking
Skill: Conceptual

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

Answer: b
Question ID: Lil 2ce 1.1-13
Diff: 1
Type: MC
Page Ref: 8
Topic: Psychology as a Science
Skill: Factual

14) Members of the scientific community believe that psychology is best considered to be a
a. science.
b. weak science.
c. hard science
d. soft science.

Answer: a
Question ID: Lil 2ce 1.1-14
Diff: 1
Type: MC
Page Ref: 8
Topic: Psychology as a Science
Skill: Factual

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

Answer: c
Question ID: Lil 2ce 1.1-15
Diff: 1
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Factual

16) Suppose Dr. Fish has a theory that says you cannot live without two working eyes. To demonstrate this is true, Dr. Fish brings to you hundreds of living people, each of whom has two working eyes. This demonstrates the
a. the availability heuristic.
b. the hindsight bias.
c. the confirmation bias.
d. belief perseverance.

Answer: c
Question ID: Lil 2ce 1.1-16
Diff: 2
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

17) 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 behaviour is maintained through
a. the representativeness heuristic.
b. the confirmation bias.
c. belief perseverance.
d. the hindsight bias.

Answer: b
Question ID: Lil 2ce 1.1-17
Diff: 2
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

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

Answer: c
Question ID: Lil 2ce 1.1-18
Diff: 2
Type: MC

Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

19) In *Alice in Wonderland*, the Cheshire Cat tells Alice that "most everyone's mad here. I'm mad, you're mad." And Alice protests, "But how do you know I'm mad?!" "Because," says the Cat, "if you weren't, you wouldn't have come here." So Alice begins to look for other examples of madness in the strange world, demonstrating
a. belief perseverance.
b. the availability heuristic.
c. confirmation bias.
d. the anchoring and adjustment heuristic.

Answer: c
Question ID: Lil 2ce 1.1-19
Diff: 2
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-20
Diff: 2
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

21) To believe that everyone admitted to a mental institution is necessarily crazy (or they wouldn't be there) demonstrates
a. belief perseverance.
b. the availability heuristic.
c. healthy skepticism.
d. confirmation bias.

Answer: d
Question ID: Lil 2ce 1.1-21
Diff: 2

Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

22) To believe that a ragged-looking man with a shopping cart is necessarily impoverished demonstrates
a. belief perseverance.
b. the availability heuristic.
c. healthy skepticism.
d. confirmation bias.

Answer: d
Question ID: Lil 2ce 1.1-22
Diff: 2
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Conceptual

23) According to your authors, _____ is the "mother of all biases."
a. the confirmation bias
b. the availability heuristic
c. belief perseverance
d. the hindsight bias

Answer: a
Question ID: Lil 2ce 1.1-23
Diff: 1
Type: MC
Page Ref: 10
Topic: Psychology as a Science
Skill: Factual

24) 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 representativeness heuristic.
b. the hindsight bias.
c. belief perseverance.
d. the availability heuristic.

Answer: c
Question ID: Lil 2ce 1.1-24
Diff: 2

Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Conceptual

25) Suppose a teacher hears from the principal at the start of the school year that an especially "weak" student will be admitted to their class. From September to October, the teacher indeed sees that this student struggles with assignments. In November, the principal states that the student admitted to the class was actually quite strong. But even after knowing this, the teacher still grades the student poorly. This is an example of
a. the representativeness heuristic.
b. the hindsight bias.
c. belief perseverance.
d. the availability heuristic.

Answer: c
Question ID: Lil 2ce 1.1-25
Diff: 2
Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Conceptual

26) Suppose you hear that Mr. Banker was arrested for stealing money; to your friends, you have few good things to say about Mr. Banker. But at the trial, the charges are shown to be false. However, you are still suspicious and wary of Mr. Banker. This is an example of
a. the representativeness heuristic.
b. the hindsight bias.
c. belief perseverance.
d. the availability heuristic.

Answer: c
Question ID: Lil 2ce 1.1-26
Diff: 2
Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Conceptual

27) Recall from your text that researchers gave students false feedback about their abilities to distinguish between false and real suicide notes. At the conclusion of the study, the researchers informed the students that their feedback was in no way related to their actual performance. However, on a subsequent task where the students had to

estimate their performance on a similar task, they used this false feedback to guide their estimates. This is an example of
a. belief perseverance.
b. overconfidence.
c. confirmation bias.
d. the hindsight bias.

Answer: a
Question ID: Lil 2ce 1.1-27
Diff: 2
Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Factual

28) Pretend that you are a participant in a study on deception detection, and after several trials, the experimenter gives you feedback that you are a 'wizard' at detecting deception and score better than the average student. You are then asked to complete a few more trials of deception judgments. At the end of the study, the experimenter tells you that the feedback was bogus and your performance was average and around the same level as everyone else who has participated in the study. Despite this, you are still convinced that you were better at determining when people were lying better than other participants. In this example, you would be engaging in
a. confirmation bias.
b. disinterestedness.
c. belief perseverance.
d. the disconfirmation bias.

Answer: c
Question ID: Lil 2ce 1.1-28
Diff: 2
Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Conceptual

29) In science, a scientific theory is defined as a(n)
a. personal understanding of natural laws.
b. testable prediction about the natural world.
c. explanatory device for scientific findings.
d. educated opinion about the natural world.

Answer: c
Question ID: Lil 2ce 1.1-29
Diff: 2
Type: MC

Page Ref: 8-9
Topic: Psychology as a Science
Skill: Factual

30) Let's suppose someone holds a door open for you and you wonder "do they have a crush on me?" So you start to observe their behaviour with others, to see if they hold others' doors open or show courtesy and politeness in other circumstances. Your wonderment on the possibility of a crush is best thought of as a(n)
a. theory.
b. prediction.
c. hypothesis.
d. outcome.

Answer: c
Question ID: Lil 2ce 1.1-30
Diff: 3
Type: MC
Page Ref: 9
Topic: Psychology as a Science
Skill: Conceptual

31) In science, an explanatory device for scientific findings is called a(n)
a. scientific theory.
b. scientific hypothesis.
c. empirical theory.
d. rational theory.

Answer: a
Question ID: Lil 2ce 1.1-31
Diff: 2
Type: MC
Page Ref: 8-9
Topic: Psychology as a Science
Skill: Factual

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

Answer: d
Question ID: Lil 2ce 1.1-32
Diff: 2
Type: MC

Page Ref: 8-9
Topic: Psychology as a Science
Skill: Factual

33) To explain a wide range of observations, a psychologist might make mention to a(n)
a. rational hypothesis.
b. empirical hypothesis.
c. empirical theory.
d. scientific theory.

Answer: d
Question ID: Lil 2ce 1.1-33
Diff: 2
Type: MC
Page Ref: 8-9
Topic: Psychology as a Science
Skill: Factual

34) If a psychologist were to develop a theory of cognitive development, he or she would want his or her theory to explain a _____ observations.
a. substantial number of
b. very few
c. moderate number of
d. small number of

Answer: a
Question ID: Lil 2ce 1.1-34
Diff: 3
Type: MC
Page Ref: 8-9
Topic: Psychology as a Science
Skill: Conceptual

35) A scientific theory is considered _____ if it explains a _____ number of observations.
a. useful; large
b. useful; small
c. precise; large
d. precise; small

Answer: a
Question ID: Lil 2ce 1.1-35
Diff: 3
Type: MC
Page Ref: 8-9
Topic: Psychology as a Science
Skill: Conceptual

36) Despite the fact that scientific research has found no support or basis for the belief of "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. scientific illiteracy.
c. the hindsight bias.
d. gullibility.

Answer: a
Question ID: Lil 2ce 1.1-36
Diff: 2
Type: MC
Page Ref: 10-11
Topic: Psychology as a Science
Skill: Conceptual

37) Which of the following categories involves claims that are always untestable (and therefore unfalsifiable)?
a. Pseudoscience
b. Metaphysics
c. Science
d. Both A and B are correct.

Answer: b
Question ID: Lil 2ce 1.1-37
Diff: 2
Type: MC
Page Ref: 11
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Factual

38) Unlike science and pseudoscience, metaphysics involves claims that are always
a. unjustifiable.
b. unfalsifiable.
c. derived from rational thought.
d. derived from empirical observation.

Answer: b
Question ID: Lil 2ce 1.1-38
Diff: 2
Type: MC
Page Ref: 11
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Factual

39) Who claimed that science and religion are entirely different and non-overlapping realms of understanding the world; so that science deals with testable claims about the natural world, whereas religion deals with untestable claims about moral values.
a. Gould
b. Popper
c. Freud
d. Skinner

Answer: a
Question ID: Lil 2ce 1.1-39
Diff: 3
Type: MC
Page Ref: 11
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Factual

40) Claims that involve the existence of God, the soul, or afterlife, reflect _____ claims that are _____.
a. religious claims; replicable
b. metaphysical; unfalsifiable
c. pseudoscientific; correlations
d. scientific; risky predictions

Answer: b
Question ID: Lil 2ce 1.1-40
Diff: 2
Type: MC
Page Ref: 11
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Conceptual

41) Which of the following is not a metaphysical claim?
a. People can communicate with individuals that have passed away.
b. The existence of the afterlife has been proven by science.
c. Meditation can help to alleviate stress responses.
d. Astrological signs guide the events in the universe.

Answer: c
Question ID: Lil 2ce 1.1-41
Diff: 2
Type: MC
Page Ref: 11
Topic: Metaphysical Claims: The Boundaries of Science
Skill: Conceptual

42) In research reports, we often see the terms "research suggests," or "appears," or "raises the possibility that" a finding is correct, but also acknowledges that we might be incorrect. Your authors refer to this as
a. naïve realism.
b. a prescription for humility.
c. falsifiability.
d. Occam's razor.

Answer: b
Question ID: Lil 2ce 1.1-42
Diff: 2
Type: MC
Page Ref: 12
Topic: Recognizing That We Might Be Wrong
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-43
Diff: 2
Type: MC
Page Ref: 13
Topic: The Amazing Growth of Popular Psychology
Skill: Factual

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

Answer: d
Question ID: Lil 2ce 1.1-44
Diff: 2
Type: MC
Page Ref: 13
Topic: The Amazing Growth of Popular Psychology
Skill: Conceptual

45) When attempting to differentiate between useful and useless information from popular psychology, what is a good rule of thumb to follow?
a. Trust nothing that you read or hear in the media about psychology.
b. Insist on evidence to accurately evaluate all claims.
c. All popular psychology claims are misinformation.
d. Common sense is often correct; go with your gut.

Answer: b
Question ID: Lil 2ce 1.1-45
Diff: 2
Type: MC
Page Ref: 13
Topic: The Amazing Growth of Popular Psychology
Skill: Conceptual

46) What percentage of self-help books contain claims that are scientifically untested?
a. 30
b. 45
c. 70
d. 95

Answer: d
Diff: 1
Type: MC
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual

47) _____ represents a set of claims that seem scientific but really are not.
a. Pseudoscience
b. Metaphysics
c. Metacognition
d. Religion

Answer: a
Question ID: Lil 2ce 1.1-47
Diff: 1
Type: MC
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual

48) Which of the following statements would your authors find the most worrisome?
a. Pseudoscience seems to be so much more interesting and engaging than science.
b. The majority of North Americans do not believe in the existence of ghosts or witches.
c. Being open-minded about topics associated with pseudoscience is no big deal.
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?"

Answer: a
Question ID: Lil 2ce 1.1-48
Diff: 2
Type: MC
Page Ref: 13-14
Topic: What Is Pseudoscience?
Skill: Factual

49) In a survey of the Canadian public, which pseudoscientific belief was endorsed by the greatest percentage of people?
a. Aliens
b. Angels
c. Reincarnation
d. Ghosts

Answer: b
Question ID: Lil 2ce 1.1-49
Diff: 3
Type: MC
Page Ref: 14
Topic: What Is Pseudoscience?
Skill: Factual

50) Dr. Boliba develops a herbal supplement that he claims increases memory abilities, however many other researchers have been unable to replicate his findings and report that placebo pills are just as effective as his herbal supplement. In response to these criticisms, Dr. Boliba argues that his pills increase specific types of memory that were not tested by researchers, and that the participants must have performed poorly in other studies because they were concerned about taking a drug. In this example, which warning sign of pseudoscience are you witnessing?
a. Ad hoc immunizing
b. Exaggerated claims
c. Overreliance on anecdotes
d. Evasion of peer review

Answer: a
Question ID: Lil 2ce 1.1-50
Diff: 2

Type: MC
Page Ref: 14-15
Topic: What Is Pseudoscience?
Skill: Conceptual

51) The idea that proponents of speed-reading courses or facilitated communication hold stubbornly to their beliefs despite contradictory evidence relates to what warning sign of pseudoscience?
a. Exaggerated claims
b. Overreliance on anecdotes
c. Lack of self-correction
d. Absence of connectivity

Answer: c
Question ID: Lil 2ce 1.1-51
Diff: 2
Type: MC
Page Ref: 14-15
Topic: What Is Pseudoscience?
Skill: Conceptual

52) Your friend tells you about a new commercial program called "Memorise This" that is proven by research to help people draw on their natural abilities to form photographic memories and remember information forever. What advice would you give to your friend about this program?
a. If it is proven then it must be based on true science.
b. The claim is likely pseudoscientific as scientific findings are rarely "proven".
c. The program must work because it was made by the same company as speed-reading programs.
d. The claim sounds scientific and connects with previous research so it is worth investigating.

Answer: b
Question ID: Lil 2ce 1.1-52
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Conceptual

53) Penelope refuses to give her children cough syrup when they are sick because she knows a mother who did this and it resulted in brain damage in her child. Which warning sign of pseudoscience relates to Penelope's opinion?
a. Exaggerated claims
b. Ad hoc immunizing
c. Use of psychobabble
d. Anecdotal evidence

Answer: d
Question ID: Lil 2ce 1.1-53
Diff: 2
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Conceptual

54) Anecdotes are severely limited in all of the following ways except
a. anecdotes don't tell us anything about how representative the cases are.
b. anecdotes are impressive and can lead to new scientific inquiries.
c. anecdotes are difficult to verify.
d. anecdotes don't tell us anything about cause and effect.

Answer: b
Question ID: Lil 2ce 1.1-54
Diff: 2
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

55) Pseudoscientific claims tend not to be based on research findings that already exist. Which warning sign of pseudoscience does this reflect?
a. Ad hoc immunizing
b. Psychobabble
c. Absence of connectivity
d. Evasion of peer review

Answer: c
Question ID:
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

56) Abigail is watching a late night infomercial on television that advertises a new program called "Live Linguistically" that claims to help you learn a new language in a day. The ad says that "Live Linguistically has been scientifically proven by hundreds of studies to enable fast language learning through stimulation of the language pathways in your cerebral cortex and generate new language neurons. Not only will you be able to learn a new language in a day, but you will be able to speak it with perfect grammatical structure and accent for the rest of your life". This example reflects which of the following warning signs of pseudoscience?
a. Ad hoc immunizing
b. Psychobabble

c. Absence of connectivity
d. Overreliance on anecdotes

Answer: b
Question ID:
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Conceptual

57) Which warning sign of pseudoscience is synonymous with stating an unfalsifiable hypothesis or theory?
a. Overreliance on anecdotal evidence
b. Overuse of ad hoc immunizing hypotheses
c. Lack of self-correction
d. Evasion of peer review

Answer: b
Question ID:
Diff: 2
Type: MC
Page Ref: 14
Topic: What Is Pseudoscience?
Skill: Factual

58) According to the warning signs of pseudoscience, an overuse of ad hoc immunizing hypotheses involves
a. stating an unreliable hypothesis or theory.
b. stating an unfalsifiable hypothesis or theory.
c. a lack of self-correction.
d. little if any peer review.

Answer: b
Question ID:
Diff: 2
Type: MC
Page Ref: 14
Topic: What Is Pseudoscience?
Skill: Factual

59) A key characteristic of a pseudoscience is that incorrect theories are
a. never corrected or changed.
b. discarded.
c. formulated and revised as needed.
d. seldom believed by the general public.

Answer: a
Question ID:
Diff: 2
Type: MC
Page Ref: 14-15
Topic: What Is Pseudoscience?
Skill: Factual

60) Suppose a theorist decides not to revise his theory despite a large amount of nonsupportive evidence. If this continues, it's very likely that this theory
a. is destined to join the ranks of pseudoscience
b. will get stronger over time.
c. will get replaced over time.
d. will be believed by the general public.

Answer: a
Question ID:
Diff: 2
Type: MC
Page Ref: 14-15
Topic: What Is Pseudoscience?
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-61
Diff: 3
Type: MC
Page Ref: 13-15
Topic: What Is Pseudoscience?
Skill: Factual

62) 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. the results of research connect the efficacy of the sleep-aid to other widely accepted scientific findings.

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. its makers claim it has been "proven" to induce sleep in one-third the time of competing sleep aids.

Answer: d
Question ID: Lil 2ce 1.1-62
Diff: 2
Type: MC
Page Ref: 13-15
Topic: What Is Pseudoscience?
Skill: Conceptual

63) What is an important limitation of anecdotal evidence in developing scientifically sound treatments or procedures?
a. Anecdotes are extremely difficult for others to verify.
b. Anecdotes cannot help to establish cause-effect relationships.
c. Anecdotes do not address the issue of representativeness of the cases.
d. All of the above are important limitations of the usefulness of anecdotal evidence.

Answer: d
Question ID: Lil 2ce 1.1-63
Diff: 2
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

64) Which principle of critical thinking does anecdotal evidence fail to address?
a. Falsifiable claims about the phenomena
b. Ruling out rival or alternative explanations
c. Generalisability to the population
d. Parsimonious explanation of the phenomena

Answer: b
Question ID: Lil 2ce 1.1-64
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

65) Which warning sign of pseudoscience does not address rival hypotheses?
a. Exaggerated claims
b. Anecdotes

c. Self-correction
d. Peer review

Answer: b
Question ID: Lil 2ce 1.1-65
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

66) A great amount of evidence is required whenever one makes
a. use of highly technical terms and information.
b. an exaggerated or extraordinary claim.
c. a correlation among variables.
d. a causal link among variables.

Answer: b
Question ID: Lil 2ce 1.1-66
Diff: 2
Type: MC
Page Ref: 14-15, 23, 26
Topic: What Is Pseudoscience? & A Basic Framework for Scientific Thinking
Skill: Factual

67) According to the authors, 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 sin known as
a. evasion of peer review.
b. psychobabble.
c. exaggerated claims.
d. absence of connectivity.

Answer: d
Question ID: Lil 2ce 1.1-67
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Conceptual

68) Using needlessly technical language to explain phenomena refers to
a. evasion of peer review.
b. psychobabble.

c. exaggerated claims.
d. absence of connectivity.

Answer: b
Question ID: Lil 2ce 1.1-68
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Factual

69) "I couldn't finish my test because I was caught in a shame vortex which led to a guilt spiral." This explanation of behaviour is best described as
a. evasion of peer review.
b. psychobabble.
c. exaggerated claims.
d. absence of connectivity.

Answer: b
Question ID: Lil 2ce 1.1-69
Diff: 3
Type: MC
Page Ref: 15
Topic: What Is Pseudoscience?
Skill: Conceptual

70) Which of the following was not mentioned as a source of erroneous thinking?
a. Cognitive factors
b. Self-esteem
c. Scientific illiteracy
d. Motivational factors

Answer: b
Question ID: Lil 2ce 1.1-70
Diff: 3
Type: MC
Page Ref: 16-21
Topic: What Is Pseudoscience?
Skill: Factual

71) One explanation for why people are drawn to pseudoscience or to specific pseudoscientific beliefs is that many people
a. are experiential thinkers.
b. lack training in rational thought processes.
c. prefer to ignore scientific research and develop their own conclusions.
d. are open to exploring and understanding the mysteries of the world and universe.

Answer: d
Question ID: Lil 2ce 1.1-71
Diff: 3
Type: MC
Page Ref: 13, 17-18
Topic: What Is Pseudoscience?
Skill: Conceptual

72) Because people are open to exploring and understanding the mysteries of the world, people are likely to
a. believe unusual claims.
b. use experiential thinking.
c. use rational thinking.
d. be drawn to the pseudosciences.

Answer: d
Question ID: Lil 2ce 1.1-72
Diff: 3
Type: MC
Page Ref: 13, 17-18
Topic: What Is Pseudoscience?
Skill: Conceptual

73) What is the main point of the authors' discussion on the cognitive factors underlying why we are drawn to pseudoscience?
a. Critical thinking imposes important limitations on our decision making.
b. The brain's adaptive tendencies can also lead us to incorrect understandings.
c. Rational thinking has been largely ignored in the education system.
d. People are motivated to prove scientific understanding incorrect.

Answer: b
Question ID: Lil 2ce 1.1-73
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Conceptual

74) According to the tenets of terror management theory, why do we often adopt beliefs in the paranormal?
a. Mortality salience encourages reassuring cultural perspectives, like the existence of heaven or the afterlife.
b. Mortality salience encourages experiential and other forms of illogical reasoning.
c. Mortality salience encourages religious faith or spirituality.
d. Mortality salience encourages higher levels of belief in the unknowable.

Answer: a
Question ID: Lil 2ce 1.1-74
Diff: 3
Type: MC
Page Ref: 18
Topic: What Is Pseudoscience?
Skill: Factual

75) Terror management theory says we are more likely to believe extraordinary claims when we are reminded of our own
a. death.
b. family.
c. faults.
d. successes.

Answer: a
Question ID: Lil 2ce 1.1-75
Diff: 2
Type: MC
Page Ref: 18
Topic: What Is Pseudoscience?
Skill: Factual

76) Once a guest appeared on *The Tonight Show*, with former host Johnny Carson, and showed her collection of potato chips that resembled famous celebrities or historical figures. One example was a potato chip that was said to resemble Abraham Lincoln. In actuality, this guest was providing an example of
a. apophenia.
b. the confirmation bias.
c. belief perseverance.
d. pareidolia.

Answer: d
Question ID: Lil 2ce 1.1-76
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Conceptual

77) Will and Kristyn are laying on a hill looking up at the stars. Kristyn looks over and sees the face of a man appearing on the moon. She fails to consider that this face is really a combination of craters on the moon's surface and her own perceptual abilities creating meaning. She has fallen victim to
a. pareidolia.
b. belief perseverance.

c. apophenia.
d. the confirmation bias.

Answer: a
Question ID: Lil 2ce 1.1-77
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Conceptual

78) If you look into a burning fire and seem to make out the face of a person among the glowing embers, you have fallen victim to
a. pareidolia.
b. belief perseverance.
c. apophenia.
d. the confirmation bias.

Answer: a
Question ID: Lil 2ce 1.1-78
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Conceptual

79) Many people believe that your chances of conceiving a child after adoption is higher than before; in fact, there is no difference in the likelihood of conception. This is an example of
a. pareidolia.
b. belief perseverance.
c. apophenia.
d. the confirmation bias.

Answer: c
Question ID: Lil 2ce 1.1-79
Diff: 2
Type: MC
Page Ref: 16
Topic: What Is Pseudoscience?
Skill: Conceptual

80) _____ is the tendency to perceive meaningful images in meaningless visual stimuli.
a. Apophenia
b. Transcendental temptation

c. Pareidolia
d. Emotional reasoning fallacy

Answer: c
Question ID: Lil 2ce 1.1-80
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Factual

81) _____ is the tendency to perceive meaningful connections among unrelated phenomenon.
a. Apophenia
b. Transcendental temptation
c. Pareidolia
d. Emotional reasoning fallacy

Answer: a
Question ID: Lil 2ce 1.1-81
Diff: 2
Type: MC
Page Ref: 16
Topic: What Is Pseudoscience?
Skill: Factual

82) Carmen is thinking about her best friend Simone who lives in France, and is wondering when she will get to talk to her again, when the phone suddenly rings and it is a call from Simone! Carmen says that Simone must have ESP. Carmen's belief is an example of _____.
a. pareidolia
b. apophenia
c. transcendental temptation
d. emotional reasoning fallacy

Answer: b
Question ID: Lil 2ce 1.1-82
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Applied

83) _____ involves the perception of meaningful connections among unrelated phenomena, whereas _____ involves the perception of meaningful images in meaningless visual stimuli.

a. Either-or fallacy; emotional reasoning fallacy
b. Emotional reasoning fallacy; either-or fallacy
c. Pareidolia; apophenia
d. Apophenia; pareidolia

Answer: d
Question ID: Lil 2ce 1.1-83
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Factual

84) The phenomenon of apophenia is an example of an illusory correlation because
a. we see a pattern where none really exists.
b. we fall victim to erroneous information given to us by others.
c. we accept anecdotal evidence in place of scientific evidence.
d. we see a connection between related events.

Answer: a
Question ID: Lil 2ce 1.1-84
Diff: 3
Type: MC
Page Ref: 16
Topic: What Is Pseudoscience?
Skill: Application

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

Answer: b
Question ID: Lil 2ce 1.1-85
Diff: 2
Type: MC
Page Ref: 10, 16
Topic: Psychology as a Science & What Is Pseudoscience?
Skill: Application

86) Our tendency to perceive meaningful connections among unrelated phenomena is called
a. active constructivism.
b. passive constructivism.
c. Apophelia.
d. Apophenia.

Answer: d
Question ID: Lil 2ce 1.1-86
Diff: 2
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Factual

87) According to the example in the book about receiving a phone call from a friend shortly after thinking of him or her, we often
a. actively seek out parsimonious explanations for complicated problems.
b. overestimate how unusual certain patterns of coincidental information really are.
c. prefer skepticism to conspiracy theory explanations about presidential assassinations.
d. chalk up coincidences as being due to chance rather than to supernatural events.

Answer: b
Question ID: Lil 2ce 1.1-87
Diff: 3
Type: MC
Page Ref: 16-17
Topic: What Is Pseudoscience?
Skill: Conceptual

88) Scientific investigation has identified that "The Hot Hand" in basketball is
a. dependent on the player's skill level.
b. a question that cannot be answered through science.
c. a myth.
d. a reality.

Answer: c
Question ID: Lil 2ce 1.1-88
Diff: 2
Type: MC
Page Ref: 17
Topic: What Is Pseudoscience?
Skill: Factual

89) Reasoning traps that can lead to erroneous conclusions are called
a. systematic information biases.
b. experiential thought patterns.
c. confirmation biases.
d. logical fallacies.

Answer: d
Question ID: Lil 2ce 1.1-89
Diff: 1
Type: MC
Page Ref: 18-20
Topic: What Is Pseudoscience?
Skill: Factual

90) Talk show pundits often take extreme positions and use language that is designed to anger and upset persons who AGREE with the pundit's position. These strong, negative feelings are likely to encourage the
a. either-or fallacy.
b. the bandwagon fallacy.
c. not me fallacy.
d. emotional reasoning fallacy.

Answer: d
Question ID: Lil 2ce 1.1-90
Diff: 2
Type: MC
Page Ref: 18-19
Topic: What Is Pseudoscience?
Skill: Conceptual

91) Jerry puts his child in daycare while he works, whereas Janine stays home from work to look after her child. When told about research that suggests that daycare has negative effects on children, Jerry is angry and refuses to believe the study is accurate, whereas Janine wholeheartedly agrees with the outcome of the study. This example reflects what type of logical fallacy?
a. Bandwagon fallacy
b. Emotional reasoning fallacy
c. Either-or fallacy
d. Not me fallacy

Answer: b
Question ID: Lil 2ce 1.1-91
Diff: 2
Type: MC
Page Ref: 18-19
Topic: What Is Pseudoscience?
Skill: Applied

92) The dramatic increase in the number of claims of repressed memories of childhood sexual abuse and satanic ritual abuse in the late 1980s and 1990s are most closely linked to which logical fallacy?
a. Emotional reasoning fallacy
b. Either-or fallacy
c. Not me fallacy
d. Bandwagon fallacy

Answer: d
Question ID: Lil 2ce 1.1-92
Diff: 2
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Conceptual

93) Juan just learned about the bystander effect in his psychology class, and is telling his friends that he would never ignore someone who needs help in an emergency regardless of how many other people also witness the emergency. This example reflects what type of logical fallacy?
a. Emotional reasoning fallacy
b. Either-or fallacy
c. Not me fallacy
d. Bandwagon fallacy

Answer: c
Question ID: Lil 2ce 1.1-93
Diff: 2
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Applied

94) Michael says that he is not racist, yet he avoids certain areas of his city because they are very ethnic neighbourhoods and he says he does not feel safe. In this example, Michael is demonstrating a phenomenon called _____.
a. apophenia
b. bias blind spot
c. pareidolia
d. opportunity cost

Answer: b
Question ID: Lil 2ce 1.1-94
Diff: 3
Type: MC
Page Ref: 20

Topic: What Is Pseudoscience?
Skill: Applied

95) Suppose the vast majority of the general population believed that it was harmful to children when women worked outside the home. Without supportive evidence, the majority of believers could be wrong, illustrating the
a. bandwagon fallacy.
b. either-or fallacy.
c. not me fallacy.
d. emotional reasoning fallacy.

Answer: a
Question ID: Lil 2ce 1.1-95
Diff: 3
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Conceptual

96) Assuming a claim is correct because many people believe it is called the
a. bandwagon fallacy.
b. either-or fallacy.
c. not me fallacy.
d. emotional reasoning fallacy.

Answer: a
Question ID: Lil 2ce 1.1-96
Diff: 2
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Factual

97) Our lack of awareness of our own biases, coupled with an acute awareness of others' biases, is called
a. bias blind spot.
b. basal ignorance.
c. self-serving bias.
d. false consensus effect.

Answer: a
Question ID: Lil 2ce 1.1-97
Diff: 2
Type: MC
Page Ref: 20
Topic: What Is Pseudoscience?
Skill: Factual

98) You are asked by a friend to tell him whether a colour is either black or white. When you look at it, you think it is neither of these two extremes but is more a shade of gray. Your friend's question is an example of the _____ fallacy.
a. emotional reasoning
b. bandwagon
c. not me
d. either-or

Answer: d
Question ID: Lil 2ce 1.1-98
Diff: 3
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

99) Framing questions so they can be answered in only one of two extreme ways highlights the _____ fallacy.
a. emotional reasoning
b. bandwagon
c. not me
d. either-or

Answer: d
Question ID: Lil 2ce 1.1-99
Diff: 3
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

100) Which of the following logical fallacies is like a self-serving bias because we assume they apply to other people's information processing more often than our own?
a. Bandwagon fallacy
b. Either-or fallacy
c. Not me fallacy
d. Emotional reasoning fallacy

Answer: c
Question ID: Lil 2ce 1.1-100
Diff: 3
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Conceptual

101) Research shows that male experimenters smile more at female participants, which can influence the results. Although researchers know this effect is possible, some may doubt that it happens in their research, a fallacy known as the
a. bandwagon fallacy.
b. either-or fallacy.
c. not me fallacy.
d. emotional reasoning fallacy.

Answer: c
Question ID: Lil 2ce 1.1-101
Diff: 2
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Conceptual

102) Holding onto the belief in an immunity from thinking errors and biases is known as the
a. bandwagon fallacy.
b. either-or fallacy.
c. not me fallacy.
d. emotional reasoning fallacy.

Answer: c
Question ID: Lil 2ce 1.1-102
Diff: 2
Type: MC
Page Ref: 19-20
Topic: What Is Pseudoscience?
Skill: Factual

103) A lack of awareness of our biases, coupled with an awareness of others' biases, is called the
a. bandwagon fallacy.
b. either-or fallacy.
c. bias blind spot.
d. emotional reasoning fallacy.

Answer: c
Question ID: Lil 2ce 1.1-103
Diff: 3
Type: MC
Page Ref: 20
Topic: What Is Pseudoscience?
Skill: Factual

104) Confusing the origin of a belief with its correctness is a fallacy based on
a. origin/genesis.
b. an appeal to ignorance.
c. an argument from adverse consequences.
d. an argument from antiquity.

Answer: a
Question ID: Lil 2ce 1.1-104
Diff: 3
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

105) Some people doubt the truthfulness of Freud's theory, citing the fact that he was a cocaine user. This highlights which fallacy?
a. Origin/genesis
b. An appeal to ignorance
c. An argument from adverse consequences
d. An argument from antiquity

Answer: a
Question ID: Lil 2ce 1.1-105
Diff: 3
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

106) Assuming that something is so simply because a teacher or religious figure said it is so, is an example of
a. naturalistic fallacy.
b. hasty generalisation fallacy.
c. appeal to authority fallacy.
d. circular reasoning fallacy.

Answer: c
Question ID: Lil 2ce 1.1-106
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

107) Which of the following fallacies is most connected to morality?
a. Adverse consequences
b. Naturalistic

c. Genetic
d. Appeal to authority

Answer: b
Question ID: Lil 2ce 1.1-107
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

108) Confusing an idea's real world consequences with its validity is a fallacy known as
a. adverse consequences.
b. naturalistic.
c. genetic.
d. appeal to authority.

Answer: a
Question ID: Lil 2ce 1.1-108
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

109) "The contents of the Bible must be true because it's been around for thousands of years." This is an example of the _____ fallacy.
a. argument from antiquity
b. naturalistic
c. genetic
d. appeal to authority

Answer: a
Question ID: Lil 2ce 1.1-109
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

110) "If you want to blame anyone for sex differences, it would be Mother Nature. If men were supposed to look after children, then they would feel inclined to do so. But since women are more inclined to do so, then they simply should do it. It's just like they say it is." This example highlights the _____ fallacy.
a. argument from antiquity
b. naturalistic

c. genetic
d. appeal to authority

Answer: b
Question ID: Lil 2ce 1.1-110
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

111) "My parents and even grandparents believe that Freud was a quack! Don't believe anything he says!" This is a logical fallacy known as
a. argument from antiquity.
b. naturalistic.
c. genetic.
d. appeal to authority.

Answer: d
Question ID: Lil 2ce 1.1-111
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

112) "Scientists have never been able to show that extraterrestrials visitors did not create crop circles so that's the likely reason." This example highlights the _____ fallacy.
a. appeal to ignorance
b. naturalistic
c. genetic
d. appeal to authority

Answer: a
Question ID: Lil 2ce 1.1-112
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Conceptual

113) Drawing conclusions based on insufficient evidence represents the _____ fallacy.
a. hasty generalisation
b. naturalistic

c. genetic
d. circular reasoning

Answer: a
Question ID: Lil 2ce 1.1-113
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

114) What logical fallacy involves confusing the correctness of a belief with its origins?
a. Appeal to ignorance fallacy
b. Naturalistic fallacy
c. Genetic fallacy
d. Hasty generalisation fallacy

Answer: c
Question ID: Lil 2ce 1.1-114
Diff: 2
Type: MC
Page Ref: 19
Topic: What Is Pseudoscience?
Skill: Factual

115) The major difference between pseudoscience and science is that
a. pseudoscience lacks the general level of public support that characterises science.
b. pseudoscience addresses different questions than science.
c. pseudoscience is less similar to popular psychology than science is.
d. pseudoscience lacks the safeguards against cognitive biases that characterise science.

Answer: d
Question ID: Lil 2ce 1.1-115
Diff: 2
Type: MC
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual

116) _____ offers safeguards against cognitive biases; _____ does not.
a. Natural science like physics; pseudoscience.
b. Natural science like physics; social science like psychology
c. Pseudoscience; science in general
d. Science in general; pseudoscience

Answer: d
Question ID: Lil 2ce 1.1-116
Diff: 2
Type: MC
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual

117) Pseudoscience lacks safeguards against _____ and _____ that characterize science.
a. correlation-causation fallacy; extraordinary claims
b. Occam's razor; Oberg's dictum
c. confirmation bias; belief perseverance
d. replicability; falsifiability

Answer: c
Question ID: Lil 2ce 1.1-117
Diff: 2
Type: MC
Page Ref: 13
Topic: What is Pseudoscience?
Skill: Factual

118) Our investment of time, energy, and effort in a questionable treatment that can lead people to forfeit the chance to obtain an effective treatment is called
a. public investment.
b. social investment.
c. hoodwinking.
d. opportunity cost.

Answer: d
Question ID: Lil 2ce 1.1-118
Diff: 2
Type: MC
Page Ref: 20
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Factual

119) An important point from the authors' discussion on why people need to care about the dangers of pseudoscience is that
a. harm rarely results from pseudoscientific beliefs or treatments.
b. a lack of critical thinking may lead to poor decisions that affect one's personal life, community, and/or one's child's schooling.
c. quackery and pseudoscience are especially easy to detect without exposure to critical thinking or skepticism.
d. people are often quite accurate and unbiased in their day-to-day decision making.

Answer: b
Question ID: Lil 2ce 1.1-119
Diff: 2
Type: MC
Page Ref: 20-21
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Conceptual

120) Darlene has depression and she has been pursuing holistic therapies, organic creams and diets, and herbal supplements from a homeopathic practitioner for months but she is not feeling any better. When asked why she does not take antidepressant medications to help alleviate her symptoms, Darlene defends her choice by saying she does not want to put chemicals of any kind in her body. This example relates to what danger of pseudoscience?
a. Transcendental temptation
b. Opportunity cost
c. Ad hoc immunizing
d. Terror management

Answer: b
Question ID: Lil 2ce 1.1-120
Diff: 3
Type: MC
Page Ref: 20-21
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Conceptual

121) Pseudoscientific treatments such as _____ may cause more harm than good, and can even lead to death as in the Candace Newmaker case.
a. neurolinguistic programming
b. rebirthing therapy
c. thought field therapy
d. primal scream therapy

Answer: b
Question ID: Lil 2ce 1.1-121
Diff: 3
Type: MC
Page Ref: 20-21
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Factual

122) According to the authors, a skeptic is someone who
a. considers the available evidence carefully.
b. seeks out evidence that is inconsistent with a theory he or she doesn't believe in.

c. is close-minded when evaluating evidence.
d. dismisses any evidence that contradicts his or her beliefs.

Answer: a
Question ID: Lil 2ce 1.1-122
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

123) According to the authors, someone who considers the available evidence carefully is called a
a. skeptic.
b. cynic.
c. rationalist.
d. empiricist.

Answer: a
Question ID: Lil 2ce 1.1-123
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

124) 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. pathological skepticism.
b. dogmatism.
c. scientific skepticism.
d. gullibility.

Answer: c
Question ID: Lil 2ce 1.1-124
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Applied

125) Scientific skepticism demands that we _____ evidence that another theory is _____.
a. accept; inferior
b. reject; inferior

c. accept; superior
d. reject; superior

Answer: c
Question ID: Lil 2ce 1.1-125
Diff: 3
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

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

Answer: a
Question ID: Lil 2ce 1.1-126
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

127) Someone who accepts claims on the basis of supportive scientific evidence is a
a. skeptic.
b. cynic.
c. rationalist.
d. empiricist.

Answer: a
Question ID: Lil 2ce 1.1-127
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

128) Thinking skeptically requires that one rely on
a. subjective conclusions.
b. objective evidence.
c. the popularity of an idea.
d. opinions of authorities.

Answer: b
Question ID: Lil 2ce 1.1-128

Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Factual

129) Scientific skepticism encourages us to accept claims on the basis of _____ and not on _____.
a. the evidence; an authority figure's endorsement.
b. unfalsifiable evidence; rival hypotheses.
c. the disconfirmation bias; the confirmation bias.
d. Occam's razor; Oberg's dictum.

Answer: a
Question ID: Lil 2ce 1.1-129
Diff: 2
Type: MC
Page Ref: 21-22
Topic: Scientific Skepticism
Skill: Conceptual

130) All of the following are enemies of scientific skepticism except
a. reliance on authority.
b. narrow-mindedness.
c. dogmatic belief.
d. critical thinking.

Answer: d
Question ID: Lil 2ce 1.1-130
Diff: 2
Type: MC
Page Ref: 22
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-131
Diff: 2
Type: MC
Page Ref: 22

Topic: A Basic Framework for Scientific Thinking
Skill: Factual

132) Which philosopher suggested a useful theory had to be falsifiable?
a. Karl Popper
b. William Occam
c. Aristotle
d. Plato

Answer: a
Diff: 2
Question ID: Lil 2ce 1.1-132
Type: MC
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

133) Critical thinking should involve
a. a tendency to be skeptical of all claims.
b. close-mindedness about claims and the evidence that supports them.
c. a set of skills for evaluating claims in an open-minded and careful manner.
d. skepticism of any scientific theory unless there is no disconfirming evidence.

Answer: c
Question ID: Lil 2ce 1.1-133
Diff: 2
Type: MC
Page Ref: 22
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

134) Suppose Dr. Honeydew is proposing a theory of attraction that posits that "Opposites Attract." Most of the available evidence suggests that "Birds of a Feather Flock Together" (i.e., similarities attract) rather than opposites attract. For his theory to be accepted by the scientific community, Dr. Honeydew will need to
a. adhere to the principle of parsimony in his theoretical explanation.
b. supply extraordinary evidence to support his extraordinary claim.
c. construct a falsifiable theory of attraction.
d. demonstrate the replicability of his initial findings.

Answer: b
Question ID: Lil 2ce 1.1-134
Diff: 3
Type: MC
Page Ref: 23, 26
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

135) A great amount of evidence is needed to support a claim that is
a. false.
b. true.
c. new.
d. extraordinary.

Answer: d
Question ID: Lil 2ce 1.1-135
Diff: 2
Type: MC
Page Ref: 23, 26
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

136) Which philosopher proposed that extraordinary claims required more evidence to support than usual?
a. Aristotle
b. Kant
c. Plato
d. Hume

Answer: d
Question ID: Lil 2ce 1.1-136
Diff: 3
Type: MC
Page Ref: 26
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

137) Hume is to "extraordinary claims" as _____ is to parsimony.
a. Aristotle
b. Plato
c. Occam
d. Kant

Answer: c
Question ID: Lil 2ce 1.1-137
Diff: 1
Type: MC
Page Ref: 23, 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

138) All of the following are the key principles of critical thinking used throughout your text except
a. Oberg's dictum.
b. falsifiability.

c. ruling out rival hypotheses.
d. replicability.

Answer: a
Question ID: Lil 2ce 1.1-138
Diff: 2
Type: MC
Page Ref: 22-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

139) Dr. Cunningham finds that people who take herbal supplements that profess to improve memory scored, on average, 15% higher on a memory test relative to groups who did not take herbal supplements or placebos. However, other researchers have tried to study this effect and have not duplicated his findings. What principle of critical thinking does this example demonstrate the importance of?
a. Falsifiability
b. Occam's razor
c. Replicability
d. Extraordinary claims

Answer: c
Question ID: Lil 2ce 1.1-139
Diff: 2
Type: MC
Page Ref: 23, 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

140) Dr. Martian claimed that aliens are real and have been performing mind experiments on humans for years. Which of the following principles of critical thinking is most applicable to his claim?
a. Replicability
b. Occam's razor
c. Extraordinary claims
d. Falsifiability

Answer: c
Question ID: Lil 2ce 1.1-140
Diff: 2
Type: MC
Page Ref: 23, 26
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

141) Dr. Siela claimed that all humans had invisible souls that guided their behaviour. Which of the following principles of critical thinking is most applicable to his claim?
a. Replicability
b. Occam's razor
c. Ruling out rival hypotheses
d. Falsifiability

Answer: d
Question ID: Lil 2ce 1.1-141
Diff: 3
Type: MC
Page Ref: 23-25
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

142) Dr. Asocate has found a relationship between foot size and criminal behaviour, and concludes that larger feet causes criminal behaviour. Which of the following principles of critical thinking is most applicable to his claim?
a. Occam's razor
b. Correlation versus causation
c. Ruling out rival hypotheses
d. Falsifiability

Answer: b
Question ID: Lil 2ce 1.1-142
Diff: 3
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

143) 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 critical thinking principle of
a. replicability.
b. ruling out rival hypotheses.
c. parsimony.
d. falsifiability.

Answer: d
Question ID: Lil 2ce 1.1-143
Diff: 2
Type: MC
Page Ref: 23-25
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

144) Suppose you advance a theory that says you need two working eyes to live, and set up your research question clearly so that the discovery of a single one-eyed living person will refute the theory. In the context of critical thinking, this is an example of
a. replicability.
b. ruling out rival hypotheses.
c. parsimony.
d. falsifiability.

Answer: d
Question ID: Lil 2ce 1.1-144
Diff: 2
Type: MC
Page Ref: 23-25
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

145) According to the authors, having a falsifiable question is a starting point for evaluating the merits of any particular psychological claim. However, we also need this question to be
a. replicated by others.
b. consistent with the available body of evidence.
c. parsimonious in its explanation of the evidence.
d. All of the above

Answer: d
Question ID: Lil 2ce 1.1-145
Diff: 2
Type: MC
Page Ref: 22-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

146) Pair up the philosopher with the type of prediction needed to best evaluate the soundness of your hypotheses.
a. Karl Popper; safe prediction.
b. Karl Popper; risky prediction.
c. Plato; safe prediction.
d. Plato; risky prediction.

Answer: b
Question ID: Lil 2ce 1.1-146
Diff: 3
Type: MC
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

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

Answer: b
Question ID: Lil 2ce 1.1-147
Diff: 3
Type: MC
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

148) According to your text, good scientific theories are associated with _____.
a. falsifiable claims.
b. risky predictions.
c. previous evidence.
d. all of the above.

Answer: d
Question ID: Lil 2ce 1.1-148
Diff: 3
Type: MC
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

149) Which of the following claims is not falsifiable?
a. Men are more physically aggressive than women.
b. Psychotherapy is effective for treating depression.
c. Bad things happen to bad people because of karma.
d. Women are better at detecting emotions than men.

Answer: c
Question ID: Lil 2ce 1.1-149
Diff: 3
Type: MC
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

150) The principle of parsimony relates to which principle of critical thinking?
a. Falsifiability
b. Extraordinary claims

c. Replicability
d. Occam's razor

Answer: d
Question ID: Lil 2ce 1.1-150
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

151) Occam's razor is another name for what critical thinking principle?
a. Oberg's dictum
b. principle of replicability
c. principle of parsimony
d. Hume's dictum

Answer: c
Question ID: Lil 2ce 1.1-151
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

152) Modern theories in physics have included, in some fields, the introduction of multiple dimensions; not with merely 3 but upwards of 11. To some critics like William of Occam, while their theories have garnered support from laboratory studies, they may lack
a. causality.
b. durability.
c. parsimony.
d. falsifiability.

Answer: c
Question ID: Lil 2ce 1.1-152
Diff: 3
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

153) Using the criteria of Occam's razor, a good theory is one that is the _____ explanation for the available data.
a. most complex
b. most conventional

c. most popular
d. most simple

Answer: d
Question ID: Lil 2ce 1.1-153
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

154) Based on Occam's razor, a good theory is _____; that is, it offers the _____ explanation for the available data.
a. replicable; most popular
b. replicable; most simple
c. parsimonious; most popular
d. parsimonious; most simple

Answer: d
Question ID: Lil 2ce 1.1-154
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

155) A key characteristic of a good scientific theory is that it is a simple explanatory device. This key characteristic is explained as the critical thinking principle of
a. ruling out rival hypotheses.
b. falsifiability.
c. replication.
d. Occam's razor/parsimony.

Answer: d
Question ID: Lil 2ce 1.1-155
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

156) With respect to the criteria of sound scientific theories, which of the following pairs belong together?
a. Oberg’s dictum, replication.
b. Oberg’s dictum, parsimony.
c. Occam’s razor, replication.
d. Occam's razor, parsimony.

Answer: d
Question ID: Lil 2ce 1.1-156
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

157) 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. not the result of correlation.
c. parsimonious and straightforward.
d. consistent and dependable.

Answer: d
Question ID: Lil 2ce 1.1-157
Diff: 2
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

158) Consistent and dependable scientific findings are also
a. accurate.
b. falsifiable.
c. parsimonious.
d. replicable.

Answer: d
Question ID: Lil 2ce 1.1-158
Diff: 2
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

159) 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. correlate.
c. achieve parsimony.
d. replicate.

Answer: d
Question ID: Lil 2ce 1.1-159

Diff: 2
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

160) If researchers cannot replicate a particular finding (e.g., that heavy metal music played backwards leads to suicidal or aggressive thoughts), this means that their results
a. are not clear.
b. are not strong.
c. are not parsimonious.
d. are not identical.

Answer: d
Question ID: Lil 2ce 1.1-160
Diff: 2
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

161) Many claims of ESP have been refuted since, under controlled conditions, the claimants have been unable to reproduce the alleged abilities. This an example of the failure to
a. accurately communicate.
b. achieve falsifiability.
c. achieve parsimony.
d. replicate.

Answer: d
Question ID: Lil 2ce 1.1-161
Diff: 2
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

162) 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 a hoax or scam
c. As an error or fluke in research
d. As a real phenomenon that exists for some gifted people but not for everyone

Answer: c
Question ID: Lil 2ce 1.1-162
Diff: 3
Type: MC
Page Ref: 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

163) Researchers who have questioned the effectiveness of eye movement desensitisation and reprocessing (EMDR) therapy argue that supporters have failed to consider that patients are being administered exposure therapy at the same time as EMDR. Further, the apparent effectiveness of EMDR is due to this exposure and not the eye movements. This example is most related to what principle of critical thinking?
a. Ruling out rival hypotheses
b. Falsifiability
c. Correlation versus causation
d. Occam's razor

Answer: a
Question ID: Lil 2ce 1.1-163
Diff: 3
Type: MC
Page Ref: 22-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

164) The principle of parsimony is to _____ as the third-variable problem is to _____.
a. Oberg's dictum; ruling out rival hypotheses
b. falsifiability; replicability
c. Occam's razor; correlation versus causation
d. extraordinary claims; scientific skepticism

Answer: c
Question ID: Lil 2ce 1.1-164
Diff: 3
Type: MC
Page Ref: 23-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

165) Chandra was reading in bed, and dozing off while doing so, when she suddenly thought she saw something that looked like a ghost standing over the end of her bed. However, she remembered what she learned in her psychology class about hypnagogic imagery during the initial stages of sleep and concluded that she had not

seen a ghost. In this example, Chandra is most STRONGLY relying on what principle of critical thinking?
a. Falsifiability
b. Ruling out rival hypotheses
c. Replicability
d. Occam's razor

Answer: d
Question ID: Lil 2ce 1.1-165
Diff: 3
Type: MC
Page Ref: 23, 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

166) Principles of critical thinking are to _____ as the warning signs of pseudoscience are to _____.
a. exaggerated claims; ruling out rival hypotheses
b. falsifiability; ad hoc immunizing
c. lack of self-correction; overreliance on anecdotes
d. connectivity; psychobabble

Answer: b
Question ID: Lil 2ce 1.1-166
Diff: 3
Type: MC
Page Ref: 13-15, 22-25
Topic: What Is Pseudoscience? & A Basic Framework for Scientific Thinking
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-167
Diff: 2
Type: MC
Page Ref: 26-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

168) 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. rule out competing explanations
d. remember that correlation equals causation

Answer: c
Question ID: Lil 2ce 1.1-168
Diff: 1
Type: MC
Page Ref: 22-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

169) Suppose a child watches an adult throw a doll at the wall, immediately followed by a harsh scolding by another adult. When left alone with the doll, the child does not play with it aggressively. Before you reach a conclusion that the child has learned that aggressive behaviour leads to a scolding, you think that perhaps the child simply did not learn the aggressive behaviour and thus couldn't demonstrate it. By this, you have demonstrated the need to
a. create unfalsifiable theories
b. create parsimonious theories
c. rule out competing explanations
d. remember that correlation equals causation

Answer: c
Question ID: Lil 2ce 1.1-169
Diff: 2
Type: MC
Page Ref: 22-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-170
Diff: 1
Type: MC
Page Ref: 23-24

Topic: A Basic Framework for Scientific Thinking
Skill: Factual

171) Research shows that milk consumption is related to the incidence of cancer, so more milk means a greater risk. Based on these findings, you might not wish to drink milk, but what is the more reasonable conclusion?
a. Simple theories are preferred to complex ones.
b. Research questions or theories must be falsifiable.
c. Good theories make safe, not risky, predictions.
d. Correlation is not causation.

Answer: d
Question ID: Lil 2ce 1.1-171
Diff: 2
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

172) Researchers have shown a correlation between the number of tattoos on a motorist and the likelihood they get into an accident. To avoid the correlation = causation error, you would have to conclude that
a. number of tattoos is correlated with the risk of an accident.
b. tattoos lead to accidents.
c. accident risk leads to a desire to get tattoos.
d. a third variable like recklessness causes accidents and a desire to get tattoos.

Answer: a
Question ID: Lil 2ce 1.1-172
Diff: 2
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

173) Researchers have shown a correlation between hair length and anti-war attitudes (longer hair is associated with more protest to military action). If you fell guilty to the correlation = causation error, you might conclude
a. haircuts will lead to more protests.
b. a third variable like personality causes anti-war attitudes.
c. hair length is more important than attitudes.
d. hair length influences anti-war attitudes.

Answer: d
Question ID: Lil 2ce 1.1-173
Diff: 2

Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

174) Researchers in Taiwan have found that contraceptive use was strongly related to the number of electrical appliances (i.e., 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. A third variable, such as educational level, is associated with each and produces the observed relationship.
d. Having many electrical appliances causes people to use contraceptive devices.

Answer: c
Question ID: Lil 2ce 1.1-174
Diff: 3
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

175) When a correlation between two variables can be just as easily explained by another variable, we refer to this problem as
a. an unavoidable issue in psychology but not other sciences.
b. the correlation-causation problem.
c. the third variable problem.
d. the replicability problem.

Answer: c
Question ID: Lil 2ce 1.1-175
Diff: 2
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

176) What might be a reasonable third-variable to explain the link between higher crime and whether you live in a single-parent home?
a. Poverty
b. Genetics
c. Education
d. Diet

Answer: a
Question ID: Lil 2ce 1.1-176

Diff: 3
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

177) 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 may really be the result of a third variable such as lack of personal control.
c. The relationship may really be in the opposite direction; having major depressive disorder causes one to experience anxiety disorders.
d. The observed relationship creates an unfalsifiable research question.

Answer: b
Question ID: Lil 2ce 1.1-177
Diff: 2
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

178) Dr. Puffer has conducted a correlational study and reported that smoking causes depression. He has failed to consider that both smoking and depression could be caused by some other variable, such as temperament or stress. This scenario reflects what problem within the correlation-causation fallacy?
a. Bidirectionality of variables
b. Third-variable problem
c. Confirmation bias
d. Risky predictions

Answer: b
Question ID: Lil 2ce 1.1-178
Diff: 2
Type: MC
Page Ref: 23-24
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

179) _____ is an entity that can take on different values or properties.
a. A theory
b. An hypothesis
c. A constant
d. A variable

Answer: d
Question ID: Lil 2ce 1.1-179
Diff: 2
Type: MC
Page Ref: 24
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

180) Psychology was once similar to which of the following disciplines?
a. Theology
b. Journalism
c. Philosophy
d. Biology

Answer: c
Question ID: Lil 2ce 1.1-180
Diff: 3
Type: MC
Page Ref: 28
Topic: Psychology's Early History
Skill: Factual

181) What individual is often credited with establishing the first psychological laboratory, thus establishing psychology as an experimental science?
a. Sigmund Freud
b. Wilhelm Wundt
c. William James
d. John Watson

Answer: b
Question ID: Lil 2ce 1.1-181
Diff: 2
Type: MC
Page Ref: 28
Topic: Psychology's Early History
Skill: Factual

182) What early psychologist was most concerned with developing answers to basic questions about our mental experiences?
a. Wilhelm Wundt
b. John B. Watson
c. Sigmund Freud
d. Joseph Jastrow

Answer: a
Question ID: Lil 2ce 1.1-182
Diff: 2

Type: MC
Page Ref: 28
Topic: Psychology's Early History
Skill: Factual

183) What influence did psychology need to break away from in order to establish itself as a discipline and be free of associations with studying the spirit or soul?
a. Spiritualism
b. Philosophy
c. Psychicism
d. Introspection

Answer: a
Question ID: Lil 2ce 1.1-183
Diff: 1
Type: MC
Page Ref: 28
Topic: Psychology's Early History
Skill: Factual

184) What technique involves trained observers who carefully reflect and report on their own mental experiences?
a. Spiritualism
b. Introspection
c. Psychicism
d. Empiricalism

Answer: b
Question ID: Lil 2ce 1.1-184
Diff: 1
Type: MC
Page Ref: 28
Topic: Psychology's Early History
Skill: Factual

185) Classical conditioning was first discovered by Ivan Pavlov in _____.
a. 1890
b. 1910
c. 1939
d. 1953

Answer: b
Question ID: Lil 2ce 1.1-185
Diff: 3
Type: MC
Page Ref: 29

Topic: Psychology's Early History
Skill: Factual

186) Rapid eye movement (REM) sleep was discovered in _____.
a. 1910
b. 1939
c. 1953
d. 1974

Answer: c
Question ID: Lil 2ce 1.1-186
Diff: 3
Type: MC
Page Ref: 29
Topic: Psychology's Early History
Skill: Factual

187) The Canadian Psychological Association (CAP) was established in _____.
a. 1910
b. 1939
c. 1953
d. 1974

Answer: b
Question ID: Lil 2ce 1.1-187
Diff: 3
Type: MC
Page Ref: 29
Topic: Psychology's Early History
Skill: Factual

188) The first intelligence test developed by Binet and Simon was developed in _____.
a. 1905
b. 1929
c. 1953
d. 1974

Answer: a
Question ID: Lil 2ce 1.1-188
Diff: 3
Type: MC
Page Ref: 29
Topic: Psychology's Early History
Skill: Factual

189) What early American psychologist yearned to create a periodic table of the elements of consciousness?
a. Edward Titchener
b. Sigmund Freud
c. B. F. Skinner
d. William James

Answer: a
Question ID: Lil 2ce 1.1-189
Diff: 2
Type: MC
Page Ref: 30-31
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual

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

Answer: b
Question ID: Lil 2ce 1.1-190
Diff: 2
Type: MC
Page Ref: 30-31
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual

191) 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. psychoanalytic
b. behaviourist
c. functionalist
d. structuralist

Answer: c
Question ID: Lil 2ce 1.1-191
Diff: 3
Type: MC

Page Ref: 30-31
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual

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

Answer: a
Question ID: Lil 2ce 1.1-192
Diff: 2
Type: MC
Page Ref: 31-32
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual

193) You are listening in on a discussion among a group of psychology majors. One major says that 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. functionalism.
b. psychoanalysis.
c. behaviourism.
d. structuralism.

Answer: c
Question ID: Lil 2ce 1.1-193
Diff: 2
Type: MC
Page Ref: 31-32
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual

194) 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. Behaviourism
b. Structuralism
c. Psychoanalysis
d. Functionalism

Answer: d
Question ID: Lil 2ce 1.1-194
Diff: 3

Type: MC
Page Ref: 30-31, 36
Topic: The Great Theoretical Frameworks of Psychology & The Great Debates of Psychology
Skill: Conceptual

195) 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. psychoanalysis.
b. cognitivism.
c. structuralism.
d. behaviourism.

Answer: b
Question ID: Lil 2ce 1.1-195
Diff: 2
Type: MC
Page Ref: 32
Topic: The Great Theoretical Frameworks of Psychology
Skill: Conceptual

196) The key to understanding human behaviour, according to Sigmund Freud, was to focus on _____ and the _____ level of the human mind.
a. external factors; unconscious
b. external factors; conscious
c. internal psychological processes; unconscious
d. internal psychological processes; conscious

Answer: c
Question ID: Lil 2ce 1.1-196
Diff: 1
Type: MC
Page Ref: 33
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual

197) Which theorist and perspective is correctly matched?
a. Structuralism – William James
b. Behaviourism – Jean Piaget
c. Functionalism – Charles Darwin
d. Cognitivism – John Watson

Answer: c
Question ID: Lil 2ce 1.1-197
Diff: 2

Type: MC
Page Ref: 30
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual

198) Which perspective was among the first to focus on the need for objective research?
a. Cognitivism
b. Behaviourism
c. Functionalism
d. Psychoanalysis

Answer: b
Question ID: Lil 2ce 1.1-198
Diff: 2
Type: MC
Page Ref: 30
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual

199) Which theoretical approach argues that we learn by grasping the underlying nature of problems and attaining insight?
a. Cognitivism
b. Behaviourism
c. Functionalism
d. Psychoanalysis

Answer: a
Question ID: Lil 2ce 1.1-199
Diff: 2
Type: MC
Page Ref: 32
Topic: The Great Theoretical Frameworks of Psychology
Skill: Factual

200) The greatest proportion of psychologists are found working
a. in K-12 schools.
b. in self-employed, clinical practice.
c. for a governmental agency.
d. at universities and 4-year colleges.

Answer: d
Question ID: Lil 2ce 1.1-200
Diff: 3
Type: MC
Page Ref: 33-34
Topic: The Multifaceted World of Modern Psychology
Skill: Factual

201) 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. school psychologist.
c. experimental psychologist.
d. forensic psychologist.

Answer: a
Question ID: Lil 2ce 1.1-201
Diff: 2
Type: MC
Page Ref: 33-34
Topic: The Multifaceted World of Modern Psychology
Skill: Applied

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

Answer: c
Question ID: Lil 2ce 1.1-202
Diff: 3
Type: MC
Page Ref: 34-35
Topic: The Multifaceted World of Modern Psychology
Skill: Conceptual

203) Evolutionary psychology
a. focuses on animal behaviour.
b. provides easily testable hypotheses.
c. has solved the nature–nurture debate.
d. applies Darwin's theory of natural selection.

Answer: d
Question ID: Lil 2ce 1.1-203
Diff: 2
Type: MC
Page Ref: 36
Topic: The Great Debates of Psychology
Skill: Factual

204) If you were to do a presentation on “Psychology's Great Debates” you would be most likely to make which of the following points?
a. Research indicates that most people possess a remarkable insight into the underlying cause(s) of their behaviour.
b. Different human behaviours result from levels of nature and nurture influences.
c. Psychologists consider the “mind” to be nothing more than brain and nervous system activity.
d. Evidence suggests that free will is illusory to some extent.

Answer: b
Question ID: Lil 2ce 1.1-204
Diff: 2
Type: MC
Page Ref: 35-36
Topic: The Great Debates of Psychology
Skill: Conceptual

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

Answer: d
Question ID: Lil 2ce 1.1-205
Diff: 3
Type: MC
Page Ref: 36-37
Topic: The Great Debates of Psychology
Skill: Conceptual

206) Brandon is an industrial-organisational psychologist who has been hired by a large hotel chain to determine why their turnover rate is so high for their maids. This is an example of _____ research.
a. experiential
b. laboratory
c. applied
d. basic

Answer: c
Question ID: Lil 2ce 1.1-206
Diff: 2
Type: MC

Page Ref: 37-38
Topic: How Psychology Affects Our Lives
Skill: Applied

207) What famous American psychologist heavily influenced the field of advertising?
a. B. F. Skinner
b. John Watson
c. William James
d. Carl Rogers

Answer: b
Question ID: Lil 2ce 1.1-207
Diff: 3
Type: MC
Page Ref: 38
Topic: How Psychology Affects Our Lives
Skill: Factual

208) Psychological research applied to police settings has demonstrated that what type of lineup promotes eyewitness identification accuracy?
a. Simultaneous
b. Show-up
c. Mugshot
d. Sequential

Answer: d
Question ID: Lil 2ce 1.1-208
Diff: 3
Type: MC
Page Ref: 38
Topic: How Psychology Affects Our Lives
Skill: Factual

Chapter 1: PSYCHOLOGY AND SCIENTIFIC THINKING
Critical Thinking Questions

1) Illustrate how the confirmation bias has created a problem for a friend or family member in the past.

Answer: Answers will vary but should include the following information for full credit.

--Student should mention the basic idea of the confirmation bias (seek out supportive evidence but fail to seek out, ignore, or distort contradictory information).

--Student should clearly and correctly identify a situation where they observed an individual using the confirmation bias and how the person came to an erroneous conclusion.

Question ID: Lil 2ce 1.5-1
Difficulty: 3
Page Ref: 10
Topic: Psychology as a Science
Skill: Application

2) Explain how the principles of critical thinking can assist a person in making more informed, and hopefully more accurate decisions, in one's everyday life.

Answer: Answers will vary but should include *at least four* of the following ideas for full credit.

--The principle of falsifiability helps to inform us of the kinds of questions that we can ask and actually find a scientific answer.

--The principle of parsimony reminds us to focus on the simplest explanation with the fewest assumptions as being the best.

--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 favour of a new theory that explains both the known and the new information we have gathered.

--We need to have gathered the evidence in such a way that our explanation/understanding is the only possible rational reason for the data (Ruling out rival hypotheses).

--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).

Question ID: Lil 2ce 1.5-2
Difficulty: 3
Page Ref: 22-27
Topic: A Basic Framework for Scientific Thinking
Skill: Applied

3) Demonstrate a time that you fell victim to at least one of the following logical fallacies (bandwagon fallacy emotional reasoning fallacy, or not me fallacy) and how it negatively affected the quality of your decision on that occasion.

Answer: Answers will vary but should contain the following information for full credit.

--Student clearly and correctly identifies at least one of the fallacies listed above in his/her answer, according to the definitions provided.

The *emotional reasoning fallacy* is the error of using our emotions as guides for evaluating the validity of a claim (some psychologists also refer to this error as the *affect heuristic*; Slovic & Peters, 2006).

The *bandwagon fallacy* is the error of assuming that a claim is correct just because many people believe it.

The *not me fallacy* is the error of believing that we're immune from errors in thinking that afflict other people.

--Student provides supportive detail to show how the fallacy negatively affected them.

Question ID: Lil 2ce 1.5-3
Difficulty: 2
Page Ref: 18-20
Topic: What is Pseudoscience?
Skill: Applied

Chapter 1: PSYCHOLOGY AND SCIENTIFIC THINKING
Essay Questions

1) Evaluate critically the kind of information that one gains from common sense.
Answer: Answers will vary but should contain information from the following sections of Chapter 1 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 and logical fallacies mentioned in the text are used to buttress claims of the accuracy of common sense (appeals to authority, argument from antiquity fallacy, bandwagon fallacy).

--Confirmation bias and belief perseverance allow us to continue to hold erroneous beliefs because we only look for supportive evidence (confirmation bias) and we refuse to modify/correct our false beliefs (belief perseverance).

Question ID: Lil 2ce 1.4-1
Diff: 3
Type: ES
Page Ref: 6-7, 10-11, 19
Topic: Why We Can't Always Trust Our Common Sense
Skill: Conceptual

2) Apply the critical thinking principles discussed in Chapter 1 to a discussion of how science is an approach to evidence.
Answer: Answers may vary but a full credit answer will contain the following points.

--Needs to discuss the idea humility (need to recognize that our hypothesis or theory is wrong).

--We are required to ask questions in a manner that allows them to be shown to be supported or refuted (falsifiability).

--Critical thinking principles provide the tools to choose between theories: parsimony, kind of evidence necessary to modify what is currently known (extraordinary claims need extraordinary evidence), replicability is needed to help ensure the accuracy of initial findings, and the questions should be structured so that rival explanations are eliminated via research.

--Must understand that demonstrating a relationship (correlation) isn't the same as demonstrating causation.

Question ID: Lil 2ce 1.4-2
Diff: 3
Type: ES
Page Ref: 12, 22-27
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

3) The textbook authors noted that many people misunderstand the role of a theory in science. Analyze how these misunderstandings are related to low levels of scientific literacy.
Answer: Answers will vary but should include the following information for full credit.

--Identify that scientific illiteracy refers to incorrect beliefs regarding many scientifically demonstrated facts and is due to not being able to adequately evaluate scientific and pseudoscientific claims.

--Identify and discuss two misconceptions mentioned in PsychoMythology Box—that theory refers to one event and is just an educated guess.

--People don't understand that theories differ in their level of support, and what is considered support by laypeople (we like this explanation best, for example—or any of the fallacies toward the end of the chapter) is not considered support by scientists (replicability, parsimony, degree of support for specific hypotheses to test a theory, etc.).

Question ID: Lil 2ce 1.4-3
Diff: 2
Type: ES
Page Ref: 8-9, 22-27
Topic: Psychology as a Science
Skill: Conceptual

4) What does the concept of falsifiability refer to? Explain what it means for a theory to be falsifiable, the implications of the falsifiability principle, and what characteristics make a good theory.

Answer: Answer: Answers will vary but should contain the points that reflect the following information for full credit.

In order for a claim to be meaningful it must be **falsifiable,** that is, capable of being disproved. Some students misunderstand this point, confusing the question of whether a theory is *falsifiable* with whether it's *false*. The principle of falsifiability doesn't mean that a theory must be false to be meaningful. Instead, it means that for a theory to be meaningful, it *could* be proved wrong if there were certain types of evidence against

it. For a claim to be falsifiable, its proponent must state clearly *in advance,* not after the fact, which findings would count as evidence for and against the claim.

A key implication of the falsifiability principle is that a theory that explains everything—that is, a theory that can account for every conceivable outcome—in effect explains nothing. That's because a good scientific theory must predict only certain outcomes, but not others.

Good scientific theories take risks. By a **risky prediction,** Popper meant a forecast that stands a decent chance of being wrong. The best theories make risky predictions and emerge unscathed. Most bad theories don't take such risks.

The bottom line: Whenever we evaluate a psychological claim, we should ask ourselves whether one could in principle disprove it or whether it's consistent with any conceivable body of evidence.

Question ID: Lil 2ce 1.4-4
Diff: 2
Type: ES
Page Ref: 24-25
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

5) Analyze how the sins of pseudoscience are often examples of violations of the principles of critical thinking.

Answer: Answers will vary but should contain the following information for full credit.

--Overuse/Use of ad hoc immunizing hypotheses violates the principle of falsifiability because it involves giving after-the-fact explanations that describe the negative findings of the research. 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 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 violates the principle of replicability. It's often hard, if not impossible to verify the truthfulness of the supposed claims from testimonials or anecdotes. Lack of self-correction also violates this principle because a lack of replication should lead to self-correction but many pseudoscientific beliefs persist anyway.

--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.

--Absence of connectivity is a violation of ruling out rival hypotheses and parsimony.

Question ID: Lil 2ce 1.4-5
Diff: 3
Type: ES
Page Ref: 13-15, 22-27
Topic: What is Pseudoscience?
Skill: Conceptual

6) Identify the seven key warning signs that a claim may be pseudoscientific. Provide descriptions for any three of these warning signs.
Answer: Answer: Answers will vary but should contain the points that reflect the following information for full credit.

Deadly Sin #1: Overuse of ad hoc immunizing hypotheses. Ad hoc immunizing hypothesis is just an escape hatch that defenders of a theory use to protect their theory from being falsified. When proponents of a theory come across negative evidence, they often try to explain it away by invoking loopholes. Sometimes these loopholes are justified, but in other cases they amount to nothing more than excuses for negative findings.

Deadly Sin #2: Lack of self-correction. As we've learned, many scientific claims turn out to be wrong. In science, incorrect claims tend to be weeded out eventually, even though it often takes a while. In contrast, in pseudosciences incorrect claims never seem to go away because their proponents cling to them stubbornly despite contrary evidence.

Deadly Sin #3: Overreliance on anecdotes. There's an old saying that "the plural of anecdote is not data." A mountain of numerous anecdotes may seem impressive, but it shouldn't persuade us to put much stock in others' claims. Anecdotes are *I know a person who* assertions. This kind of secondhand evidence—"I know a person who says his self-esteem skyrocketed after receiving hypnosis"; "I know a person who tried to commit suicide after taking an antidepressant"— is commonplace in everyday life.
Deadly Sin #4: Exaggerated claims. Not all amazing claims are false. But remember that extraordinary claims require extraordinary evidence. Pseudosciences tend to promise remarkable or dramatic cures but rarely deliver the goods.

Deadly Sin #5: Evasion of peer review. The scientific community relies on a procedure called **peer review,** a mechanism whereby experts in the field carefully screen the work of their fellow scientists. When scientists submit a report of their

research to a journal, it's almost always sent to a panel of researchers from other colleges and universities, who must decide whether the report is worthy of publication.

Deadly Sin #6: Absence of connectivity. Connectivity refers to the extent to which a researcher's findings build on, or "connect up with," previous scientific findings. Most sciences are cumulative: New findings typically extend earlier ones. In contrast, most pseudosciences neglect previous research and purport to create grand new ideas out of whole cloth.

Deadly Sin #7: Psychobabble. Be skeptical of claims accompanied by oodles of psychological or neurological language that sounds highly scientific. Sometimes such language is genuinely scientific, but much of the time it's designed to impress gullible people who lack extensive psychological or neurological training. Many pseudosciences attempt to lure consumers into accepting their claims by peppering their advertising with technical terms that are devoid of meaning.

Question ID: Lil 2ce 1.4-6
Diff: 2
Type: ES
Page Ref: 13-15
Topic: What is Pseudoscience?
*Skill: Factua*l

7) What are the four main logical fallacies in psychological thinking that can predispose us to pseudoscientific beliefs? Describe and provide an example of each.
Answer: Answer: Answers will vary but should contain the points that reflect the following information for full credit.

Emotional Reasoning Fallacy. The **emotional reasoning fallacy** is the error of using our emotions as guides for evaluating the validity of a claim (some psychologists also refer to this tendency as the *affect heuristic*). If we're honest with ourselves, we'll realize that findings that challenge our preexisting beliefs often make us angry, whereas findings that confirm these beliefs often make us happy or at least relieved. We shouldn't make the mistake of assuming that because a scientific claim makes us feel uncomfortable or indignant, it's necessarily wrong.

Bandwagon Fallacy. The **bandwagon fallacy** is the error of assuming that a claim is correct just because many people believe it. It's an error because popular opinion isn't a dependable guide to the accuracy of an assertion.

Either–Or Fallacy. The **either–or fallacy** is the error of framing a question as though we can answer it in only one of two extreme ways (that's why this fallacy is sometimes also called the *black or white fallacy*). Few psychological questions lend themselves to only two completely distinct alternatives.

Not Me Fallacy. The **not me fallacy** may be the most widespread and dangerous of all logical fallacies. It's the error of believing we're immune from errors in thinking that afflict other people. This fallacy can get us into deep trouble because it can lead us to conclude mistakenly that we don't require the safeguards of the scientific method. Many pseudoscientists fall into this trap: They're so certain their claims are right—and uncontaminated by mistakes in their thinking—that they don't bother to conduct scientific studies to back up these claims.

Question ID: Lil 2ce 1.4-7
Diff: 1
Type: ES
Page Ref: 18-20
Topic: What is Pseudoscience?
Skill: Factual

8) Describe the dangers of pseudoscience and why the dangers should matter to you.
Answer: Answers will vary but at least three of the following are needed 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.

--These decisions lead to impacts on the diversity of animal species throughout the world.

--Persons may be directly harmed when opinion rather than scientific proof is used in the application of a treatment.

--Pseudoscience impacts people in their daily lives (it impacts the education their children may get, it impacts the workplace, it impacts their community through politics and other means).

Question ID: Lil 2ce 1.4-8
Diff: 1
Type: ES

Page Ref: 20-21
Topic: The Dangers of Pseudoscience: Why Should We Care?
Skill: Factual

Chapter 1: PSYCHOLOGY AND SCIENTIFIC THINKING
Fill in the Blank Questions

1) Most people get their knowledge about psychological topics not from scientific journals or academic-related books but rather from popular psychology (or the popular psychology industry).

Question ID: Lil 2ce 1.3-1
Difficulty: 1
Page Ref: 4
Topic: Psychology and Scientific Thinking: A Framework for Everyday Life (Introduction)
Skill: Factual

2) Naive realism refers to a person's belief that he or she accurately and objectively sees the world as it is.

Question ID: Lil 2ce 1.3-2
Difficulty: 2
Page Ref: 7
Topic: Why We Can't Always Trust Our Common Sense
Skill: Factual

3) Tatiana is a manager of a large grocery store, and she 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 behaviour by her older adult employees. It would be wise to warn her of the dangers of the confirmation bias.

Question ID: Lil 2ce 1.3-3
Difficulty: 3
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied

4) 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, the confirmation bias is likely to occur.

Question ID: Lil 2ce 1.3-4
Difficulty: 2
Page Ref: 10
Topic: Psychology as a Science
Skill: Applied

5) An explanation for a large number of findings in the natural world is what a scientist would call a scientific theory.

Question ID: Lil 2ce 1.3-5
Difficulty: 2
Page Ref: 8-9
Topic: Psychology as a Science
Skill: Factual

6) Scientific skepticism requires that any claim is met with a(n) open mind.

Question ID: Lil 2ce 1.3-6
Difficulty: 2
Page Ref: 21
Topic: Scientific Skepticism
Skill: Factual

7) According to the authors, we sometimes must look to authorities because we cannot devote the time (or the resources) to the evaluation of claims about human behaviour.

Question ID: Lil 2ce 1.3-7
Difficulty: 1
Page Ref: 22
Topic: Scientific Skepticism
Skill: Factual

8) For a scientific claim to be meaningful, it must be capable of being disproven. This is the critical thinking principle of falsifiability.

Question ID: Lil 2ce 1.3-8
Difficulty: 2
Page Ref: 23-25
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

9) Replicability 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.

Question ID: Lil 2ce 1.3-9
Difficulty: 2
Page Ref: 23, 25-26
Topic: A Basic Framework for Scientific Thinking
Skill: Factual

10) 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 critical thinking principle of ruling out rival hypotheses.

Question ID: Lil 2ce 1.3-10
Difficulty: 3
Page Ref: 22-24
Topic: A Basic Framework for Scientific Thinking
Skill: Conceptual

11) Pseudoscience refers to claims or statements that superficially appear to be scientific but are not.

Question ID: Lil 2ce 1.3-11
Difficulty: 1
Page Ref: 13
Topic: What Is Pseudoscience?
Skill: Factual

12) Pseudoscience lacks the safeguards against confirmation bias and belief perseverance that characterize science.

Question ID: Lil 2ce 1.3-12
Difficulty: 3
Page Ref: 13
Topic: What is Pseudoscience?
Skill: Factual

13) One of the weakest forms of evidence in the scientific method that is prevalent in pseudoscience is reliance on anecdotal evidence.

Question ID: Lil 2ce 1.3-13
Difficulty: 3
Page Ref: 15
Topic: What is Pseudoscience?
Skill: Conceptual

14) During a class discussion on the effects of daycare on later social adjustment, Dr. Barnes frequently reminded her students to focus on the scientific evidence rather than on their feelings about daycare. Dr. Barnes was attempting to encourage more critical thinking (should also accept logical thinking or scientific thinking or rational thinking).

Question ID: Lil 2ce 1.3-14
Difficulty: 2
Page Ref: 18-19, 22-27

Topic: What Is Pseudoscience? & A Basic Framework for Scientific Thinking
Skill: Applied

15) The phrase "If I didn't believe it, I wouldn't have seen it" most accurately describes how the *cognitive* factor pareidolia leads to the development of pseudoscientific belief.

Question ID: Lil 2ce 1.3-15
Difficulty: 3
Page Ref: 16
Topic: What is Pseudoscience?
Skill: Conceptual

16) The use of the emotions one experiences as a guide for evaluating the validity of scientific claims is called emotional reasoning by psychologists.

Question ID: Lil 2ce 1.3-16
Difficulty: 2
Page Ref: 18-19
Topic: What is Pseudoscience?
Skill: Factual

17) Mistakenly assuming that popularity of a theory is in some way indicative of a theory's correctness or accuracy is the definition of the bandwagon fallacy.

Question ID: Lil 2ce 1.3-17
Difficulty: 2
Page Ref: 19-20
Topic: What is Pseudoscience?
Skill: Factual

18) In the movie *Revenge of the Sith*, Anakin Skywalker/Darth Vader tells his former mentor, Obi-Wan Kenobi, "If you are not with me, then you are my enemy." This is an example of the either-or fallacy.

Question ID: Lil 2ce 1.3-18
Difficulty: 2
Page Ref: 18-19
Topic: What is Pseudoscience?
Skill: Conceptual

19) When a person views the world in terms of absolutes ("you are either with us or against us"), he or she is extremely likely to fall victim to the either-or fallacy.

Question ID: Lil 2ce 1.3-19
Difficulty: 2
Page Ref: 19
Topic: What is Pseudoscience?
Skill: Conceptual

20) Assuming that a claim is true because an authority figure endorses it is known as the appeal to authority fallacy.

Question ID: Lil 2ce 1.3-20
Difficulty: 3
Page Ref: 19
Topic: What is Pseudoscience?
Skill: Factual

21) Tim believes that because evolutionary psychologists speculate that the ability to lie is adaptive, it must be OK to lie to his parents. Tim has committed the naturalistic fallacy.

Question ID: Lil 2ce 1.3-21
Difficulty: 3
Page Ref: 19
Topic: What is Pseudoscience?
Skill: Applied

22) You overhear Sheila tell a friend, "Never date a fraternity guy! Every single one I dated cheated on me!" Sheila has committed the hasty generalization fallacy.

Question ID: Lil 2ce 1.3-22
Difficulty: 3
Page Ref: 19
Topic: What is Pseudoscience?
Skill: Applied