

Chapter 01

Multiple Choice Questions

1. The term _____ refers to the use of everyday or commonsense sources to understand and explain human behaviour.

- A) counselling psychology
- B) psychology
- C) popular psychology
- D) experimental psychology

Difficulty: 2

QuestionID: 01-1-01

Topic: Psychology and Scientific Thinking—A Framework for Everyday Life [Introduction]

Skill: Factual

Objective: 1.1a

Answer: C) popular psychology

2. When students begin to read through their introductory psychology textbook, they are often surprised to learn that

- A) common-sense explanations are essential 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.

Difficulty: 2

QuestionID: 01-1-02

Topic: What Is Psychology?

Skill: Applied/Conceptual

Objective: 1.1a

Answer: B) many of their beliefs about the causes of thoughts and behaviours are incorrect.

3. Psychology is the scientific study of the mind, brain, and

- A) illness
- B) society
- C) behaviour
- D) common sense

Difficulty: 2

QuestionID: 01-1-03

Topic: What Is Psychology?

Skill: Factual

Objective: 1.1a

Answer: C) behaviour

4. Which level of analysis in psychology would focus on your relationships with friends and family?

- A) biological
- B) social-cultural
- C) psychological
- D) neurological

Difficulty: 2

QuestionID: 01-1-04

Topic: Psychology and Levels of Analysis

Skill: Applied/Conceptual

Objective: 1.1a

Answer: B) social-cultural

5. Which level of psychological analysis would focus on the experience of anxiety or anger?

- A) neurological
- B) psychological
- C) social and cultural
- D) biological

Difficulty: 2

QuestionID: 01-1-05

Topic: What Makes Psychology Distinctive—and Fascinating

Skill: Applied/Conceptual

Objective: 1.1a

Answer: B) psychological

6. Which of the following research questions would be most interesting to a psychologist who studies anxiety from the biological perspective?

- A) Do all people experience anxiety in the same way?
- B) Do hormone changes affect the experience of anxiety?
- C) Do most people experience more anxiety in crowds than when alone?
- D) Are more people anxious about physical threats or social threats?

Difficulty: 3

QuestionID: 01-1-06

Topic: What Makes Psychology Distinctive—and Fascinating

Skill: Applied/Conceptual

Objective: 1.1a

Answer: B) Do hormone changes affect the experience of anxiety?

7. Janet is very friendly and outgoing, and she makes friends very easily. People are typically very nice to Janet, because of her friendliness, and as a result Janet is even more likely to be friendly. Which of the following terms is illustrated by this example?

- A) Mutual exclusion
- B) Kin selection
- C) Reciprocal determinism
- D) Naive realism

Difficulty: 1

QuestionID: 01-1-07

Topic: What Makes Psychology Distinctive—and Fascinating

Skill: Applied/Conceptual

Objective: 1.1a

Answer: C) Reciprocal determinism

8. Dr. Ortega is a researcher in Spain, where she conducts research on how Spanish culture shapes body image in young Spanish teenaged girls. Dr. Ortega is using which approach to cross-cultural psychology?

- A) etic
- B) emic

- C) reciprocal determinism
- D) western

Difficulty: 3

QuestionID: 01-1-08

Topic: What Makes Psychology Distinctive—and Fascinating

Skill: Applied/Conceptual

Objective: 1.1a

Answer: B) emic

9. Which of the following topics in psychology would focus on 'individual differences'?

- A) How personality affects job preferences.
- B) How neurons transmit signals.
- C) How colour vision works.
- D) How sleep deprivation affects attention.

Difficulty: 3

QuestionID: 01-1-09

Topic: What Makes Psychology Distinctive—and Fascinating

Skill: Applied/Conceptual

Objective: 1.1a

Answer: A) How personality affects job preferences.

10. Prior to the late 1800s, Psychology was difficult to distinguish from which of the following disciplines?

- A) Theology
- B) Journalism
- C) Philosophy
- D) Biology

Difficulty: 2

QuestionID: 01-1-10

Topic: Psychology's Early History

Skill: Factual

Objective: 1.4a

Answer: C) Philosophy

11. Which 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 B. Watson

Difficulty: 2

QuestionID: 01-1-11

Topic: Psychology's Early History

Skill: Factual

Objective: 1.4a

Answer: B) Wilhelm Wundt

12. What early psychologist was most concerned with developing answers to basic questions about our mental experiences, such as how long it takes us to react to a sound?

- A) Wilhelm Wundt
- B) John B. Watson
- C) Sigmund Freud
- D) Alfred Binet

Difficulty: 2

QuestionID: 01-1-12

Topic: Psychology's Early History

Skill: Factual

Objective: 1.4a

Answer: A) Wilhelm Wundt

13. What technique involves trained observers who carefully reflect and report on their own mental experiences?

- A) Spiritualism
- B) Introspection
- C) Experimentalism
- D) Empiricism

Difficulty: 1

QuestionID: 01-1-13

Topic: Psychology's Early History

Skill: Factual

Objective: 1.4a

Answer: B) Introspection

14. 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

Difficulty: 1

QuestionID: 01-1-14

Topic: Psychology's Early History

Skill: Factual

Objective: 1.4a

Answer: A) Spiritualism

15. What early American psychologist wanted to identify the basic elements of psychology in order to create a 'map' or 'periodic table' of consciousness?

- A) Edward Titchener
- B) Sigmund Freud
- C) B.F. Skinner
- D) William James

Difficulty: 2

QuestionID: 01-1-15

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: A) Edward Titchener

16. Which of the following phenomena caused a problem for structuralism, because it demonstrated that some aspects of psychology are outside of conscious awareness?

- A) introspection
- B) insight
- C) imageless thought
- D) natural selection

Difficulty: 2

QuestionID: 01-1-16

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: C) imageless thought

17. Which of the following is a lasting contribution by the school of thought known as structuralism?

- A) It defined psychology as the study of behaviour.
- B) It emphasized the need for systematic observation.
- C) It established the map of consciousness that we still use today.
- D) It focused on the purpose of behaviour.

Difficulty: 2

QuestionID: 01-1-17

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: B) It emphasized the need for systematic observation.

18. Suppose you were one of the early students in the new field of psychology. Your mentor is interested in answers to questions such as "Why do we see in colour?" "Why do people cry when they are sad?" and "Why do we dream?" Your mentor's approach is most consistent with the _____ perspective.

- A) psychoanalytic
- B) behaviourist
- C) functionalist
- D) structuralist

Difficulty: 3

QuestionID: 01-1-18

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: C) functionalist

19. Which of the following fields was most influenced by Charles Darwin's theory of evolution by natural selection?

- A) psychoanalysis
- B) behaviourism
- C) functionalism
- D) structuralism

Difficulty: 2

QuestionID: 01-1-19

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual
Objective: 1.4a

Answer: C) functionalism

20. With its study of the adaptive purpose of various psychological systems, evolutionary psychology is most like which early psychological school of thought?

- A) Behaviourism
- B) Structuralism
- C) Psychoanalysis
- D) Functionalism

Difficulty: 3

QuestionID: 01-1-20

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: D) Functionalism

21. In which of the following is the theorist matched to the correct school of thought?

- A) Structuralism – Charles Darwin
- B) Behaviourism – Jean Piaget
- C) Functionalism – William James
- D) Cognitivism – John B. Watson

Difficulty: 2

QuestionID: 01-1-21

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: C) Functionalism – William James

22. What psychological school of thought was most concerned with the influence of learning on a person's actions or thoughts?

- A) Behaviourism
- B) Structuralism
- C) Cognitivism
- D) Psychoanalysis

Difficulty: 2

QuestionID: 01-1-22

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: A) Behaviourism

23. 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 *publicly observable* human actions. This statement is most consistent with

- A) functionalism.
- B) psychoanalysis.
- C) behaviourism.
- D) structuralism.

Difficulty: 3

QuestionID: 01-1-23

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: C) behaviourism.

24. The phrase "black box psychology" is associated with which theoretical framework?

- A) Functionalism.
- B) Psychoanalysis.
- C) Behaviourism.
- D) Structuralism.

Difficulty: 2

QuestionID: 01-1-24

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: C) Behaviourism.

25. Which perspective was among the first to focus on the need for objective, rather than subjective, evidence?

- A) Cognitivism
- B) Behaviourism
- C) Functionalism
- D) Psychoanalysis

Difficulty: 2

QuestionID: 01-1-25

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: B) Behaviourism

26. Which theoretical approach argues that we conceptualize the world in different ways and, thinking, interpretation and insight are central to psychology.

- A) Cognitivism
- B) Behaviourism
- C) Functionalism
- D) Psychoanalysis

Difficulty: 2

QuestionID: 01-1-26

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: A) Cognitivism

27. One person interprets eye contact as friendly, and another person interprets it as threatening. Which of the following fields is most interested in this difference of interpretation?

- A) psychoanalysis.
- B) cognitivism.

- C) structuralism.
- D) behaviourism.

Difficulty: 3

QuestionID: 01-1-27

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: B) cognitivism.

28. Which theoretical framework proposed that our interpretation of rewards and punishments is a crucial determinant of our behaviour?

- A) Behaviourism
- B) Psychoanalysis
- C) Structuralism
- D) Cognitivism

Difficulty: 2

QuestionID: 01-1-28

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: D) Cognitivism

29. A researcher who studies the relationship between brain functioning and various thought processes, such as remembering or planning, would belong to what field of psychology?

- A) Evolutionary psychology
- B) Cognitive neuroscience
- C) Psychoanalysis
- D) Behaviourism

Difficulty: 2

QuestionID: 01-1-29

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: B) Cognitive neuroscience

30. 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

Difficulty: 2

QuestionID: 01-1-30

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: C) internal psychological processes; unconscious

31. Which theoretical framework proposed that our lives are full of *symbols*, or things that represent other things?

- A) Cognitivism
- B) Behaviourism
- C) Functionalism
- D) Psychoanalysis

Difficulty: 1

QuestionID: 01-1-31

Topic: The Great Theoretical Frameworks of Psychology

Skill: Factual

Objective: 1.4a

Answer: D) Psychoanalysis

32. 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.

Difficulty: 2

QuestionID: 01-1-32

Topic: The Multifaceted World of Modern Psychology

Skill: Applied/Conceptual

Objective: 1.4b

Answer: A) clinical psychologist.

33. Which theoretical school of thought focused on early childhood experience as a major influence on behaviour?

- A) structuralism
- B) functionalism
- C) cognitivism
- D) psychoanalysis

Difficulty: 3

QuestionID: 01-1-33

Topic: The Great Theoretical Frameworks of Psychology

Skill: Applied/Conceptual

Objective: 1.4a

Answer: D) psychoanalysis

34. The greatest proportion of psychologists are found working

- A) in K–12 schools.
- B) in self-employed, clinical practices.
- C) for a governmental agency.
- D) at universities and colleges.

Difficulty: 3

QuestionID: 01-1-34

Topic: The Multifaceted World of Modern Psychology

Skill: Factual

Objective: 1.4b

Answer: D) at universities and colleges.

35. All types of psychology involve

- A) interactions between patients and therapists.
- B) studying the brain.
- C) the use of scientific methods.
- D) replicating what is already known via common sense.

Difficulty: 3

QuestionID: 01-1-35

Topic: The Multifaceted World of Modern Psychology

Skill: Applied/Conceptual

Objective: 1.4b

Answer: C) the use of scientific methods.

36. Early thinkers in philosophy and psychology believed that we are shaped exclusively by our environments and we are born with a "blank state". These thinkers would endorse which of the following concepts?

- A) Natural selection
- B) Tabula rasa
- C) Imprinting
- D) Imageless thought

Difficulty: 2

QuestionID: 01-1-36

Topic: The Great Debates of Psychology

Skill: Applied/Conceptual

Objective: 1.4c

Answer: B) Tabula rasa

37. Which of the following provides strong evidence against the 'blank slate' concept of psychology?

- A) Evidence that early childhood experiences influence adult behaviour.
- B) Evidence that genes influence traits like intelligence and personality.
- C) Evidence that reward and punishment are important determinants of behaviour.
- D) Evidence that there are individual differences for most psychological traits.

Difficulty: 2

QuestionID: 01-1-37

Topic: The Great Debates of Psychology

Skill: Applied/Conceptual

Objective: 1.4c

Answer: B) Evidence that genes influence traits like intelligence and personality.

38. Anxiety is an important emotion because it helps us to detect and avoid danger. Which field of psychology is most consistent with this sort of statement?

- A) cognitivism
- B) psychoanalysis
- C) behaviourism
- D) evolutionary psychology

Difficulty: 2

QuestionID: 01-1-38

Topic: The Great Debates of Psychology

Skill: Applied/Conceptual
Objective: 1.4c

Answer: D) evolutionary psychology

39. According to evolutionary psychologists, which of the following explains why men and women tend to have slightly different approaches to sex and relationships?

- A) Socialization differences
- B) Life-span differences
- C) Differences in the 'cost' of mating
- D) Differences in personality

Difficulty: 3

QuestionID: 01-1-39

Topic: The Great Debates of Psychology

Skill: Applied/Conceptual

Objective: 1.4c

Answer: C) Differences in the 'cost' of mating

40. Which of the following is consistent with B.F. Skinner's argument that free will is an illusion?

- 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 engage in one behaviour rather than in another.
- D) People often lack direct understanding of the causes of their own behaviour.

Difficulty: 3

QuestionID: 01-1-40

Topic: The Great Debates of Psychology

Skill: Applied/Conceptual

Objective: 1.4c

Answer: D) People often lack direct understanding of the causes of their own behaviour.

41. Some people believe that the earth is flat, because that's what they can observe when they look out at the world. Which of the following terms is illustrated by this sort of error?

- A) the confirmation bias.
- B) naive realism.
- C) logical fallacies.
- D) communalism.

Difficulty: 2

QuestionID: 01-1-41

Topic: Why We Can't Always Trust Our Common Sense

Skill: Factual

Objective: 1.1a

Answer: B) naive realism.

42. Empiricism is an important part of psychological science. What does empiricism require?

- A) that we rely on logical decision-making
- B) that we acquire knowledge through observation
- C) that we use systematic diagnostic procedures
- D) that we are completely subjective at all times

Difficulty: 1

QuestionID: 01-1-42

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: B) that we acquire knowledge through observation

43. Which of the following makes psychology a scientific discipline?

- A) a systematic approach to evidence
- B) including the study of the brain
- C) staying away from 'soft' topics like emotion
- D) embracing naïve realism

Difficulty: 1

QuestionID: 01-1-43

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: A) a systematic approach to evidence

44. In science, a scientific theory is defined as a(n)

- A) personal understanding of natural laws.
- B) testable prediction about the natural world.
- C) explanation for a large number of findings
- D) educated opinion about the natural world.

Difficulty: 2

QuestionID: 01-1-44

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: C) explanation for a large number of findings

45. Imagine that someone winks at you and you wonder "do they have a crush on me?" So you start to observe their behaviour with others, to see if they wink or flirt in other circumstances. In this case, your question about a possible crush could be considered

- A) a theory.
- B) a prediction.
- C) a hypothesis.
- D) an outcome.

Difficulty: 3

QuestionID: 01-1-45

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) a hypothesis.

46. In science, an explanatory device that connects multiple scientific findings is called a(n)

- A) scientific theory.
- B) scientific hypothesis.
- C) metaphysical claim.
- D) rationalization.

Difficulty: 2

QuestionID: 01-1-46

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: A) scientific theory.

47. 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.

Difficulty: 2

QuestionID: 01-1-47

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: D) explains a wide range of observations.

48. To explain a wide range of observations, a psychologist would use

- A) a rational hypothesis.
- B) an empirical hypothesis.
- C) an empirical theory.
- D) a scientific theory.

Difficulty: 2

QuestionID: 01-1-48

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: D) a scientific theory.

49. _____ are general explanations, whereas _____ are specific predictions derived from these explanations.

- A) hypotheses; theories
- B) theories; hypotheses
- C) biases; heuristics
- D) heuristics; biases

Difficulty: 1

QuestionID: 01-1-49

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: B) theories; hypotheses

50. 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.

Difficulty: 1

QuestionID: 01-1-50

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: C) the confirmation bias.

51. Suppose Dr. Fish has a hypothesis that dogs make people happy. He supports his hypothesis by interviewing people at the dog park who are smiling and laughing. This demonstrates

- A) the availability heuristic.
- B) the hindsight bias.
- C) the confirmation bias.
- D) belief perseverance.

Difficulty: 2

QuestionID: 01-1-51

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) the confirmation bias.

52. Douglas believes that women are more polite and respectful than men. 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 social behaviour is maintained through

- A) the representativeness heuristic.
- B) the confirmation bias.
- C) belief perseverance.
- D) the hindsight bias.

Difficulty: 2

QuestionID: 01-1-52

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: B) the confirmation bias.

53. Police interrogators often assume that people brought in for questioning have important knowledge about the crime in question. If an interrogator asks questions that assume the guilt of a suspect rather than asking questions that would exonerate the suspect, then _____ may occur.

- A) belief perseverance
- B) the availability heuristic
- C) confirmation bias
- D) the anchoring and adjustment heuristic

Difficulty: 3

QuestionID: 01-1-53

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) confirmation bias

54. In *Alice in Wonderland*, the Cheshire Cat tells Alice that "most everyone's mad here." 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." What does this example illustrate?

- A) belief perseverance.
- B) the availability heuristic.
- C) confirmation bias.
- D) the anchoring and adjustment heuristic.

Difficulty: 3

QuestionID: 01-1-54

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) confirmation bias.

55. 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.

Difficulty: 3

QuestionID: 01-1-55

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: D) confirmation bias.

56. To believe that everyone admitted to hospital is necessarily ill (or they wouldn't be there) demonstrates

- A) belief perseverance.
- B) the availability heuristic.
- C) healthy skepticism.
- D) confirmation bias.

Difficulty: 2

QuestionID: 01-1-56

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: D) confirmation bias.

57. When you like someone, you tend to notice all of the good things about that person and minimize their flaws. While this might help your relationships, it is also an example of

- A) belief perseverance.
- B) the availability heuristic.
- C) healthy skepticism.
- D) confirmation bias.

Difficulty: 2

QuestionID: 01-1-57

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: D) confirmation bias.

58. Which of the following is described in the textbook as being the 'mother of all biases' that is most important for scientists to counteract?

- A) the confirmation bias
- B) the availability heuristic
- C) belief perseverance
- D) the hindsight bias

Difficulty: 1

QuestionID: 01-1-58

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: A) the confirmation bias

59. When conducting research, it is important to look for evidence that could disprove your hypothesis. This helps researchers avoid

- A) hindsight bias
- B) confirmation bias
- C) naive realism
- D) availability heuristic

Difficulty: 2

QuestionID: 01-1-59

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: B) confirmation bias

60. Milo and Shirley have been happily married for 20 years. They believe they made it to this milestone because they know each other so well. They recently did a quiz that showed them that they don't know each other as well as they thought! This evidence didn't change their minds, however, and they still believe that their love is because they know nearly everything about each other. This is an example of

- A) the representativeness heuristic.
- B) the hindsight bias.
- C) belief perseverance.
- D) the availability heuristic.

Difficulty: 2

QuestionID: 01-1-60

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) belief perseverance.

61. Despite the fact that scientific research has found no support or basis for the belief of "the hot hand" for winning streaks 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.

Difficulty: 2

QuestionID: 01-1-61

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: A) belief perseverance.

62. 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.

Difficulty: 2

QuestionID: 01-1-62

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) belief perseverance.

63. 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.

Difficulty: 2

QuestionID: 01-1-63

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) belief perseverance.

64. Recall from your text that researchers gave students false feedback about their abilities to distinguish between false and real documents. 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.

Difficulty: 2

QuestionID: 01-1-64

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: A) belief perseverance.

65. Imagine that you are a participant in a study on math skills, and after several trials, the experimenter gives you feedback that you are a "wizard" at math and score better than the average student. You are then asked to complete a few more math problems. 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 math than other participants. In this example, you would be engaging in

- A) confirmation bias.
- B) disinterestedness.
- C) belief perseverance.
- D) the disconfirmation bias.

Difficulty: 2

QuestionID: 01-1-65

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) belief perseverance.

66. Which of the following categories involves claims that are always untestable (and therefore unfalsifiable)?

- A) Philosophy
- B) Metaphysics
- C) Science
- D) Psychology

Difficulty: 2

QuestionID: 01-1-66

Topic: Metaphysical Claims—The Boundaries of Science

Skill: Factual

Objective: 1.1b

Answer: B) Metaphysics

67. Unlike science and pseudoscience, metaphysics involves claims that are always

- A) unjustifiable.
- B) unfalsifiable.
- C) derived from rational thought.
- D) derived from empirical observation.

Difficulty: 2

QuestionID: 01-1-67

Topic: Metaphysical Claims—The Boundaries of Science

Skill: Factual

Objective: 1.1b

Answer: B) unfalsifiable.

68. Which of the following is a metaphysical claim?

- A) We have guardian angels.
- B) Specific vitamins can cure cancer.
- C) There are no sex differences in emotion.
- D) Intelligent people are more likely to swear.

Difficulty: 3

QuestionID: 01-1-68

Topic: Metaphysical Claims—The Boundaries of Science

Skill: Factual

Objective: 1.1b

Answer: A) We have guardian angels.

69. Claims that involve the existence of God, the soul, or the afterlife reflect _____ claims that are _____.

- A) religious; replicable
- B) metaphysical; unfalsifiable
- C) pseudoscientific; correlations
- D) scientific; risky predictions

Difficulty: 2

QuestionID: 01-1-69

Topic: Metaphysical Claims—The Boundaries of Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: B) metaphysical; unfalsifiable

70. Why do scientists say things like "evidence suggests" or "this supports our hypothesis" rather than saying "we have proven"?

- A) Because scientists are worried about being sued.
- B) Because scientists know that their methods are weak.
- C) Because scientists know that new evidence could change their understanding.
- D) Because scientists are trained in humility.

Difficulty: 2

QuestionID: 01-1-70

Topic: Metaphysical Claims—The Boundaries of Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: C) Because scientists know that new evidence could change their understanding.

71. Which of the following makes it so important for people who read popular psychology to be able to distinguish real from bogus claims?

- A) Psychological research is rare.
- B) The popular psychology industry has no quality control.
- C) Popular psychology is more straightforward than research psychology.
- D) There are no reliable internet resources about psychology.

Difficulty: 2

QuestionID: 01-1-71

Topic: The Amazing Growth of Popular Psychology

Skill: Factual

Objective: 1.2a

Answer: B) The popular psychology industry has no quality control.

72. According to your textbook, what percentage of self-help books contain claims that are scientifically untested?

- A) 30
- B) 45
- C) 70
- D) 95

Difficulty: 1

QuestionID: 01-1-72

Topic: The Amazing Growth of Popular Psychology

Skill: Factual

Objective: 1.2a

Answer: D) 95

73. When attempting to differentiate between useful and useless information from popular psychology, what is a good rule 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.

Difficulty: 2

QuestionID: 01-1-73

Topic: The Amazing Growth of Popular Psychology

Skill: Applied/Conceptual

Objective: 1.2a

Answer: B) Insist on evidence to accurately evaluate all claims.

74. _____ represents a set of claims that seem scientific but really are not.

- A) Pseudoscience
- B) Metaphysics
- C) Metacognition
- D) Religion

Difficulty: 1

QuestionID: 01-1-74

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: A) Pseudoscience

75. What does science have that pseudoscience lacks?

- A) Safeguards against confirmation bias and belief perseverance.
- B) Technical terminology or jargon.
- C) The ability to investigate metaphysical claims.
- D) Referring to 'proof' rather than 'evidence'.

Difficulty: 2

QuestionID: 01-1-75

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: A) Safeguards against confirmation bias and belief perseverance.

76. _____ 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

Difficulty: 2

QuestionID: 01-1-76

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: D) Science in general; pseudoscience

77. Unlike science, pseudoscience lacks safeguards against _____ and _____.

- A) correlation–causation fallacy; extraordinary claims
- B) Occam's razor; Oberg's dictum
- C) confirmation bias; belief perseverance
- D) replicability; falsifiability

Difficulty: 2

QuestionID: 01-1-77

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: C) confirmation bias; belief perseverance

78. The major difference between pseudoscience and science is that

- A) pseudoscience lacks the general level of public support that characterizes 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 characterize science.

Difficulty: 2

QuestionID: 01-1-78

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: D) pseudoscience lacks the safeguards against cognitive biases that characterize science.

79. Dr. Boliba develops a herbal supplement that he claims increases memory abilities but other researchers have been unable to replicate his findings. In response to these criticisms, Dr. Boliba argues that clinical trials won't show the effects of his supplement because the environment is too intimidating for participants. In this example, which warning sign of pseudoscience is evident?

- A) Ad hoc immunizing
- B) Exaggerated claims
- C) Overreliance on anecdotes
- D) Evasion of peer review

Difficulty: 3

QuestionID: 01-1-79

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: A) Ad hoc immunizing

80. **Proponents of speed-reading courses or facilitated communication hold stubbornly to their beliefs despite contradictory evidence. Which warning sign of pseudoscience does this illustrate?**

- A) Exaggerated claims
- B) Overreliance on anecdotes
- C) Lack of self-correction
- D) Absence of connectivity

Difficulty: 3

QuestionID: 01-1-80

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: C) Lack of self-correction

81. **Your friend wants to purchase some expensive software that claims to to be scientifically proven to allow you to memorize entire books. He says that he knows someone whose grades went up after buying the software.**

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) Anecdotal evidence about effectiveness is not reliable.
- C) The program must work because there is good evidence for most speed-reading programs.
- D) The claim sounds scientific and connects with previous research so it is worth investigating.

Difficulty: 3

QuestionID: 01-1-81

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: B) Anecdotal evidence about effectiveness is not reliable.

82. **Your friend claims that a diet change led to weight loss and muscle gain for him, and that you should try it too. Which of the following represents a scientific approach to your friend's claim?**

- A) Because your friend provided evidence, a scientific approach would be to believe his statement.
- B) Your friend's claim is anecdotal evidence, which could be true or false and requires further testing.
- C) Because your friend provided anecdotal evidence, the claim is false.
- D) Your friend has used an ad hoc immunizing hypothesis, which should make you skeptical.

Difficulty: 2

QuestionID: 01-1-82

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: B) Your friend's claim is anecdotal evidence, which could be true or false and requires further testing.

83. **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 provide statements from people who have used the product, who indicate that it is proven to work.

Difficulty: 2

QuestionID: 01-1-83

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: D) its makers provide statements from people who have used the product, who indicate that it is proven to work.

84. Our brains are very good at organizing information into manageable categories or chunks. Why is this wonderful ability a problem for scientists?

- A) Because it is difficult to study how the brain actually functions.
- B) Because it can lead us to find patterns where none actually exist.
- C) Because it makes people overly skeptical.
- D) Because it becomes impossible to distinguish science from pseudoscience.

Difficulty: 3

QuestionID: 01-1-84

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) Because it can lead us to find patterns where none actually exist.

85. A company that promotes exercise programs provides data from studies that were all conducted by the company itself. All of the results show that the exercise programs are highly effective. Which of the following signs of pseudoscience does this illustrate?

- A) meaningless "psychobabble"
- B) lack of peer review
- C) overreliance on anecdotes
- D) exaggerated claims

Difficulty: 3

QuestionID: 01-1-85

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: B) lack of peer review

86. As you read an article in a magazine about "the anti-aging miracle that the medical industry doesn't want you to know about" you notice that the article dismisses evidence from scientists as 'just opinions'. Which warning sign of pseudoscience does this illustrate?

- A) meaningless "psychobabble"
- B) overreliance on anecdotes
- C) use of metaphysical claims
- D) lack of self-correction with contrary evidence

Difficulty: 3

QuestionID: 01-1-86

Topic: What Is Pseudoscience?

Skill: Factual
Objective: 1.2a

Answer: D) lack of self-correction with contrary evidence

87. 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 to other research
- D) Evasion of peer review

Difficulty: 3

QuestionID: 01-1-87

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: C) Absence of connectivity to other research

88. Abigail sees an ad on television that advertises a new program called "Live Linguistically". It 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." This example reflects which of the following warning signs of pseudoscience?

- A) Ad hoc immunizing
- B) Meaningless "psychobabble"
- C) Absence of connectivity
- D) Overreliance on anecdotes

Difficulty: 3

QuestionID: 01-1-88

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: B) Meaningless "psychobabble"

89. Which warning sign of pseudoscience is synonymous with stating an unfalsifiable hypothesis?

- A) Overreliance on anecdotal evidence
- B) Overuse of ad hoc immunizing hypotheses
- C) Lack of self-correction
- D) Evasion of peer review

Difficulty: 3

QuestionID: 01-1-89

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: B) Overuse of ad hoc immunizing hypotheses

90. According to the warning signs of pseudoscience, an overuse of ad hoc immunizing hypotheses involves

- A) making an exaggerated claim.
- B) stating an unfalsifiable hypothesis or theory.
- C) a lack of self-correction.

D) avoiding peer review.

Difficulty: 2

QuestionID: 01-1-90

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: B) stating an unfalsifiable hypothesis or theory.

91. 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 to other research.

Difficulty: 3

QuestionID: 01-1-91

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: D) absence of connectivity to other research.

92. Using needlessly technical language to explain phenomena refers to

- A) evasion of peer review.
- B) "psychobabble".
- C) exaggerated claims.
- D) absence of connectivity.

Difficulty: 2

QuestionID: 01-1-92

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: B) "psychobabble".

93. 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.

Difficulty: 2

QuestionID: 01-1-93

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: A) never corrected or changed.

94. Suppose a theorist decides not to revise his theory despite a large amount of contradictory evidence. If this continues, it's very likely that this theory

- A) will 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.

Difficulty: 2

QuestionID: 01-1-94

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: A) will join the ranks of pseudoscience.

95. 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

Difficulty: 3

QuestionID: 01-1-95

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: D) Self-correction of incorrect hypotheses and theories

96. Penelope refuses to give her children cough syrup when they are sick because she knows a mother whose child developed a serious infection after using cough syrup. Which warning sign of pseudoscience relates to Penelope's opinion?

- A) Exaggerated claims
- B) Ad hoc immunizing
- C) Use of psychobabble
- D) Anecdotal evidence

Difficulty: 2

QuestionID: 01-1-96

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: D) Anecdotal evidence

97. If you read a case study or testimonial, you don't know whether that anecdote is representative. What does that mean?

- A) The anecdote could be a lie.
- B) The anecdote could be about an exceptional person or circumstance rather than a typical one.
- C) The anecdote likely contains psychobabble and misuse of scientific terms.
- D) The anecdote is used as a loophole or escape from the theory being tested.

Difficulty: 3

QuestionID: 01-1-97

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: B) The anecdote could be about an exceptional person or circumstance rather than a typical one.

98. One explanation for why people are drawn to pseudoscience or to specific pseudoscientific beliefs is that many people, including scientists,

- A) are experiential thinkers.
- B) lack training in rational thought processes.
- C) prefer to ignore scientific research and develop their own conclusions.
- D) are eager to make sense of the endless information streaming around them.

Difficulty: 3

QuestionID: 01-1-98

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) are eager to make sense of the endless information streaming around them.

99. Because people are open to exploring and understanding the mysteries of the world, people are likely to

- A) seek out contradictory evidence.
- B) use experiential thinking.
- C) use rational thinking.
- D) be drawn to the pseudosciences.

Difficulty: 3

QuestionID: 01-1-99

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) be drawn to the pseudosciences.

100. A guest on a talk show displayed 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. This guest provided an example of

- A) the bandwagon fallacy
- B) the confirmation bias.
- C) belief perseverance.
- D) patternicity.

Difficulty: 2

QuestionID: 01-1-100

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) patternicity.

101. 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) patternicity.
- B) belief perseverance.
- C) the either-or fallacy.
- D) the confirmation bias.

Difficulty: 2

QuestionID: 01-1-101

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) patternicity.

102. Which of the following helps to explain why we are prone to seeing faces or animals when we stare at the stars or the clouds?

- A) patternicity.
- B) belief perseverance.
- C) the not me fallacy.
- D) the confirmation bias.

Difficulty: 2

QuestionID: 01-1-102

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) patternicity.

103. Many people believe that there are more accidents during a full moon, but there is no evidence of such a correlation. It is likely that people tend to notice when full moons and accidents go together, but don't notice all the times that accidents occur during other times of the month. What does this illustrate?

- A) the bandwagon fallacy.
- B) belief perseverance.
- C) patternicity.
- D) the confirmation bias.

Difficulty: 2

QuestionID: 01-1-103

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) patternicity.

104. _____ refers to the tendency to perceive relationships or similarities between meaningless data/events/objects.

- A) Terror management theory
- B) Transcendental temptation
- C) Patternicity
- D) Emotional reasoning fallacy

Difficulty: 1

QuestionID: 01-1-104

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: C) Patternicity

105. 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) a scientific hypothesis.
- B) patternicity.
- C) transcendental temptation.
- D) emotional reasoning fallacy.

Difficulty: 2

QuestionID: 01-1-105

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) patternicity.

106. **Our tendency to perceive meaningful connections among unrelated phenomena is called**

- A) active constructivism.
- B) passive constructivism.
- C) a correlation.
- D) patternicity.

Difficulty: 1

QuestionID: 01-1-106

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: D) patternicity.

107. **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.

Difficulty: 2

QuestionID: 01-1-107

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: C) a myth.

108. **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.

Difficulty: 2

QuestionID: 01-1-108

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) death.

109. **According to the tenets of terror management theory, why does *mortality salience* lead people to develop paranormal beliefs?**

- A) It encourages thinking about dimensions of life beyond our own.
- B) It increases all sorts of illogical reasoning.
- C) It prompts us to be more selfish than usual.
- D) It leads to hallucination or "visions."

Difficulty: 3

QuestionID: 01-1-109

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) It encourages thinking about dimensions of life beyond our own.

110. **Traps in thinking that can lead to mistaken conclusions are called**

- A) systematic information biases.
- B) experiential thought patterns.
- C) confirmation biases.
- D) logical fallacies.

Difficulty: 1

QuestionID: 01-1-110

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: D) logical fallacies.

111. **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 grey. Your friend's question is analogous to the _____ fallacy.**

- A) emotional reasoning
- B) bandwagon
- C) not me
- D) either–or

Difficulty: 3

QuestionID: 01-1-111

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) either–or

112. **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

Difficulty: 3

QuestionID: 01-1-112

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: D) either—or

113. Confusing the origin of a belief with its correctness is a fallacy based on

- A) genesis.
- B) ignorance.
- C) adverse consequences.
- D) antiquity.

Difficulty: 3

QuestionID: 01-1-113

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) genesis.

114. Some people doubt the validity of Freud's theory, citing the fact that he was a cocaine user. This highlights which fallacy?

- A) Genetic fallacy
- B) Appeal to authority fallacy
- C) Hasty generalization fallacy
- D) Argument from antiquity fallacy

Difficulty: 3

QuestionID: 01-1-114

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) Genetic fallacy

115. 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 generalization fallacy.
- C) appeal to authority fallacy.
- D) circular reasoning fallacy.

Difficulty: 2

QuestionID: 01-1-115

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) appeal to authority fallacy.

116. Derek learned that humans have a genetic predisposition toward preferring sweet or salty foods over sour or bitter foods. Derek decided that his chocolate cravings must be adaptive, so he eats even more chocolate than usual. Which fallacy does this illustrate?

- A) Adverse consequences
- B) Naturalistic
- C) Genetic
- D) Appeal to authority

Difficulty: 2

QuestionID: 01-1-116

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) Naturalistic

117. **Gina argues that there can't be any psychological differences between men and women, because that would lead sexist people to feel justified. Which fallacy does this represent?**

- A) argument from adverse consequences.
- B) naturalistic.
- C) genetic.
- D) appeal to authority.

Difficulty: 2

QuestionID: 01-1-117

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) argument from adverse consequences.

118. **"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

Difficulty: 2

QuestionID: 01-1-118

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) argument from antiquity

119. **"Depression and anxiety happen for a reason. They are there to teach us lessons, and we should just let those disorders run their course. Medications just mask the problem." This example highlights the _____ fallacy.**

- A) argument from antiquity
- B) naturalistic
- C) genetic
- D) appeal to authority

Difficulty: 3

QuestionID: 01-1-119

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) naturalistic

120. **"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.

Difficulty: 2

QuestionID: 01-1-120

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) appeal to authority.

121. "Scientists have never been able to show that extraterrestrial 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

Difficulty: 2

QuestionID: 01-1-121

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) appeal to ignorance

122. Drawing conclusions based on insufficient evidence is associated with the _____ fallacy.

- A) hasty generalization
- B) naturalistic
- C) genetic
- D) circular reasoning

Difficulty: 2

QuestionID: 01-1-122

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) hasty generalization

123. 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 generalization fallacy

Difficulty: 2

QuestionID: 01-1-123

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: C) Genetic fallacy

124. Politicians often use language that is designed to make their political opponents seem untrustworthy or

incompetent. If people are convinced by this use of language, rather than by the politicians' actual records, then which fallacy does this represent?

- A) either–or fallacy.
- B) bandwagon fallacy.
- C) not me fallacy.
- D) emotional reasoning fallacy.

Difficulty: 2

QuestionID: 01-1-124

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) emotional reasoning fallacy.

125. Jerry stays home to care for his young children, but his neighbour Janine has chosen to use a local daycare. Recent research showed evidence that kids in daycare learn some cognitive skills more quickly. 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

Difficulty: 2

QuestionID: 01-1-125

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) Emotional reasoning fallacy

126. "Most of my friends at the gym buy those expensive detox juices, so the juice must be healthy." Which fallacy is illustrated in this example?

- A) Emotional reasoning fallacy
- B) Either–or fallacy
- C) Not me fallacy
- D) Bandwagon fallacy

Difficulty: 2

QuestionID: 01-1-126

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: D) Bandwagon fallacy

127. 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

Difficulty: 2

QuestionID: 01-1-127

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) Not me fallacy

128. **Michael says that he is not racist, yet he avoids areas of the city that he thinks are 'ethnic' because he says he does not feel safe. In this example, Michael is demonstrating a phenomenon called _____.**

- A) patternicity
- B) bias blind spot
- C) confirmation bias
- D) opportunity cost

Difficulty: 3

QuestionID: 01-1-128

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) bias blind spot

129. **Suppose the vast majority of the general population believed that smoking cigarettes was perfectly harmless or even healthy. Without supportive evidence, the majority of believers would be wrong, illustrating the**

- A) bandwagon fallacy.
- B) either–or fallacy.
- C) not me fallacy.
- D) emotional reasoning fallacy.

Difficulty: 3

QuestionID: 01-1-129

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) bandwagon fallacy.

130. **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.

Difficulty: 2

QuestionID: 01-1-130

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) bandwagon fallacy.

131. **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.

Difficulty: 2

QuestionID: 01-1-131

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: A) bias blind spot.

132. 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

Difficulty: 3

QuestionID: 01-1-132

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) Not me fallacy

133. 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.

Difficulty: 2

QuestionID: 01-1-133

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) not me fallacy.

134. Holding on to the belief that you are immune to thinking errors and biases is known as the

- A) bandwagon fallacy.
- B) either–or fallacy.
- C) not me fallacy.
- D) emotional reasoning fallacy.

Difficulty: 2

QuestionID: 01-1-134

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2b

Answer: C) not me fallacy.

135. 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.

Difficulty: 2

QuestionID: 01-1-135

Topic: The Dangers of Pseudoscience—Why Should We Care?

Skill: Factual

Objective: 1.2b

Answer: D) opportunity cost.

136. **Darlene has severe anxiety and she has been pursuing holistic therapies, organic diets, and herbal supplements from a homeopathic practitioner for months, but she is not feeling any better. When asked why she does not take 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

Difficulty: 3

QuestionID: 01-1-136

Topic: The Dangers of Pseudoscience—Why Should We Care?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) Opportunity cost

137. **Some people say that using homeopathy or other unscientific treatments is harmless, and the worst thing that will happen is that people waste their money. But some people avoid real medical treatment because they are convinced by pseudoscientific arguments. Which of the following is illustrated by this example?**

- A) direct harm
- B) erosion of scientific thinking in society
- C) opportunity cost
- D) metaphysical claims

Difficulty: 2

QuestionID: 01-1-137

Topic: The Dangers of Pseudoscience—Why Should We Care?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: C) opportunity cost

138. **Which of the following is an example of direct harm caused by pseudoscience?**

- A) fitness trends like yoga
- B) injury or death from treatments like 'rebirthing therapy'
- C) side effects from any prescription medication
- D) discomfort associated with difficult choices

Difficulty: 2

QuestionID: 01-1-138

Topic: The Dangers of Pseudoscience—Why Should We Care?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: B) injury or death from treatments like 'rebirthing therapy'

139. Kim is always eager to try new methods to reach her full potential, but only if they seem mystical or magical. This includes the use of pseudoscientific treatments or practices, like sleeping with crystals in her pillow or avoiding all brown foods. Over the years, Kim has become more and more gullible and does seem to critically evaluate information about these treatments or about other information in her life. Which risk of pseudoscience does this illustrate?

- A) inability to think scientifically as citizens
- B) direct harm
- C) opportunity cost
- D) bias blind-spot

Difficulty: 2

QuestionID: 01-1-139

Topic: Scientific Skepticism

Skill: Applied/Conceptual

Objective: 1.2b

Answer: A) inability to think scientifically as citizens

140. 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 they don't believe in.
- C) is close-minded when evaluating evidence.
- D) dismisses any evidence that contradicts his or her beliefs.

Difficulty: 2

QuestionID: 01-1-140

Topic: Scientific Skepticism

Skill: Factual

Objective: 1.3a

Answer: A) considers the available evidence carefully.

141. According to the authors, someone who considers the available evidence carefully is called a

- A) skeptic.
- B) cynic.
- C) rationalist.
- D) empiricist.

Difficulty: 2

QuestionID: 01-1-141

Topic: Scientific Skepticism

Skill: Factual

Objective: 1.3a

Answer: A) skeptic.

142. Dr. Ward 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.

Difficulty: 2

QuestionID: 01-1-142

Topic: Scientific Skepticism

Skill: Applied/Conceptual

Objective: 1.3a

Answer: C) scientific skepticism.

143. **Your textbook authors have suggested that you should contact them, or ask your professor for more information, if you disagree with something that is written in the book. Which attitude does this represent?**

- A) cynicism
- B) bias blind-spot
- C) skepticism
- D) pseudoscience

Difficulty: 2

QuestionID: 01-1-143

Topic: Scientific Skepticism

Skill: Applied/Conceptual

Objective: 1.3a

Answer: C) skepticism

144. **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.

Difficulty: 2

QuestionID: 01-1-144

Topic: Scientific Skepticism

Skill: Factual

Objective: 1.3a

Answer: A) accepts claims on the basis of supportive scientific evidence.

145. **Someone who keeps an open mind to all claims, and then accepts claims that have undergone careful scientific testing is a**

- A) skeptic.
- B) cynic.
- C) rationalist.
- D) empiricist.

Difficulty: 2

QuestionID: 01-1-145

Topic: Scientific Skepticism

Skill: Factual

Objective: 1.3a

Answer: A) skeptic.

146. **Thinking skeptically requires that we rely on**

- A) subjective conclusions.

- B) objective evidence.
- C) the popularity of an idea.
- D) opinions of authorities.

Difficulty: 2

QuestionID: 01-1-146

Topic: Scientific Skepticism

Skill: Factual

Objective: 1.3a

Answer: B) objective evidence.

147. **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.

Difficulty: 2

QuestionID: 01-1-147

Topic: Scientific Skepticism

Skill: Applied/Conceptual

Objective: 1.3a

Answer: A) the evidence; an authority figure's endorsement.

148. **A key aspect of scientific skepticism is**

- A) reliance on authority.
- B) narrow-mindedness.
- C) dogmatic belief.
- D) critical thinking.

Difficulty: 2

QuestionID: 01-1-148

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) critical thinking.

149. **Critical thinking is**

- 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 until there is disconfirming evidence.

Difficulty: 2

QuestionID: 01-1-149

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: C) a set of skills for evaluating claims in an open-minded and careful manner.

150. **Your text describes Thought Field Therapy (TFT) which claims to be a treatment for anxiety. The treatment includes tapping on body parts in order to release 'energy blockages' that practitioners claim cause anxiety.**

Researchers have pointed out that any effect of TFT could be due to other aspects of the treatment, rather than the tapping. 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

Difficulty: 3

QuestionID: 01-1-150

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: A) Ruling out rival hypotheses

151. 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

Difficulty: 1

QuestionID: 01-1-151

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) rule out competing explanations

152. Patricia claims that the reason her child was well-behaved was because she read to him every night before bed and never let him eat junk food. She hasn't considered that there may have been other aspects of parenting or personality that influenced his behaviour. Which principle of scientific thinking does this illustrate?

- A) extraordinary claims
- B) falsifiability
- C) ruling out rival hypotheses
- D) Occam's razor

Difficulty: 2

QuestionID: 01-1-152

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) ruling out rival hypotheses

153. Your friend seems cranky and is very abrupt with you. You decide that your friend is angry with you, so you ask what you've done wrong. Your friend responds by telling you that he has a severe toothache and it hurts to talk. If you hadn't asked, you might still think that your friend was angry with you. Which principle of scientific thinking is illustrated by this example?

- A) Occam's razor
- B) falsifiability.
- C) ruling out rival hypotheses.
- D) replicability.

Difficulty: 3

QuestionID: 01-1-153

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: A) Occam's razor

154. **Dr. Scholl has found a relationship between foot size and criminal behaviour and concludes that larger feet cause 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

Difficulty: 3

QuestionID: 01-1-154

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) Ruling out rival hypotheses

155. **If you read the statement "There is a relationship between ice cream sales and crime rates" and assume that crime rates lead to ice cream sales, then which error have you made?**

- 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.

Difficulty: 1

QuestionID: 01-1-155

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) correlation is causation.

156. **Research demonstrates that people with higher incomes tend to live longer than people with lower incomes. If you use this information to argue that poverty directly leads to illness, which scientific thinking principle have you ignored?**

- 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.

Difficulty: 2

QuestionID: 01-1-156

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Correlation is not causation.

157. **Imagine that you have found clear evidence that there is a correlation between grades and coffee consumption. Which of the following is the only statement that is consistent with principles of scientific thinking?**

- A) drinking more coffee will change your grades
- B) drinking more coffee will improve your grades
- C) grades influence your decision to drink coffee
- D) grades and coffee consumption are related in some way

Difficulty: 2

QuestionID: 01-1-157

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) grades and coffee consumption are related in some way

158. Rhianna has been drinking a lot of tea to make her hair grow, because she read that tea consumption is correlated with hair length. She knows that cutting her hair wouldn't change how much tea she drinks so she feels like she has thought critically about the information. What is Rhianna missing?

- A) falsifiability
- B) Occam's razor
- C) extraordinary claims require extraordinary evidence
- D) the third variable problem

Difficulty: 3

QuestionID: 01-1-158

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) the third variable problem

159. 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.

Difficulty: 3

QuestionID: 01-1-159

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) A third variable, such as educational level, is associated with each and produces the observed relationship.

160. 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.

Difficulty: 2

QuestionID: 01-1-160

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: C) the third variable problem.

161. There is a strong correlation between smoking and risk of cancer. Some people have argued that because correlation is not causation, this evidence is not a good reason to quit smoking. Is this a reasonable conclusion?

- A) No, because smoking is bad for you.
- B) No, because a correlation could result from a causal relationship.
- C) Yes, because the causal relationship is in the opposite direction.
- D) Yes, because cancer is actually a third variable.

Difficulty: 3

QuestionID: 01-1-161

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: B) No, because a correlation could result from a causal relationship.

162. Suppose that a therapist notices several clients with anxiety disorders also demonstrate symptoms consistent with major depressive disorder. What might the therapist think if she considers the third variable problem?

- A) Her observations may not be replicated by other researchers.
- B) The relationship may really be the result of some other factor such as trauma.
- 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.

Difficulty: 2

QuestionID: 01-1-162

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: B) The relationship may really be the result of some other factor such as trauma.

163. 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 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

Difficulty: 2

QuestionID: 01-1-163

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: B) Third variable problem

164. Which of the following is something that you measure, that could have a range of different measurements?

- A) A theory
- B) A hypothesis
- C) A constant
- D) A variable

Difficulty: 2

QuestionID: 01-1-164

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) A variable

165. **Which philosopher suggested a useful theory had to be falsifiable?**

- A) Karl Popper
- B) William Occam
- C) Aristotle
- D) Plato

Difficulty: 2

QuestionID: 01-1-165

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: A) Karl Popper

166. **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

Difficulty: 3

QuestionID: 01-1-166

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Falsifiability

167. **A psychologist should state research questions such that new evidence could either support or refute the question. This is the critical thinking principle of**

- A) replicability.
- B) ruling out rival hypotheses.
- C) parsimony.
- D) falsifiability.

Difficulty: 2

QuestionID: 01-1-167

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) falsifiability.

168. **Suppose you advance a theory that says that all cats have good night vision. You then set out to test the vision of cats all around the world, because if you find cats who can't see well at night then your theory will be refuted. In the context of critical thinking, this is an example of**

- A) replicability.
- B) ruling out rival hypotheses.
- C) parsimony.
- D) falsifiability.

Difficulty: 2

QuestionID: 01-1-168

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) falsifiability.

169. A major problem with common-sense proverbs is that they often coexist with their complete opposite. For example, when people talk about dating they might say both "Opposites attract" and "Birds of a feather flock together!" This violates which principle of critical thinking?

- A) Replicability
- B) Extraordinary claims require extraordinary evidence
- C) Occam's razor
- D) Falsifiability

Difficulty: 3

QuestionID: 01-1-169

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Falsifiability

170. 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, even though they make opposite recommendations would appear to violate the critical thinking principle of

- A) replicability.
- B) extraordinary claims require extraordinary evidence.
- C) parsimony/Occam's razor.
- D) falsifiability.

Difficulty: 3

QuestionID: 01-1-170

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) falsifiability.

171. What did philosopher Karl Popper mean when he suggested that good hypotheses or theories are risky?

- A) They have to make extraordinary claims.
- B) There must be a large possibility that they could be proven wrong.
- C) They need to be controversial or contentious.
- D) They must make people uncomfortable.

Difficulty: 3

QuestionID: 01-1-171

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: B) There must be a large possibility that they could be proven wrong.

172. Philosopher Karl Popper would be most impressed with your hypothesis if it made a(n)

- A) safe prediction.
- B) risky prediction.
- C) irrefutable prediction.
- D) unfalsifiable prediction.

Difficulty: 3

QuestionID: 01-1-172

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: B) risky prediction.

173. 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 people get what they deserve, eventually.
- D) Women are better at detecting emotions than men.

Difficulty: 3

QuestionID: 01-1-173

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) Bad people get what they deserve, eventually.

174. The principle of parsimony is to _____ as the third variable problem is to _____.

- A) Popper's predictions; ruling out rival hypotheses
- B) falsifiability; replicability
- C) Occam's razor; correlation versus causation
- D) extraordinary claims; scientific skepticism

Difficulty: 3

QuestionID: 01-1-174

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) Occam's razor; correlation versus causation

175. Dr. Cunningham finds that people who take herbal supplements that profess to improve memory scored, on average, 15 percent 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?

- A) Falsifiability
- B) Occam's razor
- C) Replicability
- D) Extraordinary claims

Difficulty: 2

QuestionID: 01-1-175

Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.3b

Answer: C) Replicability

176. 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.

Difficulty: 2

QuestionID: 01-1-176

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) consistent and dependable.

177. Scientific findings that are consistent, no matter what lab does the testing, are said to be

- A) accurate.
- B) falsifiable.
- C) parsimonious.
- D) replicable.

Difficulty: 2

QuestionID: 01-1-177

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) replicable.

178. 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.

Difficulty: 2

QuestionID: 01-1-178

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) replicate.

179. One researcher finds that lemon odours affect memory, but a researcher in another lab finds no effect of lemon. This means that the initial results

- A) are not clear.
- B) are not strong.
- C) are not parsimonious.

D) are not replicated.

Difficulty: 2

QuestionID: 01-1-179

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) are not replicated.

180. **Many claims of ESP have been refuted because, under controlled conditions, the claimants have been unable to reproduce what they claim to have done in the past. This an example of the failure to**

- A) accurately communicate.
- B) achieve falsifiability.
- C) achieve parsimony.
- D) replicate.

Difficulty: 2

QuestionID: 01-1-180

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) replicate.

181. **A group of researchers started the Open Science Collaboration in 2012, so that research teams from around the world could attempt to recreate famous experiments. Which principle of scientific thinking did they focus on?**

- A) extraordinary claims
- B) Occam's razor
- C) replicability
- D) correlation is not causation

Difficulty: 3

QuestionID: 01-1-181

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) replicability

182. **Dr. Honeydew has proposed a theory about mind-reading, and says that he will conduct research that will demonstrate the existence of mind-reading. 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 mind-reading
- D) demonstrate a strong correlation.

Difficulty: 3

QuestionID: 01-1-182

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: B) supply extraordinary evidence to support his extraordinary claim.

183. **A higher standard of evidence is needed to support a claim that is**

- A) false.
- B) true.
- C) new.
- D) extraordinary.

Difficulty: 2

QuestionID: 01-1-183

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) extraordinary.

184. **Which philosopher proposed that extraordinary claims required more evidence than usual?**

- A) Aristotle
- B) Kant
- C) Plato
- D) Hume

Difficulty: 3

QuestionID: 01-1-184

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) Hume

185. **Dr. Martian claimed that aliens are real and they 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 require extraordinary evidence
- D) Falsifiability

Difficulty: 2

QuestionID: 01-1-185

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) Extraordinary claims require extraordinary evidence

186. **A greater 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.

Difficulty: 2

QuestionID: 01-1-186

Page-Reference:

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: B) an exaggerated or extraordinary claim.

187. **Your text describes the existence of 'crop circles' in England in the late 20th century, and the claim that these crop circles were evidence of aliens visiting earth (until the creators of the crop circles admitted to the pranks). What was the important message about scientific thinking in this example?**

- 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 should select the simpler of two claims that fit with the available evidence.

Difficulty: 2

QuestionID: 01-1-187

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Critical thinkers should select the simpler of two claims that fit with the available evidence.

188. **Hume is to "extraordinary claims" as _____ is to parsimony.**

- A) Aristotle
- B) Plato
- C) Occam
- D) Kant

Difficulty: 1

QuestionID: 01-1-188

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) Occam

189. **The principle of parsimony relates to which principle of critical thinking?**

- A) Falsifiability
- B) Extraordinary claims
- C) Replicability
- D) Occam's razor

Difficulty: 2

QuestionID: 01-1-189

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) Occam's razor

190. **Occam's razor is another name for what critical thinking principle?**

- A) Correlation is not causation
- B) Principle of replicability
- C) Principle of parsimony
- D) Hume's dictum

Difficulty: 2

QuestionID: 01-1-190

Topic: A Basic Framework for Scientific Thinking

Skill: Factual
Objective: 1.3b

Answer: C) Principle of parsimony

191. **Freudian theory has been rejected by many researchers. It included some complicated explanations for behaviour that has been explained more easily with other theories. Which principle led researchers to reject Freudian theory in this case?**

- A) causality
- B) durability
- C) parsimony
- D) falsifiability

Difficulty: 3

QuestionID: 01-1-191

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: C) parsimony

192. **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

Difficulty: 2

QuestionID: 01-1-192

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) most simple

193. **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

Difficulty: 2

QuestionID: 01-1-193

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) parsimonious; most simple

194. **A key characteristic of a good scientific theory is that it is a simple explanatory device. This key characteristic is the scientific thinking principle of**

- A) ruling out rival hypotheses.
- B) falsifiability.
- C) replication.

D) Occam's razor/parsimony.

Difficulty: 2

QuestionID: 01-1-194

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Occam's razor/parsimony.

195. **With respect to the criteria of sound scientific theories, which of the following pairs belong together?**

- A) Popper's predictions and replication
- B) Popper's predictions and parsimony
- C) Occam's razor and replication
- D) Occam's razor and parsimony

Difficulty: 2

QuestionID: 01-1-195

Topic: A Basic Framework for Scientific Thinking

Skill: Factual

Objective: 1.3b

Answer: D) Occam's razor and parsimony

196. **Chandra was reading in bed when she suddenly thought she saw something that looked like a ghost standing over the end of her bed. Chandra chuckled, and told herself that she must have dozed off and dreamed it because that is far more likely than the existence of ghosts. In this example, Chandra is relying on what principle of critical thinking?**

- A) Falsifiability
- B) Ruling out rival hypotheses
- C) Replicability
- D) Occam's razor

Difficulty: 3

QuestionID: 01-1-196

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

Answer: D) Occam's razor

197. **Brandon is an industrial psychologist who has been hired by a large hotel chain to determine why there is such a high turnover rate for their cleaning staff. This is an example of _____ research.**

- A) experiential
- B) laboratory
- C) applied
- D) basic

Difficulty: 2

QuestionID: 01-1-197

Topic: How Psychology Affects Our Lives

Skill: Applied/Conceptual

Objective: 1.4d

Answer: C) applied

198. Some psychologists conduct _____ research, which examines fundamental questions about the mind and behaviour. Other psychologists conduct _____ research, which uses knowledge in psychology to solve real-world problems?

- A) advanced; basic
- B) basic; applied
- C) scientific; pseudoscientific
- D) original; replication

Difficulty: 3

QuestionID: 01-1-198

Topic: How Psychology Affects Our Lives

Skill: Factual

Objective: 1.4d

Answer: B) basic; applied

199. Psychological research applied to police settings has compared simultaneous lineups to sequential lineups, in order to make recommendations that increase eyewitness accuracy. Which category of research is this?

- A) Basic
- B) Parsimonious
- C) Contemporary
- D) Applied

Difficulty: 3

QuestionID: 01-1-199

Topic: How Psychology Affects Our Lives

Skill: Factual

Objective: 1.4d

Answer: D) Applied

200. What differs most between basic research and applied research in psychology?

- A) the research methods
- B) the statistics used for analysis
- C) the focus on real-world problems
- D) the falsifiability

Difficulty: 2

QuestionID: 01-1-200

Topic: How Psychology Affects Our Lives

Skill: Applied/Conceptual

Objective: 1.4d

Answer: C) the focus on real-world problems

Fill-in-the-blank

1. A researcher who studies the neurons in the frontal lobes of the brain is operating at the _____ level of analysis.

Difficulty: 1

QuestionID: 01-2-01

Topic: Psychology and Levels of Analysis

Skill: Factual

Objective: 1.1a

Answer: a. biological

2. _____ refers to someone's belief that they accurately and objectively see the world as it is.

Difficulty: 2

QuestionID: 01-2-02

Topic: Why We Can't Always Trust Our Common Sense

Skill: Factual

Objective: 1.1a

Answer: a. Naive realism

3. An explanation for a large number of findings in the natural world is what a scientist would call a _____ .

Difficulty: 2

QuestionID: 01-2-03

Topic: Psychology as a Science

Skill: Factual

Objective: 1.1b

Answer: a. theory

4. A researcher predicts that the results of his experiment will show that university students get fewer than eight hours of sleep on average. This specific prediction is what scientists call a _____ .

Difficulty: 2

QuestionID: 01-2-04

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: a. hypothesis

5. Kari is listening to the mayoral debate. She is in favour of one candidate in particular. As a result of _____ , she notices all of the strong points made by her preferred candidate, and tends not to notice mistakes or weak points.

Difficulty: 2

QuestionID: 01-2-05

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b

Answer: a. confirmation bias

6. _____ refers to claims or statements that superficially appear to be scientific but are not.

Difficulty: 1

QuestionID: 01-2-06

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: a. Pseudoscience

7. Unlike science, pseudoscience lacks safeguards against _____ and belief perseverance.

Difficulty: 3

QuestionID: 01-2-07

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

Answer: a. confirmation bias

8. When a company uses a testimonial from one satisfied customer, that type of evidence is known as _____ evidence.

Difficulty: 3

QuestionID: 01-2-08

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a

Answer: a. anecdotal

9. Our tendency toward _____ lets us see faces in the clouds and also makes us vulnerable to superstitions and other errors.

Difficulty: 3

QuestionID: 01-2-09

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: a. patternicity

10. If we reject the results of a study because the results make us angry or sad, then we've used the _____ fallacy.

Difficulty: 2

QuestionID: 01-2-10

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: a. emotional reasoning

11. Alex thinks that if he doesn't become a doctor then he will be a complete failure. This error in thinking is known as the _____ fallacy.

Difficulty: 2

QuestionID: 01-2-11

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2b

Answer: a. either-or

12. Assuming that a claim is true just because your professor endorses it is known as the _____ fallacy.

Difficulty: 2
QuestionID: 01-2-12
Topic: What Is Pseudoscience?
Skill: Factual
Objective: 1.2b

Answer: a. appeal to authority

13. Tim believes that because researchers speculate that the ability to lie is an evolved trait, it must be okay to lie to his parents. Tim has committed the _____ fallacy.

Difficulty: 3
QuestionID: 01-2-13
Topic: What Is Pseudoscience?
Skill: Applied/Conceptual
Objective: 1.2b

Answer: a. naturalistic

14. You overhear Sheila tell a friend, "Never date a hockey player! Every single one I dated cheated on me!" Sheila has committed the _____ fallacy.

Difficulty: 3
QuestionID: 01-2-14
Topic: What Is Pseudoscience?
Skill: Applied/Conceptual
Objective: 1.2b

Answer: a. hasty generalization

15. If Mary avoids surgery and instead tries to cure her cancer with prayer, her decision reflects the _____ cost of pseudoscience.

Difficulty: 2
QuestionID: 01-2-15
Topic: What Is Pseudoscience?
Skill: Factual
Objective: 1.2b

Answer: a. opportunity

16. A scientific _____ evaluates all claims with an open mind, but insists on persuasive evidence.

Difficulty: 2
QuestionID: 01-2-16
Topic: Scientific Skepticism
Skill: Factual
Objective: 1.3a

Answer: a. skeptic

17. Age is correlated with income, because as people get older they tend to get more experience and better jobs, but age doesn't *cause* income. This illustrates the _____ problem.

Difficulty: 2
QuestionID: 01-2-17

Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.3b

Answer: a. third variable

18. Good scientific hypotheses make risky predictions. This reflects the importance of _____ as a principle of scientific thinking.

Difficulty: 2
QuestionID: 01-2-18
Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.3b

Answer: a. falsifiability

19. Across multiple studies, there is evidence that sleep deprivation causes problems for concentration. The evidence about sleep deprivation has good _____ because it has been duplicated consistently.

Difficulty: 1
QuestionID: 01-2-19
Topic: Scientific Skepticism
Skill: Applied/Conceptual
Objective: 1.3b

Answer: a. replicability

20. Your neighbour claims that your car is missing because aliens came from space and stole it. This is an _____ claim that will require some very impressive evidence for you to believe it.

Difficulty: 3
QuestionID: 01-2-20
Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.3b

Answer: a. extraordinary

21. You could choose to believe that those noises in the bushes are monsters but the principle of _____ suggests that it is probably just neighbourhood cats.

Difficulty: 2
QuestionID: 01-2-21
Topic: A Basic Framework for Scientific Thinking
Skill: Factual
Objective: 1.3b

Answer: a. parsimony

22. The technique known as _____ required trained observers to reflect upon and report their mental experiences.

Difficulty: 2
QuestionID: 01-2-22
Topic: A Basic Framework for Scientific Thinking

Skill: Factual
Objective: 1.4a

Answer: a. introspection

23. The school of thought known as _____ focused on understanding the purpose of behaviour and was heavily influenced by Darwin's theory of evolution.

Difficulty: 2
QuestionID: 01-2-23
Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.4a

Answer: a. functionalism

24. Sigmund Freud is associated with _____ which focused on the study of unconscious influences on our experiences.

Difficulty: 2
QuestionID: 01-2-24
Topic: A Basic Framework for Scientific Thinking
Skill: Applied/Conceptual
Objective: 1.4a

Answer: a. psychoanalysis

Critical Thinking

1. Use an example to explain how confirmation bias creates problems for making good decisions.

Difficulty: 3
QuestionID: 01-3-01
Topic: Psychology as a Science
Skill: Applied/Conceptual
Objective: 1.1b

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.

2. Provide an example of a time that you fell victim to at least one of the following logical fallacies (*bandwagon fallacy*, *emotional reasoning fallacy*, or *not me fallacy*). Be sure that your answer clearly shows that you understand what that fallacy is, AND shows how the quality of your decision was negatively affected.

Difficulty: 2
QuestionID: 01-3-02
Topic: What Is Pseudoscience?
Skill: Applied/Conceptual
Objective: 1.2b

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

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 *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.

3. 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. Use at least four of the six principles in your answer.

Difficulty: 3

QuestionID: 01-3-03

Page-Reference:

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

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 to which we can 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* means that a study can be duplicated and validation of the original findings increases our confidence that those findings were not due to chance.
- *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 – *that correlation does not imply causation*

4. Some creationists who've demanded that creationism be granted equal time and attention with evolutionary theory in biology classes argue that evolution is "just a theory." What is wrong with this idea?

Difficulty: 3

QuestionID: 01-3-04

Topic: What is a scientific theory?

Skill: Applied/Conceptual

Objective: 1.1b

Answer: This implies that some religious explanations are "more than theories." But these explanations lack the rigor of scientific explanations.

Moreover, theories are not just guesses. Some theories have survived repeated efforts to refute them and are well-confirmed models of how the world works. Darwinian evolution, the Big Bang, and other well-established scientific theories aren't just guesses about how the world works, because they've been substantiated over and over again by independent investigators. There are systematic observations and evidence (e.g., dated fossils of extinct animals, calculated distances of galaxies etc.) that are consistent with each of these theories and their explanatory models.

Alternative explanations such as creationist stories don't provide as compelling evidence as these theories provide. Better theories and explanations may come up one day, but they can't be just guesses.

5. Discuss terror management theory perspective in explaining the popularity of metaphysical claims such as

paranormal events, ghosts, reincarnation and astrology. Why are we so drawn to these explanations?

Difficulty: 3

QuestionID: 01-3-05

Page-Reference:

Topic: Psychological Pseudoscience—Imposters of Science

Skill: Applied/Conceptual

Objective: 1.2b

Answer: Studies show that reminding people of their mortality make them adopt certain cultural perspectives that promise life after death. That's why people who underwent a mortality salience manipulation and were reminded of their ultimate demise tend to report higher levels of belief in paranormal events, ghosts, reincarnation and astrology. These explanations can be comforting and help people manage their anxieties or existential terror.

Essay

1. Use examples of naïve realism and at least one logical fallacy to explain why we can't always trust our 'common sense'.

Difficulty: 3

QuestionID: 01-4-01

Topic: Why We Can't Always Trust Our Common Sense

Skill: Applied/Conceptual

Objective: 1.1a, 1.2b, and 1.3b

Answer: Answers will vary but should contain information similar to the following.

- Much of common sense is demonstrably incorrect. However, we trust our common sense largely because we're prone to *naïve realism*: the belief that we see the world precisely as it is. The Earth seems flat. The sun seems to revolve around the Earth. But in both cases, our intuitions are wrong. Similarly, naïve realism can trip us up when it comes to evaluating ourselves and others.
- We often believe contradictory ideas with equal strength in their accuracy (which leads to common-sense proverbs being unfalsifiable). (Note that this is not a necessary component of a correct answer, but students may include it.)
- There are also *logical fallacies* mentioned in the text that are used to buttress claims of the accuracy of common sense (appeals to authority, argument from antiquity fallacy, bandwagon fallacy). These fallacies compose traps in thinking that can lead to mistaken conclusions. It's easy for all of us to make these errors, because they seem to make intuitive sense. For example, someone might think that cold temperatures cause the cold because lots of other people hold that belief (bandwagon fallacy), or because of old wives' tales (argument from antiquity). In reality, colds are caused by viruses and not ambient temperature, but occurrence of colds is correlated with seasonal changes (correlation is not causation).

2. People who are 'scientifically illiterate' often don't understand how science works, or understand the differences among hypotheses, theories, evidence, and proof. Using an example from either science or pseudoscience, explain how misunderstanding these terms could lead someone to make errors when evaluating claims.

Difficulty: 2

QuestionID: 01-4-02

Topic: Psychology as a Science

Skill: Applied/Conceptual

Objective: 1.1b, 1.2a

Answer: Answers will vary but should include the following information for full credit. Some students will have a wholistic answer that incorporates all terms, whereas other students will have a different example for each of the four terms. Both options are valid.

- Answer should show evidence that the student understands that a hypothesis is a specific prediction or question about a specific situation/study but a theory is an overarching explanation that predicts or explains multiple situations/results

- Answer should show evidence that the student understand that evidence or data includes pieces of information used to make decisions or test hypotheses, whereas proof is something that scientists rarely claim (because new evidence could always change our understanding)
- Answer should include evidence of a mistake about understanding science (rejecting evidence or explanations because of 'just a theory', or concluding that something is proven just because there is evidence for it) or pseudoscience (accepting pseudoscience because of claimed 'proof' or another misunderstanding of the terms above)

3. Identify and describe the three crucial warning signs that a claim may be pseudoscientific.

Difficulty: 2

QuestionID: 01-4-03

Page-Reference:

Topic: What Is Pseudoscience?

Skill: Factual

Objective: 1.2a

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

- *Overuse of ad hoc immunizing hypotheses.* An 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.
- *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 pseudoscience, incorrect claims never seem to go away because their proponents cling to them stubbornly despite contrary evidence.
- *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 became suicidal after taking an antidepressant"—is commonplace in everyday life.

4. For each of the three crucial warning signs of pseudoscience, explain how each one violates one of the six principles of scientific thinking.

Difficulty: 3

QuestionID: 01-4-04

Topic: What Is Pseudoscience?

Skill: Applied/Conceptual

Objective: 1.2a, 1.3b

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 than the proponents of pseudoscience would wish to admit.
- Note that students may use one of the other signs of pseudoscience, from Table 1.2. For example: Absence of connectivity is a violation of both ruling out rival hypotheses and parsimony. These sorts of answers should be accepted for at least partial marks.

5. What are the three main logical fallacies in psychological thinking that can predispose us to pseudoscientific

beliefs? Describe and provide an example of each.

Difficulty: 1

QuestionID: 01-4-05

Page-Reference:

Topic: What Is Pseudoscience?

Skill: Factual

Objective:

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.

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.

6. Describe three dangers of pseudoscience and why those dangers should matter to society.

Difficulty: 1

QuestionID: 01-4-06

Topic: The Dangers of Pseudoscience—Why Should We Care?

Skill: Factual

Objective: 1.2b

Answer: Answers will vary but at least three of the following are needed for full credit.

Opportunity cost: 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.

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

Inability to think scientifically as citizens: Scientific thinking skills aren't just important for evaluating psychological claims—we can apply them to all aspects of our lives. Pseudoscience negatively impacts people in their daily lives; it impacts the education their children may get, it impacts the workplace, and it impacts their community and environment through politics and other means.

7. Science has been described as a 'prescription for humility'. Explain how the scientific principle of falsifiability is related to this concept of scientific humility and create an example to illustrate your answer.

Difficulty: 2

QuestionID: 01-4-07

Topic: Recognizing that we might be wrong

Skill: Applied/Conceptual

Objective: 1.1b, 1.3b

Answer: Answers may vary but a full credit answer will contain the following points.

- Humility: Needs to discuss the idea of humility (need to recognize that our hypothesis or theory could be wrong, that we don't know everything, that new evidence could change our minds)

- Falsifiability: We are required to ask questions or create hypotheses in a manner that allows them to be shown to be supported or refuted (falsifiability). If we set up our questions so that they can be tested in this way, only then do we provide the opportunity to be wrong. And we have to be willing to accept those results.
- Examples will vary, but could be that you have a hypothesis that reading with music helps you to study. You have to try out studying with music and studying without music in order to compare your performance. You might find out that you actually study better without music and you have to be willing to change your mind.

8. 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.

Difficulty: 3

QuestionID: 01-4-08

Page-Reference:

Topic: A Basic Framework for Scientific Thinking

Skill: Applied/Conceptual

Objective: 1.3b

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, while excluding 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.

9. Define and compare basic and applied research. Provide an example of each type of research.

Difficulty: 2

QuestionID: 01-4-09

Topic: How Psychology Affects Our Lives

Skill: Applied/Conceptual

Objective: 1.4d

Answer: Basic research examines how the mind works, understands the principles of human behavior and and studies the function of the brain. Applied research, on the other hand, examines how we can use basic research to solve real-world problems:

An example of basic research would be to test whether people are equally able to perceive the colour red under different lighting conditions in a laboratory, or studies whether the frontal lobes are more active during reading tasks or listening tasks.

An example is brake lights of the cars. A ten-month study of taxis with and without the new brake lights (at the base of cars' back windshields) and found a 61 percent lower rate of rear-end accidents in the first group. As a result of his research, all new North American cars have three brake lights.

There are three more examples: colours of fire trucks (red vs lime), place of faces and written texts on the pages (left vs right), and lineups of suspects (simultaneous vs sequential).