

**Multiple Choice (65)**

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?

LO: 1, Ans: C, Cognitive Domain: Comprehension, Answer Location: 2.1 Generating Interesting and Novel Ideas

2. You must be able to show how your idea adds to or builds upon the 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?

LO: 1, Ans: A, Cognitive Domain: Comprehension, Answer Location: 2.1 Generating Interesting and Novel Ideas

3. An idea for a research study should be interesting, meaning that it should:

- a. provide new information.
- b. appeal to others.
- c. advance scientific rigor.
- d. replicate previous data.

LO: 1, Ans: B, Cognitive Domain: Knowledge, Answer Location: 2.1 Generating Interesting and Novel Ideas

4. An idea for a research study should be novel, meaning that it should:

- a. provide new information.
- b. appeal to others.
- c. use the scientific process.
- d. apply the peer-review process.

LO: 1, Ans: A, Cognitive Domain: Knowledge, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 2, Ans: D, Cognitive Domain: Comprehension, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 2, Ans: C, Cognitive Domain: Comprehension, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 2, Ans: B, Cognitive Domain: Comprehension, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

8. Which of the following accurately distinguishes between a theory and a hypothesis?
- 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.
  - A hypothesis is a statement that has testable predictions, whereas a theory explain already tested outcomes and so provides no new predictions.
  - A theory and hypothesis are only different because a theory is more readily accepts as fact than a hypothesis.
  - A theory is a hypothesis that is correct because it has been tested and supported by scientific observation.

LO: 2, Ans: A, Cognitive Domain: Analysis, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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.

LO: 2, Ans: A, Cognitive Domain: Analysis, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

10. Which of the following is a criterion for developing good theories and hypotheses?

- a. Testable for falsifiable
- b. Replicable or precise
- c. Parsimonious
- d. Falsifiable, precise, and parsimonious

LO: 2, Ans: D, Cognitive Domain: Analysis, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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 allow 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.

LO: 2, Ans: C, Cognitive Domain: Analysis, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

12. Simpler explanations should be preferred to more complex ones describes which concept?

- a. Parsimony
- b. Testability
- c. Reliability
- d. Precision

LO: 2, Ans: A, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

13. Simply stated, what is the ‘mechanism’ stated in a theory?

- a. Presumed effect
- b. Presumed cause
- c. Falsifiability
- d. Rationale for the theory

LO: 2, Ans: B, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

14. A researcher states a theory that feelings of attraction promote commitment to a long-term relationship. What ‘mechanism’ is stated in this theory?
- Length of a relationship
  - Level of commitment
  - Feelings of attraction
  - No mechanism is stated in this theory

LO: 2, Ans: C, Cognitive Domain: Application, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

15. Which of the following best describes the approach of deductive reasoning?
- Left-right
  - Top down
  - Bottom up
  - Front-behind

LO: 3, Ans: B, Cognitive Domain: Knowledge, Answer Location: Deductive reasoning

16. Which of the following best describes the approach of inductive reasoning?
- Left-right
  - Front-behind
  - Bottom up
  - Top down

LO: 3, Ans: C, Cognitive Domain: Knowledge, Answer Location: Inductive reasoning

17. The type of reasoning in which a claim or theory is used to generate predictions and make observations, is called:
- deductive reasoning.
  - inductive reasoning.
  - absolute reasoning.
  - empirical reasoning.

LO: 3, Ans: A, Cognitive Domain: Comprehension, Answer Location: Deductive reasoning

18. 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. theoretical reasoning.

LO: 3, Ans: B, Cognitive Domain: Comprehension, Answer Location: Inductive reasoning

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. Researchers do not use inductive or deductive reasoning because both are flawed.
- d. Many researchers use a combination of inductive and deductive reasoning.

LO: 3, Ans: D, Cognitive Domain: Comprehension, Answer Location: Inductive reasoning

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

LO: 3, Ans: B, Cognitive Domain: Comprehension, Answer Location: Inductive reasoning

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

LO: 3, Ans: A, Cognitive Domain: Comprehension, Answer Location: Deductive reasoning

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

- a. peerreview.
- b. primary review.
- c. analytic review.
- d. literature review.

LO: 4, Ans: D, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review

23. Akey 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.

LO: 4, Ans: B, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review

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.

LO: 4, Ans: A, Cognitive Domain: Knowledge, Answer Location: Getting started: Choosing a research topic

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.

LO: 4, Ans: C, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review

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.

LO: 4, Ans: B, Cognitive Domain: Analysis, Answer Location: 2.4 Performing a Literature Review

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

LO: 4, Ans: B, Cognitive Domain: Comprehension, Answer Location: Getting organized: Choosing appropriate sources

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.

LO: 4, Ans: C, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources

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.

LO: 4, Ans: A, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources

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

LO: 4, Ans: D, Cognitive Domain: Comprehension, Answer Location: Getting organized: Choosing appropriate sources

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

- a. PubMed
- b. PubMed, PsycInfo
- c. PubMed, PsycInfo, PsycArticles
- d. PubMed, PsycInfo, PsycArticles, ERIC

LO: 4, Ans: D, Cognitive Domain: Knowledge, Answer Location: Getting searching: Using online databases

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.

LO: 4, Ans: B, Cognitive Domain: Application, Answer Location: Getting searching: Using online databases

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

LO: 4, Ans: C, Cognitive Domain: Comprehension, Answer Location: Getting searching: Using online databases

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

LO:4, Ans: A, Cognitive Domain: Comprehension, Answer Location: Getting searching: Using online databases

35. Which of the following is *not* a strategy used to avoid citing sources incorrectly or citing sources without reference to the primary source?
- Always double-check your sources for accuracy.
  - Be aware of citation bias.
  - Obtain the primary source of an article you cite.
  - Obtain permission from a publisher before citing a source.

LO: 5, Ans: D, Cognitive Domain: Analysis, Answer Location: Getting searching: Using online databases

36. Instances in which an individual cites the full reference of some work after simply skimming through an abstract, is called:
- abstracting.
  - citation bias.
  - publication bias.
  - appropriate.

LO: 5, Ans: A, Cognitive Domain: Comprehension, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

37. Which of the following is an example of abstracting?
- A researcher cites only evidence that supports her view and fails to cite conflicting evidence in her research paper.
  - A researcher cites the full reference of an article after skimming only the abstract of that article.
  - A researcher cites all references for articles in which she read the full-text and the abstract of those articles.
  - A researcher reads the full-text, but not the abstract of each article that he cites in his research paper.

LO: 5, Ans: B, Cognitive Domain: Application, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

38. Which of the following is a possible consequence of abstracting?
- Inability to identify the authors of the abstract.
  - Inability to find the abstract.
  - Misrepresentation of the findings reported in the abstract.
  - Inability to retrieve the abstract.

LO: 5, Ans: C, Cognitive Domain: Comprehension, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

39. A misleading approach to citing sources that occurs when an author or authors cite only evidence that supports their view and fails to cite existing evidence that refutes their view, is called:

- a. abstracting.
- b. citation bias.
- c. referencing.
- d. outsourcing.

LO: 5, Ans: B, Cognitive Domain: Knowledge, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

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.

LO: 5, Ans: D, Cognitive Domain: Application, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

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.

LO: 5, Ans: A, Cognitive Domain: Knowledge, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

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.

LO: 5, Ans: C, Cognitive Domain: Comprehension, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit

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

LO: 4, 6, Ans: C, Cognitive Domain: Application, Answer Location: Getting searching: Using online databases

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

LO: 4, 6, Ans: A, Cognitive Domain: Comprehension, Answer Location: Getting searching: Using online databases

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.

LO: 4, 6, Ans: B, Cognitive Domain: Comprehension, Answer Location: 2.6 The “3 Cs” of an Effective Literature Review

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. by providing free access to all scientific journals.
  - d. immediate delivery of all articles.

LO: 6, Ans: B, Cognitive Domain: Comprehension, Answer Location: Be comprehensive

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

LO: 6, Ans: D, Cognitive Domain: Comprehension, Answer Location: Be comprehensive

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

LO: 6, Ans: C, Cognitive Domain: Knowledge, Answer Location: Be comprehensive

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

LO: 6, Ans: B, Cognitive Domain: Knowledge, Answer Location: 2.6 The “3 Cs” of an Effective Literature Review

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

LO: 6, Ans: D, Cognitive Domain: Knowledge, Answer Location: Be comprehensive

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

LO: 6, Ans: C, Cognitive Domain: Knowledge, Answer Location: Be critical

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.

LO: 6, Ans: B, Cognitive Domain: Analysis, Answer Location: Be critical

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

- a. Be clever
- b. Be considerate
- c. Be critical
- d. Be comprehensive

LO: 6, Ans: A, Cognitive Domain: Knowledge, Answer Location: Be clever

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.

LO: 6, Ans: A, Cognitive Domain: Knowledge, Answer Location: Be clever

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.

LO: 7, Ans: C, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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

LO: 7, Ans: D, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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 can not be used to test prediction made by a theory or hypothesis.
- d. it will always show support for a theory or hypothesis.

LO: 7, Ans: B, Cognitive Domain: Comprehension, Answer Location: Confirmational strategy

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 the above

LO: 7, Ans: A, Cognitive Domain: Comprehension, Answer Location: Confirmational strategy

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.

LO: 7, Ans: D, Cognitive Domain: Knowledge, Answer Location: Disconfirmational strategy

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

LO: 7, Ans: C, Cognitive Domain: Comprehension, Answer Location: Confirmational strategy

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

LO: 7, Ans: B, Cognitive Domain: Comprehension, Answer Location: 2.7 Testing Your Idea: Confirmation and Disconfirmation

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.

LO: 8, Ans: A, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

63. Another name for the publication bias is the:
- a. citation bias.
  - b. effect bias.
  - c. file drawer problem.
  - d. print problem.

LO: 8, Ans: C, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

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.

LO: 8, Ans: D, Cognitive Domain: Application, Answer Location: 2.8 Ethics in Focus: Publication Bias

65. One problem that arises because of the 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 preferential published negative results in favor of positive results.

LO: 8, Ans: C, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

**True/False (40)**

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

LO: 1, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 1, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 1, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 2, Ans: F, Cognitive Domain: Analysis, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 2, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

- LO: 2, Ans: T, Cognitive Domain: Comprehension, Answer Location: 2.2  
Converting Ideas to Hypotheses and Theories
7. A theory that is stated simply can be replicable, but is not parsimonious.  
LO: 2, Ans: F, Cognitive Domain: Comprehension, Answer Location: 2.2  
Converting Ideas to Hypotheses and Theories
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.  
LO: 3, Ans: F, Cognitive Domain: Comprehension, Answer Location: Deductive reasoning
9. Inductive reasoning is a “bottom-up” type of reasoning.  
LO: 3, Ans: T, Cognitive Domain: Knowledge, Answer Location: Inductive reasoning
10. When the data or observations guide the ideas we generate and observations we make, we are using deductive reasoning.  
LO: 3, Ans: F, Cognitive Domain: Knowledge, Answer Location: Deductive reasoning
11. The scientific *literature* refers to the general body of published scientific knowledge.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review
12. A key objective of the literature review is to develop new ideas that can be tested using the scientific method.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review
13. A *source* is any published or printed article, chapter, or book from which information can be obtained.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
14. To organize the sources you come across and make a literature review more efficient, first review sources using an Internet Google search, then search from peer-reviewed or other scientific sources, if they seem applicable.  
LO: 4, Ans: F, Cognitive Domain: Application, Answer Location: Getting organized: Choosing appropriate sources

15. A source can be categorized as being reliable or secondary.  
LO: 4, Ans: F, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
16. The original source of an idea or research is called a primary source.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
17. A review article is an example of a primary source.  
LO: 4, Ans: F, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
18. Most primary and secondary sources in the scientific literature can be found using online databases.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
19. It can be more efficient to first review secondary sources, then review primary sources in a literature review.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
20. A scientific source must be a primary source or secondary source; a source cannot be both primary and secondary.  
LO: 4, Ans: F, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
21. PsycInfo, PsycArticles, PubMed, ERIC, and JSTOR are all examples of databases for scientific sources.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting searching: Using online databases
22. A full-text article is typically available online in PDF format.  
LO: 4, Ans: T, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources
23. An abstract is a short article that is usually less than a few pages in length, which makes it easier to read.  
LO: 4, Ans: F, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources

24. “Abstracting” refers to cases when an individual cites the full reference of some work after simply skimming through an abstract.  
LO: 5, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit
25. Citation bias occurs when an author or authors cites conflicting evidence that supports two opposing views, but not necessarily the view of the author or authors of the work.  
LO: 5, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit
26. Citing the original author of an article typically leads to citation bias.  
LO: 5, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.5 Ethics in Focus: Giving Proper Credit
27. Being comprehensive means performing an effective literature review in a minimum amount of time.  
LO: 6, Ans: T, Cognitive Domain: Knowledge, Answer Location: Be comprehensive
28. Being critical means that you ask questions, know your sources, and remain objective as you perform a literature review.  
LO: 6, Ans: T, Cognitive Domain: Knowledge, Answer Location: Be critical
29. Remaining objective in a literature review does not necessarily mean that you should be open to viewpoints that contradict your own.  
LO: 6, Ans: F, Cognitive Domain: Knowledge, Answer Location: Be critical
30. Being clever means that you are creative and calculated in your ideas.  
LO: 6, Ans: T, Cognitive Domain: Knowledge, Answer Location: Be clever
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.  
LO: 6, Ans: T, Cognitive Domain: Comprehension, Answer Location: Be clever
32. The 3 Cs of an effective literature review are to be comprehensive, be cooperative, and be clever.  
LO: 6, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.6: The “3 Cs” of an Effective Literature Review

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.

LO: 7, Ans: T, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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

LO: 7, Ans: F, Cognitive Domain: Knowledge, Answer Location: Disconfirmational strategy

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

LO: 7, Ans: T, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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

LO: 7, Ans: T, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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

LO: 7, Ans: T, Cognitive Domain: Knowledge, Answer Location: Disconfirmational strategy

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

LO: 8, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

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.

LO: 8, Ans: F, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

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

LO: 8, Ans: T, Cognitive Domain: Knowledge, Answer Location: 2.8 Ethics in Focus: Publication Bias

**Short Answer/Essay (20)**

1. What does saying that an idea is novel and interesting mean?

LO: 1, Ans: An idea that is novel and interesting is one that is original or new and potentially benefit society, test a prediction, or develop areas of research where little is known, Cognitive Domain: Comprehension, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 1, 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, Cognitive Domain: Comprehension, Answer Location: 2.1 Generating Interesting and Novel Ideas

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

LO: 2, Ans: Three criteria are: (1) testable/falsifiable, (2) replicable/precise, (3) parsimonious, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 2, 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. As we start to put the pieces together a pattern emerges similar to how we take the observations we make to develop a theory. In this way, the strategies we use to complete a puzzle are like the hypotheses and theories that researchers state, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 2, Ans: The predictions made by a theory can be tested, and the limitations of a theory can be tested, Cognitive Domain: Knowledge, Answer Location: 2.2 Converting Ideas to Hypotheses and Theories

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

LO: 3, Ans: Inductive reasoning is a “bottom-up” process. Deductive reasoning is a “top-down” process, Cognitive Domain: Comprehension, Answer Location: Inductive reasoning

7. You observe two of your friends arguing. About two minutes 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?

LO: 3, Ans: This is an example of inductive reasoning, Cognitive Domain: Application, Answer Location: Inductive reasoning

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?

LO: 3, Ans: This is an example of deductive reasoning, Cognitive Domain: Application, Answer Location: Deductive reasoning

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

LO: 4, Ans: The *literature* is the general body of published scientific knowledge. The *review* is the search you perform of this general body of knowledge, Cognitive Domain: Knowledge, Answer Location: 2.4 Performing a Literature Review

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

LO: 4, 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. Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources

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

LO: 4, Ans: A *review article* is an article that provides a full summary of a research topic by an author who is regarded as an expert on that topic, Cognitive Domain: Knowledge, Answer Location: Getting organized: Choosing appropriate sources

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

LO: 5, 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, Cognitive Domain: Knowledge, Answer Location: Ethics in Focus: Giving Proper Credit

13. What does “abstracting” mean?

LO: 5, Ans: Abstracting refers to instances in which an individual cites the full reference of some work after simply skimming through an abstract, Cognitive Domain: Comprehension, Answer Location: Ethics in Focus: Giving Proper Credit

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

LO: 6, Ans: The “3 Cs” are to be comprehensive, be critical, and be clever, Cognitive Domain: Knowledge, Answer Location: 2.6 The “3 Cs” of an Effective Literature Review

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

LO: 6, Ans: You should read each article in the following order: title, abstract, introduction and discussion, method and results, then references, Cognitive Domain: Analysis, Answer Location: Be comprehensive

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

LO: 7, Ans: If A is true, then B is true. B is true. Therefore, A is true, Cognitive Domain: Knowledge, Answer Location: Confirmational strategy

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

LO: 7, Ans: Confirmational strategy, Cognitive Domain: Comprehension, Answer Location: Confirmational strategy

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

LO: 7, 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, Cognitive Domain: Analysis, Answer Location: Confirmational strategy

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

LO: 8, 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, Cognitive Domain: Analysis, Answer Location: 2.8 Ethics in Focus: Publication Bias

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

LO: 8, Ans: The publication bias, Cognitive Domain: Comprehension,  
Answer Location: 2.8 Ethics in Focus: Publication Bias