

Test Bank for Research Methods for the Behavioral Sciences 4th Privitera

Research Methods for the Behavioral Sciences (4th)

ISBN 9781071928257 | Chapter 1: Introduction to Scientific Thinking

Total Questions: 135

Easy

Multiple Choice (27)

Q1. [Multiple Choice]

A _____ is a set of ~~all~~ individuals, items, or data of interest.

- a) variable
- b) statistic
- c) **population ✓ correct**
- d) sample

Q2. [Multiple Choice]

A _____ is a set of ~~selected~~ individuals, items, or data taken from a population of interest.

- a) statistic
- b) criterion
- c) population
- d) **sample ✓ correct**

Q3. [Multiple Choice]

A common method of communicating research to others is via _____.

- a) **poster presentations ✓ correct**
- b) e-mails to colleagues
- c) final course papers
- d) popular science magazines

Q4. [Multiple Choice]

A(n) _____ is a description of some observable event in terms of the specific process or manner by which it was observed or measured.

- a) variable
- b) statistic
- c) **operational definition ✓ correct**
- d) research hypothesis

Q5. [Multiple Choice]

A(n) _____ is a testable claim or statement concerning the relationship between variables that can be observed.

- a) variable
- b) statistic
- c) operational definition
- d) **research hypothesis ✓ correct**

Q6. [Multiple Choice]

Applied research uses the scientific method to answer questions _____.

- a) related to phenomena that are not easily testable
- b) about theoretical issues for fundamental processes
- c) **concerning practical problems with potential practical solutions ✓ correct**
- d) that are directly related to the predictions made by theories

Q7. [Multiple Choice]

As part of the scientific process, if we are *conducting the study*, then this means that we are _____.

- a) **executing the research plan ✓ correct**
- b) at the last step in the scientific process
- c) trying to decide on a research plan
- d) not engaged in the scientific method

Q8. [Multiple Choice]

Basic research uses the scientific method to answer questions that address _____.

- a) issues that are of interest to the general public
- b) **theoretical issues about fundamental processes and underlying mechanisms ✓ correct**
- c) practical problems with potential practical solutions
- d) individuals who are at a basic level of understanding or competency

Q9. [Multiple Choice]

In psychology and across many other disciplines in the behavioral sciences, which style of communication is most often used?

- a) **APA ✓ correct**
- b) MSA
- c) Chicago
- d) USMC

Q10. [Multiple Choice]

Intuition may have some value for scientists in that it can help them create a(n) _____, especially when there is little information available on their research interest.

- a) research design
- b) **research hypothesis ✓ correct**
- c) analytical strategy
- d) research proposal

Q11. [Multiple Choice]

Pseudoscience is _____.

- a) **not scientific ✓ correct**
- b) reliable
- c) descriptive
- d) valid

Q12. [Multiple Choice]

Pseudoscience is sometimes confused with which of the following terms?

- a) experimental
- b) observational
- c) **nonscientific ✓ correct**
- d) quantitative

Q13. [Multiple Choice]

Quantitative research uses the scientific method to _____.

- a) **record observations as numeric data ✓ correct**
- b) make nonnumeric observations
- c) conduct studies that can be completed without the use of statistical analysis
- d) make guesses about scientific phenomena

Q14. [Multiple Choice]

Researchers measure data in a(n) _____ to learn more about individuals in the larger _____ of interest.

- a) **sample; population ✓ correct**
- b) statistic; inference
- c) population; sample
- d) inference; statistic

Q15. [Multiple Choice]

Science is a broad term that comes from the Latin *scientia*, meaning what?

- a) to state (a theory or idea)
- b) **knowledge ✓ correct**
- c) to observe
- d) interpretation

Q16. [Multiple Choice]

Tenacity is a method of knowing based largely on _____.

- a) educated guesses
- b) scientific rigor
- c) **habit or superstition ✓ correct**
- d) constant pressure

Q17. [Multiple Choice]

The goal of qualitative research is to _____.

- a) record observations as numeric data
- b) **describe, interpret, and explain the behaviors or events being studied ✓ correct**
- c) conduct studies that can be completed without the use of statistical analysis
- d) make nonnumeric observations and conduct studies without the use of statistical analysis

Q18. [Multiple Choice]

The term _____ refers to a set of systematic techniques used to acquire, modify, and integrate knowledge concerning observable and measurable phenomena.

- a) hypothesis
- b) population
- c) **scientific method ✓ correct**
- d) operational definition

Q19. [Multiple Choice]

What are the four goals of science?

- a) control, explain, describe, and complete
- b) establish, rationalize, predict, and predict
- c) **describe, explain, predict, and control ✓ correct**
- d) rationalize, cause, control, and describe

Q20. [Multiple Choice]

What does APA stand for?

- a) **American Psychological Association ✓ correct**
- b) American Psychonomic Affiliation
- c) Abridged Psychological Association
- d) Affiliated Psychologists of America

Q21. [Multiple Choice]

What is another term for the scientific method?

- a) research plan
- b) research method ✓ correct**
- c) design plan
- d) research design

Q22. [Multiple Choice]

What is the last step in the scientific method?

- a) identify a problem
- b) analyze and evaluate the data
- c) communicate the results
- d) generate more new ideas ✓ correct**

Q23. [Multiple Choice]

Which of the following is a method of knowing?

- a) superstition
- b) coincidence
- c) rationalism ✓ correct**
- d) expertise

Q24. [Multiple Choice]

Which term describes a system or set of beliefs that try to deceptively create the impression that the knowledge gained represents the “final say” or most reliable knowledge on its subject matter?

- a) experimental
- b) scientific method
- c) pseudoscience ✓ correct**
- d) methodological

Q25. [Multiple Choice]

Which term is used to describe a single measurement, value, or observation?

- a) datum ✓ correct**
- b) proportion
- c) sample
- d) population

Q26. [Multiple Choice]

_____ are measurements or observations that are typically numeric.

- a) Operations
- b) Data ✓ correct**
- c) Samples
- d) Hypotheses

Q27. [Multiple Choice]

_____ is the acquisition of knowledge through observation, evaluation, interpretation, and theoretical explanation.

- a) Science ✓ correct**
- b) Empiricism
- c) Authority
- d) Statistics

True/False (28)

Q28. [True/False]

A population can be any group of interest.

a) True ✓ correct

b) False

Correct answer: True

Q29. [True/False]

A research hypothesis is a specific, testable claim or prediction about what you expect to observe given a set of circumstances.

a) True ✓ correct

b) False

Correct answer: True

Q30. [True/False]

A sample is a set of all individuals, items, or data of interest about which scientists will generalize.

a) True

b) False ✓ correct

Correct answer: False

Q31. [True/False]

A scientific observation can be direct or indirect.

a) True ✓ correct

b) False

Correct answer: True

Q32. [True/False]

A variable that is tested using the scientific method must be directly or indirectly observable and measurable.

a) True ✓ correct

b) False

Correct answer: True

Q33. [True/False]

An operational definition is a description of some observable event in terms of how it would be described in a dictionary.

a) True

b) False ✓ correct

Correct answer: False

Q34. [True/False]

Applied research is used to address questions that can lead to immediate solutions to practical problems.

a) True ✓ correct

b) False

Correct answer: True

Q35. [True/False]

Applied research is used to address theoretical questions regarding the mechanisms and processes of behavior.

a) True

b) False ✓ correct

Correct answer: False

Q36. [True/False]

Authority is a method of knowing in which statements are accepted as fact because they came from an expert or respected source.

a) True ✓ correct

b) False

Correct answer: True

Q37. [True/False]

Data are rarely presented in figures or graphs in a research report.

a) True

b) False ✓ correct

Correct answer: False

Q38. [True/False]

Data are typically nonnumeric measurements or observations.

a) True

b) False ✓ correct

Correct answer: False

Q39. [True/False]

Even if “bad” science is intentional or fraudulent, “bad” science is rarely called pseudoscience.

a) True ✓ correct

b) False

Correct answer: True

Q40. [True/False]

Generally speaking, pseudoscience is “nonscience posing as science.”

a) True ✓ correct

b) False

Correct answer: True

Q41. [True/False]

Guidelines for communicating results to others are identified by the American Psychological Association.

a) True ✓ correct

b) False

Correct answer: True

Q42. [True/False]

Many factors bias our perceptions of the behaviors and events we observe.

a) True ✓ correct

b) False

Correct answer: True

Q43. [True/False]

One of the four goals of science is to prove.

a) True

b) False ✓ correct

Correct answer: False

Q44. [True/False]

One way of generating more new ideas is to refine or expand an original hypothesis.

a) True ✓ correct

b) False

Correct answer: True

Q45. [True/False]

Qualitative research uses the scientific method to make nonnumeric observations.

a) True ✓ correct

b) False

Correct answer: True

Q46. [True/False]

Rationalism is a nonscientific method of knowing.

a) True ✓ correct

b) False

Correct answer: True

Q47. [True/False]

Researchers analyze data to determine whether the pattern of data observed in a study shows support for the research hypothesis.

a) True ✓ correct

b) False

Correct answer: True

Q48. [True/False]

Researchers should always make considerations for how to treat participants in a research study.

a) True ✓ correct

b) False

Correct answer: True

Q49. [True/False]

Science makes use of the scientific method to acquire knowledge.

a) True ✓ correct

b) False

Correct answer: True

Q50. [True/False]

The first step in the research process begins when data are analyzed statistically.

a) True

b) False ✓ correct

Correct answer: False

Q51. [True/False]

The goal of "control" is central to science.

a) True ✓ correct

b) False

Correct answer: True

Q52. [True/False]

The scientific process to test a research idea is typically completed within only a few days.

a) True

b) False ✓ correct

Correct answer: False

Q53. [True/False]

The word *science* comes from the Latin *scientia*, meaning to measure.

a) True

b) False ✓ correct

Correct answer: False

Q54. [True/False]

To describe behaviors and events means to define them in terms of how they are observed and measured.

a) True ✓ correct

b) False

Correct answer: True

Q55. [True/False]

To explain a behavior means to demonstrate what causes the behavior to occur.

a) True ✓ correct

b) False

Correct answer: True

Essay (4)

Q56. [Essay]

Explain what the scientific method is and state the six steps in the process.

Suggested answer: Sample response: The scientific method is a set of systematic techniques used to acquire, modify, and integrate knowledge concerning observable and measurable phenomena. It involves six steps: Identify a problem, develop a research plan, conduct the study, analyze and evaluate the data, communicate the results, and generate more new ideas.

Q57. [Essay]

Explain why the goal of "control" in science is powerful.

Suggested answer: Sample response: Control is a powerful goal of science because it means that researchers are able to establish some control over the behaviors that they study. For example, exposure-based therapies helps patients control or help overcome some of their PTSD symptoms.

Q58. [Essay]

State the four goals of science and explain them.

Suggested answer: Sample response: Describe is one of the goals of science and it helps us understand the behaviors and events we study by describing them or define them. A second goal of science is to explain. This is where we try to understand the causes of behavior or phenomena. Another goal is to predict. This is where we attempt to predict the future based on past knowledge. Finally, the last goal is control. Control means that we can make a behavior occur and not occur.

Q59. [Essay]

What is science?

Suggested answer: Sample response: Science is one way of knowing about the world. The word science comes from the Latin *scientia*, meaning knowledge. From a broad view, science is any systematic method of acquiring knowledge apart from ignorance. Science is the knowledge typically acquired through either observation, evaluation, interpretation, and/or theoretical explanation.

Medium

Multiple Choice (29)

Q60. [Multiple Choice]

A fan stays for the last five minutes of a football game because they have a hunch that their team is ready to make a comeback. Which method of knowing is illustrated in this example?

- a) authority
- b) tenacity
- c) empiricism
- d) intuition ✓ correct

Q61. [Multiple Choice]

A professor teaches a class of 42 students. If only 34 students show up to take the first exam, then how would we characterize this group of 34 who took the first exam?

- a) This group constitutes the population of all students in the class.
- b) This group is likely to be absent for the second exam.
- c) This group constitutes a sample of all students in the class. ✓ correct
- d) This group is not registered for the class.

Q62. [Multiple Choice]

A research hypothesis must be _____ when subjected to the scientific method.

- a) intuitive
- b) logical
- c) testable ✓ correct
- d) accurate

Q63. [Multiple Choice]

A scientist wants to investigate how people metabolize sugar. After identifying the problem they want to investigate, what is their next step if they were to follow the scientific method?

- a) develop a research plan ✓ correct
- b) begin studying how we metabolize sugar
- c) communicate to others their desire to study how people metabolize sugar
- d) send out survey requests to people

Q64. [Multiple Choice]

Companies' use of catchphrases or slogans to influence the public's belief about their product or the company exemplifies which way of acquiring knowledge?

- a) intuition
- b) science
- c) empiricism
- d) tenacity ✓ correct

Q65. [Multiple Choice]

Empiricism is a method of knowing based on _____.

- a) hunches or feelings that something is correct
- b) scientific rigor
- c) habit or superstition
- d) personal experiences or observations ✓ correct

Q66. [Multiple Choice]

If a scientist uses the grades of a class to understand whether a new teaching method is making a difference they are using what type of research?

- a) **quantitative ✓ correct**
- b) qualitative
- c) basic
- d) deductive

Q67. [Multiple Choice]

Rationalism can help in which part of the scientific process?

- a) manipulation of data to support a hypothesis
- b) reasoning about who to disqualify from a study
- c) brainstorming journals to submit a paper to
- d) **developing a research hypothesis ✓ correct**

Q68. [Multiple Choice]

Rationalism is a method of knowing that _____.

- a) **requires the use of reasoning and logic ✓ correct**
- b) applies scientific rigor
- c) follows an expert in a particular subject area
- d) is based on one's experiences or observations

Q69. [Multiple Choice]

Researchers rarely have access to entire populations. How do researchers resolve this limitation?

- a) They use their intuition to make and justify educated guesses about the population.
- b) They record data from an entire population of people to make inferences concerning characteristics in a sample.
- c) They collect data from as many persons in a population as possible to draw conclusions concerning only those individuals.
- d) **They collect data from a sample of people in the larger population in order to make inferences concerning characteristics in that larger population. ✓ correct**

Q70. [Multiple Choice]

Scientists ensure that the variables they investigate can be observed and measured by _____.

- a) providing the dictionary definition of an investigated variable
- b) using their trained intuition before investigating a variable
- c) **stating an operational definition of an investigated variable ✓ correct**
- d) conducting experiments to prove the variable is observable

Q71. [Multiple Choice]

The first step in the scientific process is to identify a problem, which entails which of the following?

- a) **performing a literature review ✓ correct**
- b) generating new ideas
- c) developing a research design
- d) conducting the study

Q72. [Multiple Choice]

The goal of "control" is specifically met when we can isolate the conditions necessary to make a _____.

- a) **behavior occur or not occur ✓ correct**
- b) random control experiment
- c) qualitative experiment
- d) detailed explanation

Q73. [Multiple Choice]

The scientific method can be used to study only phenomena that _____.

- a) can be observed and measured ✓ correct**
- b) can be studied in a laboratory
- c) are publicly accepted as real
- d) have been previously studied

Q74. [Multiple Choice]

Using the scientific method, we typically analyze and evaluate data in order to _____.

- a) avoid the need to conduct a study
- b) avoid using statistical techniques
- c) determine whether or not to measure data
- d) determine whether data support a research hypothesis ✓ correct**

Q75. [Multiple Choice]

What is a key feature of pseudoscience?

- a) All four methods of acquiring knowledge are used.
- b) There is intent to deceive. ✓ correct**
- c) It is scientific.
- d) It is based on intuition.

Q76. [Multiple Choice]

What is the first step of the scientific method?

- a) develop a research plan
- b) generate new ideas
- c) identify a problem ✓ correct**
- d) evaluate the data

Q77. [Multiple Choice]

What method of knowing reflects the expression "seeing is believing"?

- a) authority
- b) empiricism ✓ correct**
- c) rationalism
- d) tenacity

Q78. [Multiple Choice]

Which of the following is an example of a variable?

- a) value of pi
- b) human life span ✓ correct**
- c) number of years in one decade
- d) number of meters in 1 mile

Q79. [Multiple Choice]

Which of the following is one of the six steps to apply the scientific method?

- a) secure funding
- b) select an authority figure
- c) conduct the study ✓ correct**
- d) find participants

Q80. [Multiple Choice]

Which one of the four goals of science is specifically met when we can identify the conditions or causes for the behaviors or events we study?

- a) describe
- b) explain ✓ correct**
- c) predict
- d) control

Q81. [Multiple Choice]

Which one of the four goals of science is specifically met when we can identify when a behavior or event will occur again in the future?

- a) describe
- b) explain
- c) predict ✓ correct**
- d) control

Q82. [Multiple Choice]

Which one of the four goals of science is specifically met when we define the variables that we will observe and measure?

- a) describe ✓ correct**
- b) explain
- c) predict
- d) control

Q83. [Multiple Choice]

Why is Einstein's general theory of relativity an example of authority as a way of acquiring knowledge?

- a) He had a hunch or feeling about relativity.
- b) Scientific rigor was applied to find the answer to his theory.
- c) A few hundred scientists understand his theory and tell us it is accurate. ✓ correct**
- d) It has been tested repeatedly and the results support his theory.

Q84. [Multiple Choice]

_____ is a method of knowing accepted as fact because it was stated by an expert or respected source in a particular subject area.

- a) Intuition
- b) Authority ✓ correct**
- c) Empiricism
- d) Tenacity

Q85. [Multiple Choice]

_____ is a method of knowing based largely on an individual's hunch or feeling that something is correct.

- a) Intuition ✓ correct**
- b) Science
- c) Empiricism
- d) Tenacity

Q86. [Multiple Choice]

_____ research uses the scientific method to answer questions concerning practical problems with potential practical solutions.

- a) Nonempirical
- b) Basic
- c) **Applied ✓ correct**
- d) Operational

Q87. [Multiple Choice]

_____ research uses the scientific method to answer questions that address theoretical issues about fundamental processes and underlying mechanisms related to the behaviors and events being studied.

- a) Nonempirical
- b) **Basic ✓ correct**
- c) Applied
- d) Confirmational

Q88. [Multiple Choice]

_____ research uses the scientific method to make nonnumeric observations, from which conclusions are drawn without the use of statistical analysis.

- a) Quantitative
- b) **Qualitative ✓ correct**
- c) Basic
- d) Applied

True/False (10)

Q89. [True/False]

A study that analyzes the mean difference in time spent to complete a cognitive task between groups is an example of quantitative research.

- a) **True ✓ correct**
- b) False

Correct answer: True

Q90. [True/False]

All nonscience is pseudoscience.

- a) True
- b) **False ✓ correct**

Correct answer: False

Q91. [True/False]

Data in a research study can be reported as a poster presentation.

- a) **True ✓ correct**
- b) False

Correct answer: True

Q92. [True/False]

Defining athleticism as the time in seconds it takes to complete an obstacle course is an example of an operational definition.

- a) **True ✓ correct**
- b) False

Correct answer: True

Q93. [True/False]

Gamblers using their instincts to choose how to bet is an example of rationalism as a way of knowing.

a) True

b) False ✓ correct

Correct answer: False

Q94. [True/False]

Knowledge about nutrition from a Food and Drug Administration nutrition label is an example of tenacity as a way of knowing.

a) True

b) False ✓ correct

Correct answer: False

Q95. [True/False]

Predicting behavior and controlling behavior are both the same goal in science.

a) True

b) False ✓ correct

Correct answer: False

Q96. [True/False]

Quantitative and qualitative research are synonymous.

a) True

b) False ✓ correct

Correct answer: False

Q97. [True/False]

Quantitative and qualitative research can be effectively used to study the same behaviors.

a) True ✓ correct

b) False

Correct answer: True

Q98. [True/False]

The use of slogans and beliefs in superstitions are examples of empirical knowledge.

a) True

b) False ✓ correct

Correct answer: False

Essay (10)

Q99. [Essay]

Authority is viewed as a valid method of knowledge in the behavioral sciences. Explain why this can be problematic.

Suggested answer: Sample response: Authority, as a method of knowing, is accepted as fact in the behavioral sciences when it is based on a reliable, expert, or respected source in a particular subject area. However, the disadvantage of using authority as a sole method of knowing is that, in many cases, there is little effort to challenge this type of knowledge, often leaving authoritative knowledge unchecked.

Q100. [Essay]

Explain the difference between a population and a sample in research methods.

Suggested answer: Sample response: A population is a set of all individuals, items, or data of interest about which scientists will generalize. In contrast, a sample is a subset or portion of individuals selected from the larger group of interest. Observing samples instead of entire populations is more realistic and more economical.

Q101. [Essay]

Explain the second step in the scientific method.

Suggested answer: Sample response: Step 2 is to develop a research plan. This means the researcher should operationalize the variables that need to be tested, identify participants or subjects, and determine how to sample them. Finally, the researcher should decide on a research design for their experiment.

Q102. [Essay]

Identify the two key criteria to define pseudoscience that delineates it as a narrower concept.

Suggested answer: Sample response: Pseudoscience (1) is not scientific and (2) is part of a system or set of beliefs that try to deceptively create the impression that the knowledge gained represents the “final say” or most reliable knowledge on its subject matter.

Q103. [Essay]

Name three typical ways that researchers share the results of their research.

Suggested answer: Sample response: Researchers typically share the results of their research orally (in a talk), written (in a manuscript), or presented as a poster (at a conference or other professional setting).

Q104. [Essay]

What is the sixth step of the scientific method and why is it important?

Suggested answer: Sample response: Step 6 in the scientific method is to “generate new ideas.” This is important because it leads to the cyclic nature of the scientific method. By generating new ideas researchers are taken from step 6 back to step 1 to gain a better understanding of their subject.

Q105. [Essay]

Which type of research (basic or applied) is used to answer fundamental questions that address theoretical issues? What type of questions does the other type of research answer?

Suggested answer: Sample response: Basic research is used to answer fundamental questions that address theoretical issues. Applied research answer questions concerning practical problems with potential practical solutions.

Q106. [Essay]

Which type of research (quantitative or qualitative) is most often applied in science? Why?

Suggested answer: Sample response: Quantitative research is most often applied in science because the data are numeric, allowing for a more objective analysis of the observations made in a study.

Q107. [Essay]

Why is it difficult to identify true pseudoscience?

Suggested answer: Sample response: This is partly because there are other terms that sound similar like “unscientific” or “non-scientific” and because there is “bad science.” However, a key feature of pseudoscience that helps to distinguish it from these other things is intent to deceive and that it is part of a system or set of beliefs that try to deceptively create the impression that the knowledge gained represents the “final say” or most reliable knowledge on its subject matter.

Q108. [Essay]

Why is “control” only possible when the first three goals of science are met?

Suggested answer: Sample response: To establish control, we must be able to describe the behavior, explain the causes, and predict when it will occur and not occur. Hence, control is only possible once the first three goals of science are met. This also makes it a central goal for scientists.

Hard

Multiple Choice (19)

Q109. [Multiple Choice]

A person argues, "Hard work is all you need to achieve success. I know this because I worked hard my whole life, and I got ahead." Which nonscientific method of knowledge is this person using?

- a) empiricism ✓ correct**
- b) tenacity
- c) intuition
- d) authority

Q110. [Multiple Choice]

A researcher conducts a literature review. After completing this review, they state that texting during class can improve student learning. This statement is referred to as a(n) _____.

- a) intuition
- b) hypothesis ✓ correct**
- c) research plan
- d) literature review

Q111. [Multiple Choice]

A researcher conducts a study to test a prediction made by a theory of learning with the intention of addressing issues related to that theory. What type of research did this researcher conduct?

- a) basic ✓ correct**
- b) applied
- c) qualitative
- d) quantitative

Q112. [Multiple Choice]

A researcher identifies that a certain community has a high rate of obesity. They conduct a study to determine if people would increase their overall activity in that community if a park were built there. What type of research did this researcher conduct?

- a) basic
- b) applied ✓ correct**
- c) qualitative
- d) quantitative

Q113. [Multiple Choice]

A researcher measures attraction among dating college students. Which of these is an appropriate operational definition for attraction?

- a) appeal of a person's physical appearance
- b) duration of a conversation (in minutes) between two people ✓ correct**
- c) closeness or love felt for another person
- d) anecdotal responses from people

Q114. [Multiple Choice]

A researcher measures recall of an entrance exam taken two weeks prior. Which of these is an appropriate operational definition for recall?

- a) number of questions from the test correctly recognized ✓ correct**
- b) ability to bring a thought or experience back to mind or memory
- c) accuracy of the mind or memory
- d) number of questions answered correctly on a different test

Q115. [Multiple Choice]

A researcher measures studying as the number of minutes spent reading books and writing notes per week. What type of research is described in this example?

- a) quantitative ✓ correct**
- b) qualitative
- c) basic
- d) applied

Q116. [Multiple Choice]

A researcher measures studying by describing in words where a person generally likes to study and with whom they prefer to study with. What type of research is described in this example?

- a) quantitative
- b) qualitative ✓ correct**
- c) basic
- d) applied

Q117. [Multiple Choice]

A researcher measures the following four exam scores: 90, 95, 80, and 100. An individual grade is called a _____, whereas all grades are called _____.

- a) sample; population
- b) score; data ✓ correct**
- c) score; average
- d) population; sample

Q118. [Multiple Choice]

A researcher reads an article that reports a significant result. While reading this article, the researcher identifies an alternative hypothesis to explain the findings reported in that article. Which step of the scientific method is described in this example?

- a) analyze and evaluate the data
- b) conduct the study
- c) communicate the results
- d) identify a problem ✓ correct**

Q119. [Multiple Choice]

A scientist wants to study how happy students are during class. To do this they tally how many times each student smiles during class. The tally of smiles is an example of a(n) _____.

- a) indirect measure ✓ correct**
- b) direct measure
- c) sample of data
- d) research design

Q120. [Multiple Choice]

An audience member knows that a magic trick is an illusion because they saw how the trick was done. Which method of knowing is illustrated in this example?

- a) tenacity
- b) authority
- c) empiricism ✓ correct**
- d) superstition

Q121. [Multiple Choice]

Based on results reported in published articles, a researcher suggests that men will be less likely than women to read nutrition labels when making decisions about purchasing foods. What is this statement called?

- a) intuition
- b) hypothesis ✓ correct**
- c) research plan
- d) literature review

Q122. [Multiple Choice]

People believe in the messages preached by their local pastor because of which method of knowing?

- a) intuition
- b) authority ✓ correct**
- c) empiricism
- d) rationalism

Q123. [Multiple Choice]

Suppose that a researcher is interested in the 10 million people who paid to see a certain movie playing in theaters. In this example, the 10 million moviegoers would be a(n) _____.

- a) sample
- b) population ✓ correct**
- c) independent variable
- d) dependent variable

Q124. [Multiple Choice]

When asked when the store was closed last night, an employee says, "It must have been midnight because that's when the store always closes." Which method of knowing is illustrated in this example?

- a) rationalism
- b) tenacity ✓ correct**
- c) empiricism
- d) authority

Q125. [Multiple Choice]

Which of the following can we use the scientific method to investigate?

- a) how people learn ✓ correct**
- b) superstitions
- c) conspiracy theories
- d) any phenomenon

Q126. [Multiple Choice]

Which scenario is an example of pseudoscience?

- a) A psychologist performs a study and unknowingly analyzes the data incorrectly, then reports erroneous conclusions that are incorrect because of their mistake.
- b) A psychologist makes a series of impromptu observations, then constructs an explanation for the observations made as if their conclusions were scientific. ✓ correct**
- c) A psychologist reports that they have a personal belief and faith in God and believes that such faith is important.
- d) A psychologist performs a study and analyzes the data correctly, but draws conclusions that are different from what would be expected.

Q127. [Multiple Choice]

You failed your driver's test. Your mother suggests that you should have practiced driving more before taking the test. Which method of knowing is illustrated in this example?

- a) tenacity
- b) authority
- c) empiricism
- d) rationalism ✓ correct

True/False (2)

Q128. [True/False]

An example of intuition is a student who studies for a quiz because they have a hunch that the professor will give a pop quiz in the next class.

- a) True ✓ correct
- b) False

Correct answer: True

Q129. [True/False]

You believe that if you read your textbook, you will pass your research methods class, because your professor said so. This is an example of authority as a way of knowing.

- a) True ✓ correct
- b) False

Correct answer: True

Essay (6)

Q130. [Essay]

A researcher selects 10 students from their class of 18 students to participate in a class exercise. Identify the population and sample identified in this example.

Suggested answer: Sample response: The population is the entire class of 18 students; the sample is the 10 students selected to participate in the class exercise.

Q131. [Essay]

Ezra is designing a research project where he interviews survivors of sexual assault about their experiences. He plans to review their interviews and analyze broad themes of their experience. Explain what type of research Ezra is conducting.

Suggested answer: Sample response: Ezra is conducting qualitative research. This is because he is not using numeric data and instead is observing, interpreting, and making conclusions from the interviews he conducted.

Q132. [Essay]

Louis picks up his daughter from school. She has a funny look on her face and instinctively Louis knows something happened at school. What type of nonscientific method of acquiring knowledge is Louis using? Explain your answer.

Suggested answer: Sample response: Louis is using his intuition. He instinctively knows by looking at his daughter that something is not right. While there is no factual basis for his "knowing" his hunch may help him get to the bottom of something going on with his daughter at school.

Q133. [Essay]

Provide an example of applied research and explain your answer.

Suggested answer: Sample response: Implementing different instructional strategies, character development, caregiver involvement, and classroom management are examples of applied research. This is because the research is being used in real-time to help modify behavior.

Q134. [Essay]

Provide an example of someone being able to use the goal of science, *prediction*, to their advantage.

Suggested answer: Sample response: Andre is concerned that his dog, Bella, will have too much energy and may be destructive when he is out to dinner tonight. He thinks that if he takes Bella out for a long walk and trains her before he goes out that she is likely to be more tired and thus sleep more. Andre is predicting that doing things that tire his dog out will help her sleep more when he is out. This means he probably had prior experiences where after Bella went on a long walk or trained she became tired and sleepier.

Q135. [Essay]

Provide an operational definition of "learning."

Suggested answer: Sample response: An operational definition for "learning" could be to measure the time it takes to complete a rudimentary task.