

# Test Bank

## Chapter 2 Test Bank

### ***Multiple Choice***

1. Which of the following is the first step in the research process?

- \*a. Identifying a problem of practice
- b. Sharing your findings
- c. Analyzing your data
- d. Selecting a theoretical framework

Learning Objective: 2-1

Cognitive Domain: Knowledge

Answer Location: Identifying a Problem of Practice and Formulating it as a Research Problem

Question Type: MC

2. Which of the following represents a good example of a research problem?

- a. Instructional leadership
- b. English language learners in music education
- \*c. The effect of guided reading instruction on student reading comprehension
- d. Teacher collaboration in professional learning communities

Learning Objective: 2-3

Cognitive Domain: Analysis

Answer Location: Identifying a Problem of Practice and Formulating it as a Research Problem

Question Type: MC

3. Which of these is NOT a feature of a well-formulated research problem?

- a. Can be studied empirically
- \*b. Has a pre-determined outcome
- c. Connects to the previous research on the topic
- d. Relates to an issue arising from daily work

Learning Objective: 2-3

Cognitive Domain: Application

Answer Location: Formulating a Research Problem

Question Type: MC

4. A(n) \_\_\_\_\_ hypothesis describes the anticipated effect of an intervention within a research study on a specified outcome.

- a. null
- b. research
- c. primary
- \*d. experimental

Learning Objective: 2-3

Cognitive Domain: Comprehension

Answer Location: Formulating a Research Problem

Question Type: MC

5. Which of the following is an example of a null hypothesis?

- a. Teachers who encourage their students to use iPads in class experience fewer classroom behavior incidents.
- b. Examining the perceptions of teachers who collaborate informally will reveal how they value this collaboration.
- c. Principals' years of experience are positively related to student achievement in their schools.
- \*d. Students who regularly attend after-school programs do not have significantly higher test scores than their peers who do not attend after-school programs.

Learning Objective: 2-3

Cognitive Domain: Application

Answer Location: Formulating a Research Problem

Question Type: MC

6. In what kind of research are research problems typically formulated as hypotheses?

- a. Qualitative
- \*b. Quantitative
- c. Experimental
- d. Educational

Learning Objective: 2-3

Cognitive Domain: Knowledge

Answer Location: Formulating a Research Problem

Question Type: MC

7. A research problem that is situated within a particular context, linked to a theoretical framework, and developed broadly in relationship to the literature would likely be explored using \_\_\_\_\_

- a. inferential statistics
- b. quantitative methodology
- \*c. qualitative methodology
- d. literature review

Learning Objective: 2-3

Cognitive Domain: Analysis

Answer Location: Formulating a Research Problem

Question Type: MC

8. Which of these is NOT a characteristic of a good research question?

- \*a. Biased
- b. Ethical
- c. Significant
- d. Feasible

Learning Objective: 2-4

Cognitive Domain: Comprehension

Answer Location: Developing Research Questions

Question Type: MC

9. A \_\_\_\_\_ framework serves as a broad lens for your research study.

- a. conceptual
- b. experimental
- c. well-constructed
- \*d. theoretical

Learning Objective: 2-5

Cognitive Domain: Knowledge

Answer Location: Identifying a Conceptual or Theoretical Framework

Question Type: MC

10. Which of the following is a function of a theoretical or conceptual framework in a research study?

- a. To review the literature related to the topic
- b. To describe the data analysis methods

- \*c. To explain how the researcher makes sense of relationships and interactions within the study
- d. To identify a relevant problem of practice

Learning Objective: 2-5

Cognitive Domain: Application

Answer Location: Identifying a Conceptual or Theoretical Framework

Question Type: MC

11. Concerning the participants or participant observations in research studies, what is the main difference between a qualitative and a quantitative research study?

- \*a. Quantitative studies generally have more participants or participant observations than qualitative studies.
- b. Quantitative studies generally have fewer participants or participant observations than qualitative studies.
- c. Quantitative studies generally examine participants in greater depth than qualitative studies.
- d. Quantitative studies generally have the same number of participants or participant observations as qualitative studies.

Learning Objective: 2-6

Cognitive Domain: Application

Answer Location: Selecting a Methodology: A Decision-Making Process

Question Type: MC

12. Qualitative studies rely heavily on participants' \_\_\_\_\_ to generate findings.

- a. relationships
- \*b. experiences
- c. jobs
- d. characteristics

Learning Objective: 2-6

Cognitive Domain: Knowledge

Answer Location: Selecting a Methodology: A Decision-Making Process

Question Type: MC

13. Which of these describes an inductive approach to the research process?

- a. Moving from broader interpretations to localized understandings
- b. Examining data holistically
- c. Surveying participants using questions with Likert scales
- \*d. Moving from localized understanding to broader interpretations

Learning Objective: 2-6

Cognitive Domain: Knowledge

Answer Location: Selecting a Methodology: A Decision-Making Process

Question Type: MC

14. Deductive approaches to data analysis in the research process are generally adopted when the researcher is using which kind of methodology?

- a. Qualitative
- b. Ethnography
- \*c. Quantitative
- d. Case study

Learning Objective: 2-6

Cognitive Domain: Comprehension

Answer Location: Selecting a Methodology: A Decision-Making Process

Question Type: MC

15. Which of the following is NOT a source of data commonly associated with quantitative methodologies?

- a. Student test scores
- \*b. Fieldnotes

- c. Percentage of students in a school eligible for free or reduced-price lunch
- d. Amount of school funding per student

Learning Objective: 2-9

Cognitive Domain: Application

Answer Location: Selecting the Research Methods

Question Type: MC

16. If you designed a research study to learn more about how teachers in a certain school perceive the support they receive from their school's literacy coach, what is one methodology you could use to collect data?

- a. Online data
- b. Images or photographs
- \*c. Interviews
- d. Student surveys

Learning Objective: 2-7

Cognitive Domain: Analysis

Answer Location: Selecting the Research Methods

Question Type: MC

17. In quantitative research, it is important to think carefully about which \_\_\_\_\_ you are interested in studying, which are defined as expressions of a construct.

- \*a. variables
- b. focus groups
- c. interactions
- d. systems

Learning Objective: 2-7

Cognitive Domain: Knowledge

Answer Location: Selecting the Research Methods

Question Type: MC

18. You have designed a quantitative research study to examine how a certain instructional strategy may affect student achievement. Which of these is a variable you might include in your data?

- a. The teacher's gender
- \*b. Student test scores
- c. Percentage of families in the community who own their homes
- d. Amount of school funding per student

Learning Objective: 2-7

Cognitive Domain: Analysis

Answer Location: Selecting the Research Methods

Question Type: MC

19. Which of these is NOT an example of a teacher-level variable that could be studied in quantitative research?

- a. Teacher evaluation rating
- b. Years of experience
- \*c. Free or reduced-price lunch eligibility
- d. National Board for Professional Standards certification status

Learning Objective: 2-7

Cognitive Domain: Comprehension

Answer Location: Selecting the Research Methods

Question Type: MC

20. You have decided to use the number of computers per student in a classroom as one of the variables in your quantitative research study. Which of these could be one of your research questions?

- a. How does the amount of time first grade teachers spend on small-group reading instruction impact their students' reading comprehension levels?

- b. What is the relationship between the distribution of students' ages in a classroom and the frequency of reported behavior problems in that classroom?
- c. How many teachers with fewer than four years of experience leave their teaching positions each year?
- \*d. How does the amount of time students spend per week conducting in-class internet research relate to their grades on writing assignments?

Learning Objective: 2-7

Cognitive Domain: Analysis

Answer Location: Selecting the Research Methods

Question Type: MC

21. Consider the following research question: What is the impact on student reading scores of placing all students who qualify for free and reduced-price lunch in a classroom with a teacher who has 10 or more years of experience? Why might this be considered a problematic research question?

- \*a. It is not ethical.
- b. It is not significant.
- c. It is not clearly stated.
- d. It can is quantitative.

Learning Objective: 2-4

Cognitive Domain: Analysis

Answer Location: Developing Research Questions

Question Type: MC

22. Which of these would be defined as a categorical variable?

- a. Student grade point average
- b. Teacher years of experience
- \*c. Student race or ethnicity
- d. Average daily attendance rate

Learning Objective: 2-8

Cognitive Domain: Comprehension

Answer Location: Quantitative Data Analysis

Question Type: MC

23. Which approach to data analysis would be most appropriate for a study that employed interviews and focus groups for its methodology?

- a. Statistical analysis
- \*b. Qualitative analysis
- c. Descriptive analysis
- d. Quantitative analysis

Learning Objective: 2-8

Cognitive Domain: Application

Answer Location: Determining the Approach to Data Analysis

Question Type: MC

24. In qualitative data analysis, the researcher often uses a \_\_\_\_\_ to assign meaning to the data.

- a. colleague
- b. z-score
- c. highlighter
- \*d. code

Learning Objective: 2-8

Cognitive Domain: Knowledge

Answer Location: Qualitative Data Analysis

Question Type: MC

25. If your research question asked how many students from a certain school enrolled at selective research universities, which approach to data analysis might you select?

- \*a. Descriptive statistics
- b. Coding
- c. Inferential statistics
- d. Qualitative analysis

Learning Objective: 2-8

Cognitive Domain: Application

Answer Location: Quantitative Data Analysis

Question Type: MC

26. Which of these might be a code assigned to a portion of the data where the participant said, "I feel more nervous about my lessons when my principal comes to observe me"?

- a. Principal perceptions
- \*b. Teacher observations
- c. School characteristics
- d. Student interactions

Learning Objective: 2-8

Cognitive Domain: Analysis

Answer Location: Qualitative Data Analysis

Question Type: MC

27. In the qualitative analysis process, what step immediately follows the coding of the data?

- a. Identifying illustrative quotes to substantiate the findings
- b. Applying statistical tests to the data
- \*c. Establishing broad categories to describe and group codes
- d. Identifying specific outcomes

Learning Objective: 2-8

Cognitive Domain: Application

Answer Location: Qualitative Data Analysis

Question Type: MC

28. The difference between an interval and a ratio variable is that an interval variable \_\_\_\_\_.

- a. refers to a category
- \*b. does not have an absolute zero
- c. describes the rank of a score relative to other scores
- d. groups participants by their characteristics

Learning Objective: 2-8

Cognitive Domain: Comprehension

Answer Location: Quantitative Data Analysis

Question Type: MC

29. Which of the following statements might you see in a descriptive analysis?

- a. In focus groups, all teachers agreed that their collaborative meetings were highly productive.
- b. Over half (52%) of students receiving special education services scored below the second quartile on the standardized test, compared with 20% of students who were not receiving special education services.
- c. A theme among the coded interview data was that parents of ELL students did not feel welcome at after-school events.
- \*d. Last school year, 25% of principals with fewer than four years of experience transferred to different schools.

Learning Objective: 2-8

Cognitive Domain: Analysis

Answer Location: Quantitative Data Analysis

Question Type: MC

30. If the aim of your study is to test for or identify a specific outcome, what approach to analysis would you be most likely to use?

- a. Descriptive statistics

- b. Qualitative analysis
- c. Categorical analysis
- \*d. Inferential statistics

Learning Objective: 2-8

Cognitive Domain: Comprehension

Answer Location: Quantitative Data Analysis

Question Type: MC

31. A research problem statement that narrows the focus of a study to a specific relationship or interaction would usually be found in a \_\_\_\_\_ study.

- \*a. quantitative
- b. qualitative
- c. theoretical
- d. conceptual

Learning Objective: 2-2

Cognitive Domain: Comprehension

Answer Location: Formulating a Research Problem

Question Type: MC

32. For your case study on parent communication within your school district, you have decided to collect examples of letters and notifications sent home to parents. How might you begin to analyze these documents?

- a. Identifying categorical variables
- b. Descriptive statistics
- \*c. Coding the text
- d. Identifying representative quotes

Learning Objective: 2-8

Cognitive Domain: Application

Answer Location: Qualitative Data Analysis

Question Type: MC

33. How could the following research question be improved upon: How do teachers collaborate on instruction?

- a. State how this is related to a significant research problem.
- \*b. Further define the following terms: teachers, collaborate, and instruction.
- c. Specify who will conduct the research.
- d. Identify the methods to be used for data analysis.

Learning Objective: 2-4

Cognitive Domain: Analysis

Answer Location: Developing Research Questions

Question Type: MC

34. Imagine you are a kindergarten teacher in an urban school. Which of these research problems would you be most likely to choose to investigate?

- a. The impacts of high school students' service learning projects on their college choices
- b. School district administrators' perceptions of state-level policy changes
- \*c. The effects of pre-school participation on early reading skills
- d. Middle school science teachers' access to and participation in professional development

Learning Objective: 2-3

Cognitive Domain: Analysis

Answer Location: Identifying a Problem of Practice and Formulating it as a Research Problem

Question Type: MC

35. If you are conducting a descriptive study on a community where a charter school has proposed to open, which of these variables would most likely be of interest to you?

- a. Student test scores

b. Student height  
c. Teachers' highest degrees earned  
\*d. Percentage of families living below the poverty line  
Learning Objective: 2-9  
Cognitive Domain: Application  
Answer Location: Selecting the Research Methods  
Question Type: MC

**True/False**

36. A research problem should deal with something you have never considered or studied before.  
a. True  
\*b. False  
Learning Objective: 2-1  
Cognitive Domain: Knowledge  
Answer Location: Identifying a Problem of Practice and Formulating it as a Research Problem  
Question Type: TF

37. A research problem statement states the purpose of the research study and identifies the primary issue the study will examine.  
\*a. True  
b. False  
Learning Objective: 2-3  
Cognitive Domain: Knowledge  
Answer Location: Formulating a Research Problem  
Question Type: TF

38. In quantitative research, research problems are often formulated as hypotheses.  
\*a. True  
b. False  
Learning Objective: 2-3  
Cognitive Domain: Knowledge  
Answer Location: Formulating a Research Problem  
Question Type: TF

39. A researcher should select a research methodology prior to formulating a research problem.  
a. True  
\*b. False  
Learning Objective: 2-2  
Cognitive Domain: Comprehension  
Answer Location: Designing a Research Study  
Question Type: TF

40. Terms used in a research question should be clearly defined.  
\*a. True  
b. False  
Learning Objective: 2-4  
Cognitive Domain: Knowledge  
Answer Location: Developing Research Questions  
Question Type: TF

41. The significance of a research question is determined by the researcher's own opinion.  
a. True  
\*b. False



Learning Objective: 2-4  
Cognitive Domain: Comprehension  
Answer Location: Developing Research Questions  
Question Type: TF

42. A theoretical framework describes the theoretical rationale for your approach to your research study.

\*a. True

b. False

Learning Objective: 2-5  
Cognitive Domain: Comprehension  
Answer Location: Identifying a Conceptual or Theoretical Framework  
Question Type: TF

43. A conceptual framework helps to clarify your understandings of the conceptual relationships within your study.

\*a. True

b. False

Learning Objective: 2-5  
Cognitive Domain: Comprehension  
Answer Location: Identifying a Conceptual or Theoretical Framework  
Question Type: TF

44. Qualitative data analysis involves using descriptive or inferential statistics.

a. True

\*b. False

Learning Objective: 2-8  
Cognitive Domain: Knowledge  
Answer Location: Quantitative Data Analysis  
Question Type: TF

45. Representative quotes from coded qualitative data should be provided with adequate interpretation from the researcher.

\*a. True

b. False

Learning Objective: 2-8  
Cognitive Domain: Comprehension  
Answer Location: Qualitative Data Analysis  
Question Type: TF

## **Essay**

Type: E

46. How can you determine whether your research question is significant?

\*a. Significant research questions should be aligned with contemporary problems of practice; and seek to make a contribution to the field. Becoming familiar with and identifying in the literature is important to determine how your research question might contribute to existing scholarship.

Learning Objective: 2-4  
Cognitive Domain: Application  
Answer Location: Developing Research Questions  
Question Type: ESS

Type: E

47. Please describe the role of a conceptual framework for a research study.

\*a. A conceptual framework operationalizes and explains relationships between theoretical concepts. It can situate your study within the literature and expand on connections between important concepts. A

conceptual framework is a guide for your data analysis but may also be a product of the analysis – it can be revised and adjusted as findings are uncovered.

Learning Objective: 2-5

Cognitive Domain: Application

Answer Location: Identifying a Theoretical or Conceptual Framework.

Question Type: ESS

Type: E

48. What are two key features of a qualitative problem statement? Please craft an example of a qualitative problem statement that includes these two features.

\*a. Situates the research within a certain context; Linked to theoretical/conceptual framework and the broader literature base; Answers may vary for problem statement – should clearly include both of these. (e.g., Research has shown that urban first grade students may benefit from targeted reading instruction, but less is known about how their parents supplement reading instruction at home.)

Learning Objective: 2-3

Cognitive Domain: Analysis

Answer Location: Formulating a Research Problem

Question Type: ESS

Type: E

49. If you wanted to conduct a quantitative research study on how school district characteristics may predict test scores for certain groups of students, what are some variables that you might choose to examine? Name at least five variables.

\*a. Answers may vary, but could include the following variables: student race/ethnicity, student test scores, student free/reduced-price lunch eligibility, amount of school district funding per pupil, locale of school district, student mobility rates, total school district enrollment

Learning Objective: 2-9

Cognitive Domain: Application

Answer Location: Selecting the Research Methods

Question Type: ESS

Type: E

50. Why might a researcher decide to use inferential statistics for data analysis? Please give an example of a research question that might be examined through inferential statistics.

\*a. Inferential statistics could be chosen because a researcher either wants to explore relationships, predict outcomes, or make associations between variables in the dataset. Answers for example problem statements may vary, but should be similar to this example: How will student math scores be impacted if they play computer math games in class for one hour per week?

Learning Objective: 2-8

Cognitive Domain: Analysis

Answer Location: Quantitative Data Analysis

Question Type: ESS