

## Chapter 2: Generating Testable Ideas

### Test Bank

#### Multiple Choice

1. Peer-reviewed journals have a readership and your idea must appeal to those who read that journal if you are to publish your ideas. This suggestion appeals to which of the following questions regarding your research idea?

- A. Is my idea novel?
- B. Is my idea scientific?
- C. Is my idea interesting?
- D. Is my idea valid?

Ans: C

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Comprehension

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Medium

2. You must be able to show how your idea adds to or builds upon existing scientific literature. This suggestion appeals to which of the following questions regarding your research idea?

- A. Is my idea novel?
- B. Is my idea scientific?
- C. Is my idea interesting?
- D. Is my idea valid?

Ans: A

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Comprehension

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Medium

3. An idea for a research study should be interesting, meaning it should \_\_\_\_\_.

- A. provide new information
- B. appeal to others
- C. advance scientific rigor
- D. replicate previous data

Ans: B

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Knowledge

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Easy

4. An idea for a research study should be novel, meaning it should \_\_\_\_\_.

- A. provide new information
- B. appeal to others
- C. use the scientific process
- D. apply the peer-review process

Ans: A

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Knowledge

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Easy

5. A \_\_\_\_\_ is a testable claim or statement, that is yet to be tested, concerning the relationship among variables that can be observed.

- A. proposition
- B. theory
- C. prediction
- D. hypothesis

Ans: D

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Comprehension

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

6. A \_\_\_\_\_ is a claim or statement to explain a body of knowledge that has been rigorously tested and supported by scientific observations.

- A. proposition
- B. prediction
- C. theory
- D. hypothesis

Ans: C

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Comprehension

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

7. For a hypothesis to develop into a theory, researchers test many \_\_\_\_\_ from one or more related hypotheses.

- A. propositions
- B. predictions
- C. theories
- D. laws

Ans: B

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Comprehension

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

8. Which of the following accurately distinguishes between a theory and a hypothesis?
- A. A hypothesis is a statement about an outcome that has yet to be tested, whereas a theory is a statement used to explain outcomes that have been rigorously tested.
  - B. A hypothesis is a statement that has testable predictions, whereas a theory explains already-tested outcomes and thus provides no new predictions.
  - C. A theory and hypothesis are only different in that a theory is more readily accepted as fact than is a hypothesis.
  - D. A theory is a hypothesis that is correct because it has been tested and supported by scientific observation.

Ans: A

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Analysis

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

9. Which of the following is a way in which a theory can be tested?
- A. The predictions and limitations of a theory can be tested.
  - B. The limitations of a theory can be tested.
  - C. The predictions of a theory can be tested.
  - D. A theory cannot be tested because it is supported by scientific observations.

Ans: A

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Analysis

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

10. Which of the following is a criterion for developing good theories and hypotheses?
- A. testable or falsifiable
  - B. replicable or precise
  - C. parsimonious
  - D. falsifiable, precise, and parsimonious

Ans: D

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Analysis

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

11. Which of the following describes a theory that is testable or falsifiable?
- A. It is stated such that it is impossible to falsify the claim.
  - B. It is stated in a way that allows it to be vaguely interpreted.
  - C. It is stated in a way that makes it possible to reject it.
  - D. It is stated in a way that makes it impossible to reject it.

Ans: C

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Analysis

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

12. The idea that simpler explanations should be preferred over more complex explanations describes which concept?

- A. parsimony
- B. testability
- C. reliability
- D. precision

Ans: A

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

13. What is the “mechanism” stated in a theory?

- A. presumed effect
- B. presumed cause
- C. falsifiability
- D. rationale for the theory

Ans: B

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

14. A researcher states a theory that feelings of attraction promote commitment to a long-term relationship. What “mechanism” is stated in this theory?

- A. length of a relationship
- B. level of commitment
- C. feelings of attraction
- D. No mechanism is stated in this theory.

Ans: C

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Application

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Hard

15. Which of the following best describes the approach of deductive reasoning?

- A. left-right
- B. top-down
- C. bottom-up
- D. front-behind

Ans: B

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Knowledge

Answer Location: Deductive Reasoning

Difficulty Level: Easy

16. Which of the following best describes the approach of inductive reasoning?

- A. left-right
- B. front-behind
- C. bottom up
- D. top down

Ans: C

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Knowledge

Answer Location: Inductive Reasoning

Difficulty Level: Easy

17. The type of reasoning in which a claim or theory is used to generate predictions and make observations is called \_\_\_\_\_.

- A. deductive reasoning
- B. inductive reasoning
- C. absolute reasoning
- D. empirical reasoning

Ans: A

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Deductive Reasoning

Difficulty Level: Medium

18. The type of reasoning in which general observations lead to the development of hypotheses that test predictions is called \_\_\_\_\_.

- A. deductive reasoning
- B. inductive reasoning
- C. absolute reasoning
- D. theoretical reasoning

Ans: B

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Inductive Reasoning

Difficulty Level: Medium

19. Which of the following is true regarding the types of reasoning researchers use?

- A. Researchers exclusively use deductive reasoning.
- B. Researchers exclusively use inductive reasoning.
- C. Researcher do not use inductive or deductive reasoning because both are flawed.
- D. Many researchers use a combination of inductive and deductive reasoning.

Ans: D

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Inductive Reasoning

Difficulty Level: Medium

20. You observe a happy couple holding hands as they walk by you. You conclude that holding hands promotes a happy relationship. What type of reasoning did you use in this example?

- A. deductive reasoning
- B. inductive reasoning
- C. infallible reasoning
- D. absolute reasoning

Ans: B

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Inductive Reasoning

Difficulty Level: Medium

21. A researcher states the theory that violent crime on television increases violence among children. The research then determines that one prediction of this theory is that acts of violent crime should be related to how much violent crime a criminal watched on television. What type of reasoning was used in this example?

- A. deductive reasoning
- B. inductive reasoning
- C. infallible reasoning
- D. absolute reasoning

Ans: A

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Deductive Reasoning

Difficulty Level: Medium

22. A systematic search for and recording of information identified in the general body of published scientific knowledge is called \_\_\_\_\_.

- A. peer review
- B. primary review
- C. analytic review
- D. literature review

Ans: D

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

23. A key objective of the literature review is to \_\_\_\_\_.

- A. describe how scientists develop questions
- B. develop new ideas that can be converted into a hypothesis
- C. use appropriate statistical software to analysis large data sets
- D. primarily review research that has not yet been published

Ans: B

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

24. When selecting a research topic, it is important to \_\_\_\_\_.

A. select a topic that interests you

B. choose as many research topics as possible

C. avoid performing a literature review

D. choose any research topic because the research process is never tedious

Ans: A

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Started: Choosing a Research Topic

Difficulty Level: Easy

25. Each of the following is an example of a scientific literature EXCEPT \_\_\_\_\_.

A. peer-reviewed article

B. academic book

C. newspapers

D. dissertation abstract

Ans: C

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

26. Which of the following statements about the research process is true?

A. The research process is an isolated process.

B. The research process is a collaborative process that applies the scientific method.

C. The research process is easy.

D. The research process requires the study of a topic that is not of interest to the researcher.

Ans: B

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Analysis

Answer Location: Performing a Literature Review

Difficulty Level: Medium

27. A \_\_\_\_\_ is any published or printed article, chapter, or book from which information can be obtained.

A. peer

B. source

C. review

D. spreadsheet

Ans: B

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Medium

28. Any publication that references works, ideas, or observations that are not those of the author is called \_\_\_\_\_.

- A. a primary source
- B. an electronic source
- C. a secondary source
- D. a partial source

Ans: C

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

29. Any publication in which the works, ideas, or observations are those of the author is called \_\_\_\_\_.

- A. a primary source
- B. an electronic source
- C. a secondary source
- D. an impartial source

Ans: A

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

30. A great source to read in a literature review is one in which the author or authors of the peer-reviewed article provide a thorough review of sometimes hundreds of secondary sources. What type of article is described?

- A. source article
- B. book review
- C. primary article
- D. review article

Ans: D

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Medium

31. Which of the following is a commonly used database for searching scientific articles in the behavioral sciences?

- A. PubMed



- B. PubMed and PsycInfo
- C. PubMed, PsycInfo, and PsycArticles
- D. PubMed, PsycInfo, PsycArticles, and ERIC

Ans: D

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Easy

32. A researcher wants to search for scientific articles that are related to his topic of interest. Which of the following is the most efficient way for him to perform this search?

- A. search scientific journals in a library by reading through each journal to find related articles and photocopy all articles of interest
- B. perform an online search of scientific articles using PsycInfo and save all articles of interest as a pdf file or request them using an interlibrary loan
- C. perform an online search using Wikipedia or Google to find online sources that are readily available but not peer-reviewed
- D. purchase a subscription to all journals that you think will publish scientific articles of interest and read the journals as they are mailed to you

Ans: B

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Application

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Hard

33. A \_\_\_\_\_ is any article or text that is available in its full or completed published version.

- A. search engine
- B. full-text database
- C. full-text article
- D. full-text search

Ans: C

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Medium

34. A \_\_\_\_\_ is any online database that makes full-text articles available to be downloaded electronically as a pdf or other electronic format.

- A. full-text database
- B. partial-text database
- C. hard copy database
- D. pdf database

Ans: A

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Getting Searching: Using Online Databases  
Difficulty Level: Medium

35. Which of the following is *not* a strategy used to avoid citing sources incorrectly or citing sources without reference to the primary source?

- A. always double-check your sources for accuracy
- B. be aware of citation bias
- C. obtain the primary source of an article you cite
- D. obtain permission from a publisher before citing a source

Ans: D

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Analysis

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Medium

36. Instances in which an individual cites the full reference of some work after simply skimming through an abstract is called \_\_\_\_\_.

- A. abstracting
- B. citation bias
- C. publication bias
- D. appropriate

Ans: A

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Comprehension

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Medium

37. Which of the following is an example of abstracting?

- A. A researcher cites only evidence that supports her view and fails to cite conflicting evidence in her research paper.
- B. A researcher cites the full reference of an article after skimming only the abstract of that article.
- C. A researcher cites all references for articles in which she read the full text and the abstract of those articles.
- D. A researcher reads the full text, but not the abstract of each article that she cites in her research paper.

Ans: B

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Application

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Hard

38. Which of the following is a possible consequence of abstracting?

- A. inability to identify the authors of the abstract
- B. inability to find the abstract
- C. misrepresentation of the findings reported in the abstract

D. inability to retrieve the abstract

Ans: C

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Comprehension

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Medium

39. A misleading approach to citing sources that occurs when an author or authors cite(s) only evidence that supports their view and fail(s) to cite existing evidence that refutes their view is called \_\_\_\_\_.

A. abstracting

B. citation bias

C. referencing

D. outsourcing

Ans: B

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Easy

40. Which of the following is an example of citation bias?

A. A researcher does not cite any references in an article.

B. A researcher cites the full reference of an article after skimming only the abstract of that article.

C. A researcher cites references for articles that both support and contradict her own viewpoint.

D. A researcher cites only evidence that supports her view and fails to cite conflicting evidence in her research paper.

Ans: D

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Application

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Hard

41. Citing an original article that was described in your paper ensures that the person with priority for the discovery is given:

A. proper credit

B. a monetary reward

C. undue credit

D. secondary credit

Ans: A

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Easy

42. Why is it important to read an article in full before citing it as a source in your own paper?

- A. to ensure that abstract is written in the proper format
- B. to ensure that you can cite the source in the proper format
- C. to ensure that you properly represent the work
- D. to ensure that the content in the article is misrepresented

Ans: C

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Comprehension

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Medium

43. A research performs a literature review using PsycInfo and finds an entire article available to download as a pdf. What is that article called?

- A. an article abstract
- B. a partial-text article
- C. a full-text article
- D. a contingent article

Ans: C

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Application

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Hard

44. To perform a literature review using an online database, we enter \_\_\_\_\_ into the cells provided and search for all articles that include those words.

- A. key words
- B. electronic words
- C. data-based words
- D. primary words

Ans: A

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Medium

45. Which of the following is true about a literature review?

- A. You should base your entire literature review on a single article or viewpoint.
- B. Searching multiple databases can increase the total number of possible results to review for your topic of interest.
- C. Reading the title and abstract takes a lot of time and therefore is an ineffective strategy.
- D. Literature reviews are not important to the research process.

Ans: B

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review. |  
2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Comprehension

Answer Location: The “3 Cs” of an Effective Literature Review

Difficulty Level: Medium

46. Online databases, such as PsycInfo, make research more accessible by \_\_\_\_\_.

- A. allowing users free access to library memberships
- B. allowing users to search thousands of articles at a time
- C. providing free access to all scientific journals
- D. providing immediate delivery of all articles

Ans: B

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Be Comprehensive

Difficulty Level: Medium

47. A(n) \_\_\_\_\_ is a brief written summary of the purpose, methods, and results of an article, chapter, book, or other published document.

- A. full-text article
- B. database
- C. research study
- D. abstract

Ans: D

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Be Comprehensive

Difficulty Level: Medium

48. While the length of an abstract can vary, what is the typical length of an abstract?

- A. no more than 15 pages
- B. 100 words or less
- C. 250 words or less
- D. at least 250 words

Ans: C

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Be Comprehensive

Difficulty Level: Easy

49. Which of the following is not one of the “3 Cs” of an effective literature review?

- A. be clever
- B. be considerate

- C. be critical
- D. be comprehensive

Ans: B

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: The “3 Cs” of an Effective Literature Review

Difficulty Level: Easy

50. Which of the following “3 Cs” of an effective literature review explains that an efficient way to find articles of interest is to first review the title and abstract of each article?

- A. be clever
- B. be considerate
- C. be critical
- D. be comprehensive

Ans: D

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Be Comprehensive

Difficulty Level: Easy

51. Which of the following “3 Cs” of an effective literature review explains that you should ask questions, know your sources, and remain objective during a literature review?

- A. be clever
- B. be considerate
- C. be critical
- D. be comprehensive

Ans: C

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Be Critical

Difficulty Level: Easy

52. Each of the following is an important part of being critical EXCEPT \_\_\_\_\_.

- A. know where your information comes from
- B. base your search predominantly on secondary sources
- C. be aware of your own biases
- D. ask yourself questions about the participants that the researchers used, the methods or procedures employed, and the conclusions drawn

Ans: B

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Analysis  
Answer Location: Be Critical  
Difficulty Level: Medium

53. Which of the following “3 Cs” of an effective literature review explains that you should identify flaws, contradictions, and anomalies, as well as consider subtleties and think beyond the research during a literature review?

- A. be clever
- B. be considerate
- C. be critical
- D. be comprehensive

Ans: A

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Clever  
Difficulty Level: Easy

54. What does it mean to be clever when you perform a literature review?

- A. You are creative and calculated in your ideas.
- B. You perform an effective literature review in the maximum amount of time.
- C. You remain biased as you perform a literature review.
- D. You rarely review the title and abstract of an article to select articles.

Ans: A

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Clever  
Difficulty Level: Easy

55. A method of testing a theory or hypothesis in which a positive result confirms the predictions made by that theory or hypothesis is called \_\_\_\_\_.

- A. abstract strategy
- B. comprehensive strategy
- C. confirmational strategy
- D. disconfirmational strategy

Ans: C

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge  
Answer Location: Confirmational Strategy  
Difficulty Level: Easy

56. What type of logical fallacy is used to apply the confirmational strategy?

- A. satisfying the conjunction
- B. denying the antecedent

- C. affirming the disjunct
- D. affirming the consequent

Ans: D

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Confirmational Strategy

Difficulty Level: Easy

57. One problem with using only a confirmational strategy to test a theory or hypothesis is that \_\_\_\_\_.

- A. it is infallible
- B. the conclusions drawn using this strategy can be misleading
- C. it cannot be used to test predictions made by a theory or hypothesis
- D. it will always show support for a theory or hypothesis

Ans: B

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Comprehension

Answer Location: Confirmational Strategy

Difficulty Level: Medium

58. A confirmational strategy is used to test for positive results that are \_\_\_\_\_ by a theory or hypothesis.

- A. anticipated
- B. unanticipated
- C. anticipated and unanticipated
- D. none of these

Ans: A

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Comprehension

Answer Location: Confirmational Strategy

Difficulty Level: Medium

59. A method of testing a theory or hypothesis in which a positive result disconfirms the predictions made by that theory or hypothesis is called \_\_\_\_\_.

- A. discontinuous strategy
- B. comprehensive strategy
- C. confirmational strategy
- D. disconfirmational strategy

Ans: D

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Disconfirmational Strategy



Difficulty Level: Easy

60. A benefit of using the disconfirmational strategy is that we can \_\_\_\_\_ a theory or hypothesis with a positive result.

- A. support
- B. confirm
- C. refute
- D. verify

Ans: C

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Comprehension

Answer Location: Confirmational Strategy

Difficulty Level: Medium

61. If we observe a positive result, then this would show support for a theory using a \_\_\_\_\_ strategy and would refute a theory using a \_\_\_\_\_ strategy.

- A. disconfirmational; confirmational
- B. confirmational; disconfirmational
- C. confirmational; confirmational
- D. disconfirmational; disconfirmational

Ans: B

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Comprehension

Answer Location: Testing Your Idea: Confirmation and Disconfirmation

Difficulty Level: Medium

62. The tendency for editors of peer-reviewed journals to preferentially accept articles that show positive results and reject those that show only negative results is called \_\_\_\_\_.

- A. publication bias
- B. citation bias
- C. effect bias
- D. disconfirmational bias

Ans: A

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

63. Another name for the publication bias is the \_\_\_\_\_.

- A. citation bias
- B. effect bias
- C. file drawer problem
- D. print problem

Ans: C

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

64. An editor of a peer-reviewed journal will be particularly unlikely to publish a study that shows only negative results when \_\_\_\_\_.

- A. the authors conduct follow-up studies showing positive results
- B. the study is associated with high statistical power to detect the effect
- C. the study also reports positive results in the same study
- D. the study is associated with low statistical power to detect the effect

Ans: D

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Application

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Hard

65. One problem that arises because of publication bias is that \_\_\_\_\_.

- A. authors often fail to cite all sources described in their paper
- B. the results reported in the peer-reviewed literature cannot be trusted
- C. it is possible that a reported effect is overstated
- D. editors preferentially published negative results in favor of positive results

Ans: C

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

## True/False

1. It was Ivan Pavlov who once said, "I am neither especially clever nor especially gifted. I am only very, very curious."

Ans: F

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Knowledge

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Easy

2. An interesting idea can potentially benefit society, test a prediction, or develop areas of research where little is known.

Ans: T

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Knowledge

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Easy

3. A novel idea is one that cannot be tested using the scientific method.

Ans: F

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Knowledge

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Easy

4. A theory is similar to a hypothesis except that it is accepted knowledge and thus does not need to provide unique predictions about what you should expect to observe given a set of circumstances.

Ans: F

KEY: Learning Objective: 2.2: Converting Ideas to Hypotheses and Theories

REF: Cognitive Domain: Analysis

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

5. A theory is not necessarily correct; rather, it is a generally accepted explanation for evidence, as it is understood.

Ans: T

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

6. Testability and parsimony are two of the criteria for developing good theories and hypotheses.

Ans: T

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Comprehension

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

7. A theory that is stated simply can be replicable but is not parsimonious.

Ans: F

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Comprehension

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Medium

8. If you conclude something from a specific observation you made, such as concluding that people are happy because you see them smile, then you are using deductive reasoning.

Ans: F

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Deductive Reasoning  
Difficulty Level: Medium

9. Inductive reasoning is a “bottom-up” type of reasoning.

Ans: T

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Knowledge

Answer Location: Inductive Reasoning

Difficulty Level: Easy

10. Deductive reasoning tends to be “data-driven,” whereas inductive reasoning tends to be “theory-driven.”

Ans: F

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Knowledge

Answer Location: Deductive Reasoning

Difficulty Level: Easy

11. The scientific *literature* refers to the general body of published scientific knowledge.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

12. A key objective of the literature review is to develop new ideas that can be tested using the scientific method.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

13. A *source* is any published or printed article, chapter, or book from which information can be obtained.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

14. To organize the sources you come across and make a literature review more efficient, first review the sources using an Internet Google search, then search from peer-reviewed or other scientific sources, if they seem applicable.

Ans: F

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Application  
Answer Location: Getting Organized: Choosing Appropriate Sources  
Difficulty Level: Hard

15. A source can be categorized as being reliable or secondary.

Ans: F

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

16. The original source of an idea or research is called a primary source.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

17. A review article is an example of a primary source.

Ans: F

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

18. Most primary and secondary sources in scientific literature can be found using online databases.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

19. It can be more efficient to first review secondary sources and then review primary sources in a literature review.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

20. A scientific source must be a primary source or secondary source; a source cannot be both primary and secondary.

Ans: F

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources  
Difficulty Level: Easy

21. PsycInfo, PsycArticles, PubMed, ERIC, and JSTOR are all examples of databases for scientific sources.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Searching: Using Online Databases

Difficulty Level: Easy

22. A full-text article is typically available online in a pdf format.

Ans: T

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

23. An abstract is a short article that is usually less than a few pages in length, which makes it easier to read.

Ans: F

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

24. "Abstracting" is when an individual cites the full reference of some work after simply skimming through an abstract.

Ans: T

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Easy

25. Citation bias occurs when an author or authors cite(s) conflicting evidence that supports two opposing views, but not necessarily the view of the author or authors of the work.

Ans: F

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Easy

26. Citing the original author of an article typically leads to citation bias.

Ans: F

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge  
Answer Location: Ethics in Focus: Giving Proper Credit  
Difficulty Level: Easy

27. Being comprehensive means performing an effective literature review in a minimum amount of time.

Ans: T

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Comprehensive  
Difficulty Level: Easy

28. Being critical means that you ask questions, know your sources, and remain objective as you perform a literature review.

Ans: T

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Critical  
Difficulty Level: Easy

29. Remaining objective in a literature review does not necessarily mean that you should be open to viewpoints that contradict your own.

Ans: F

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Critical  
Difficulty Level: Easy

30. Being clever means that you are creative and calculated in your ideas.

Ans: T

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge  
Answer Location: Be Clever  
Difficulty Level: Easy

31. An example of thinking beyond the research is when Daniel Kahneman won the Nobel Prize in Economics for his landmark research applying principles in psychology to economic theory.

Ans: T

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Comprehension

Answer Location: Be Clever  
Difficulty Level: Medium

32. The 3 Cs of an effective literature review are to be comprehensive, be cooperative, and be clever.

Ans: F

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Be Clever

Difficulty Level: Easy

33. The following logic statement is an example of using the confirmational strategy to test a hypothesis or theory: “If A is true, then B is true. B is true; therefore, A is true.”

Ans: T

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Confirmational Strategy

Difficulty Level: Easy

34. *Affirming the consequent* is a type of logic applied with the disconfirmational strategy of testing a hypothesis or theory.

Ans: F

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Disconfirmational strategy

Difficulty Level: Easy

35. A confirmational strategy is used to test predictions that are anticipated by a theory or hypothesis.

Ans: T

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Confirmational strategy

Difficulty Level: Easy

36. *Affirming the consequent* is a type of logic that can be fallacious.

Ans: T

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Confirmational Strategy

Difficulty Level: Easy



37. A disconfirmational strategy is used to test predictions that are unanticipated by a theory or hypothesis.

Ans: T

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Disconfirmational Strategy

Difficulty Level: Easy

38. Positive and negative results are equally likely to be published in peer-reviewed journals.

Ans: F

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

39. The tendency for editors of peer-reviewed journals to preferentially accept articles that show positive results and reject those that show only negative results is called citation bias.

Ans: F

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

40. Publication bias is also called the file drawer problem.

Ans: T

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Easy

## Essay

1. What does it mean to say that an idea is novel and interesting?

Ans: An idea that is novel and interesting is one that is original or new and potentially benefits society, tests a prediction, or develops areas of research where little is known.

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Comprehension

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Medium

2. What type of journals do researchers generally submit their work to? What is unique about these journals?

Ans: Peer-reviewed journals. They are unique in that only after the work has been reviewed and accepted by peers or scientific experts who determine its scientific value or worth regarding publication will the work be published.

KEY: Learning Objective: 2.1: Explain what makes an idea interesting and novel.

REF: Cognitive Domain: Comprehension

Answer Location: Generating Interesting and Novel Ideas

Difficulty Level: Medium

3. State three key criteria to consider when developing a good hypothesis or theory that is regarded as scientific.

Ans: Three criteria are (1) testable/falsifiable, (2) replicable/precise, and (3) parsimonious.

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

4. Use the puzzle analogy given in the book to explain the distinction between a hypothesis and a theory.

Ans: Using the puzzle analogy, we begin with scattered pieces and “guessing” which pieces fit where. Each attempt to place puzzle pieces together is like an attempt to test a hypothesis. A pattern emerges as we start to put the pieces together, similar to how we develop a theory based on the observations we make. In this way, the strategies we use to complete a puzzle are like the hypotheses and theories that researchers state.

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

5. State two ways in which a theory is often tested.

Ans: The predictions made by a theory can be tested, and the limitations of a theory can be tested.

KEY: Learning Objective: 2.2: Distinguish between a hypothesis and a theory.

REF: Cognitive Domain: Knowledge

Answer Location: Converting Ideas to Hypotheses and Theories

Difficulty Level: Easy

6. State the type of reasoning that is a “bottom-up” process. State the type of reasoning that is a “top-down” process.

Ans: Inductive reasoning is a “bottom-up” process.

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Comprehension

Answer Location: Inductive Reasoning

Difficulty Level: Medium

7. You observe two of your friends arguing. About 2 min into the argument a comedy special airs on TV that makes both of them laugh. After that, they no longer argue. From this, you conclude that humor can alleviate conflict. What type of reasoning is described in this example?

Ans: This is an example of inductive reasoning.

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Application

Answer Location: Inductive Reasoning

Difficulty Level: Hard

8. While reading an article you come across a theory stating that increased violence during children's television programming leads to an increase in violence among children. You resolve that if this is true, then it should also be true that an increase in nonviolent children's television programming will lead to a reduced violence among children. What type of reasoning is described in this example?

Ans: This is an example of deductive reasoning.

KEY: Learning Objective: 2.3: Distinguish between induction and deduction.

REF: Cognitive Domain: Application

Answer Location: Deductive Reasoning

Difficulty Level: Hard

9. In terms of a literature review, what is the *literature* and what is the *review*? Delineate these terms.

Ans: The *literature* is the general body of published scientific knowledge. The *review* is the search you perform of this general body of knowledge.

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Performing a Literature Review

Difficulty Level: Easy

10. Distinguish between a primary source and a secondary source.

Ans: A primary source is any publication in which the works, ideas, or observations are those of the author. A secondary source is any publication that refers to works, ideas, or observations that are not those of the author.

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

11. What is a *review article* that is often found in scientific journals? Define the term.

Ans: A *review article* is an article that provides a full summary of a research topic by an author who is considered an expert on that topic.

KEY: Learning Objective: 2.4: Describe the process of conducting a literature review.

REF: Cognitive Domain: Knowledge

Answer Location: Getting Organized: Choosing Appropriate Sources

Difficulty Level: Easy

12. State four ways to avoid ethical concerns for giving proper credit.

Ans: The four ways are (1) always double-check your sources for accuracy, (2) obtain the primary source of an article you cite, (3) avoid “abstracting,” and (4) be aware of citation bias.

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Knowledge

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Easy

13. What does “abstracting” mean?

Ans: Abstracting refers to when an individual cites the full reference of some work after simply skimming through the abstract.

KEY: Learning Objective: 2.5: Identify four ethical concerns for giving proper credit.

REF: Cognitive Domain: Comprehension

Answer Location: Ethics in Focus: Giving Proper Credit

Difficulty Level: Medium

14. What are the “3 Cs” of conducting an effective literature review?

Ans: The “3 Cs” are to be comprehensive, be critical, and be clever.

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Knowledge

Answer Location: The “3 Cs” of an Effective Literature Review

Difficulty Level: Easy

15. State the major parts of a research article in the order that you should read those parts of the article to be comprehensive, yet concise, in your review.

Ans: You should read each article in the following order: title, abstract, introduction and discussion, method and results, then references.

KEY: Learning Objective: 2.6: Describe the “3 Cs” of conducting an effective literature review.

REF: Cognitive Domain: Analysis

Answer Location: Be Comprehensive

Difficulty Level: Medium

16. State the “if . . . then” logic statement applied by a confirmational strategy as a method of testing a theory or hypothesis.

Ans: If A is true, then B is true. B is true. Therefore, A is true.

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Knowledge

Answer Location: Confirmational Strategy

Difficulty Level: Easy

17. Which strategy or method of testing a theory or hypothesis uses a type of logic, referred to as *affirming the consequent*?

Ans: Confirmational strategy.

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Comprehension

Answer Location: Confirmational Strategy

Difficulty Level: Medium

18. Explain why using a confirmational strategy alone to test a theory or hypothesis is poor practice.

Ans: To test predictions using the confirmational strategy, we use logic that is not valid. For this reason, a confirmational strategy alone to test theories is not good practice.

KEY: Learning Objective: 2.7: Distinguish between a confirmational and a disconfirmational strategy.

REF: Cognitive Domain: Analysis

Answer Location: Confirmational Strategy

Difficulty Level: Medium

19. Why is the publication bias often referred to as the file drawer problem?

Ans: The publication bias is also called the file drawer problem because researchers have a tendency to file away studies that show negative results, knowing that most journals will likely reject them.

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Analysis

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Medium

20. Much of the peer-reviewed literature is biased in favor of studies showing positive results. What type of bias is described here?

Ans: The publication bias.

KEY: Learning Objective: 2.8: Explain the issue of publication bias.

REF: Cognitive Domain: Comprehension

Answer Location: Ethics in Focus: Publication Bias

Difficulty Level: Medium