

## Chapter 2 The Nature of Science and Research

### Chapter 2 - Multiple Choice

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1. Personal experience knowledge is \_\_\_\_\_.
- a. a basis of knowledge in which we rely on what someone in a position of authority says
  - b. a basis of knowledge in which we accept something as being true because of a long-running custom or belief
  - c. a basis of knowledge in which we rely on commonly accepted, ordinary reasoning
  - d. a basis of knowledge in which we rely on the media's construction of the truth, which often relies on claims made by politicians and government officials
  - e. a basis of knowledge in which we rely on our own lived experiences

Answer: E

Objective: To assess understanding of personal versus research based knowledge.

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Level: Basic

2. The concept that scientific knowledge must be shared, belongs to everyone, refers to which norm?
- a. communalism
  - b. disinterestedness
  - c. universalism
  - d. honesty

Answer: A

Objective: To assess understanding of research community norms.

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Level: Intermediate

3. Traditional knowledge is \_\_\_\_\_.
- a. a basis of knowledge in which we rely on what someone in a position of authority says
  - b. a basis of knowledge in which we accept something as being true because of a long-running custom or belief
  - c. a basis of knowledge in which we rely on commonly accepted, ordinary reasoning
  - d. a basis of knowledge in which we rely on the media's construction of the truth, which often relies on claims made by politicians and government officials
  - e. a basis of knowledge in which we rely on our own lived experiences

Answer: B

Objective: To assess understanding of knowledge generated in the form of tradition.

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Level: Basic

4. Authority knowledge is \_\_\_\_\_.

- a. a basis of knowledge in which we rely on what someone in a position of authority says
- b. a basis of knowledge in which we accept something as being true because of a long-running custom or belief
- c. a basis of knowledge in which we rely on commonly accepted, ordinary reasoning
- d. a basis of knowledge in which we rely on the media's construction of the truth, which often relies on claims made by politicians and government officials
- e. a basis of knowledge in which we rely on our own lived experiences

Answer: A

Objective: To assess understanding of knowledge generated through authority.

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Level: Basic

5. A basis of knowledge in which we rely on the media's construction of the truth, which often relies on claims made by politicians and government officials is called \_\_\_\_\_.
- a. authority knowledge
  - b. traditional knowledge
  - c. commonsense knowledge
  - d. media knowledge
  - e. personal experience knowledge

Answer: D

Objective: To assess understanding of knowledge generated through media outlets.

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Level: Basic

6. A basis of knowledge in which we rely on our own lived experiences is called \_\_\_\_\_.
- a. authority knowledge
  - b. traditional knowledge
  - c. commonsense knowledge
  - d. media knowledge
  - e. personal experience knowledge

Answer: E

Objective: To assess understanding of knowledge generated through personal experience.

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Level: Basic

7. Which of the following is NOT part of Kuhn's progression of knowledge?
- a. new paradigm
  - b. crisis
  - c. normal science
  - d. post paradigm

Answer: D

Objective: To assess understanding of Kuhn's progression of knowledge.

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Level: Intermediate

8. The halo effect is \_\_\_\_\_.
- statements that go far beyond what can be justified based on the data or empirical observations that one has
  - making observations in a way that simply reinforces preexisting thinking, rather than attempting to observe in a balanced and critical manner
  - making a judgment or reaching a decision and ending in an investigation, before one has the amount or depth of evidence required by scientific standards
  - allowing the prior reputation of persons, places, or things to color one's evaluations, rather than attempting to evaluate in a neutral, equal manner

Answer: D

Objective: To assess understanding of how the halo effect influences observations.

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Level: Basic

9. The premature closure effect is \_\_\_\_\_.
- statements that go far beyond what can be justified based on the data or empirical observations that one has
  - making observations in a way that simply reinforces preexisting thinking, rather than attempting to observe in a balanced and critical manner
  - making a judgment or reaching a decision and ending in an investigation, before one has the amount or depth of evidence required by scientific standards
  - allowing the prior reputation of persons, places, or things to color one's evaluations, rather than attempting to evaluate in a neutral, equal manner

Answer: C

Objective: To assess understanding of premature closure during observations.

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Level: Basic

10. The selective observation effect is \_\_\_\_\_.
- statements that go far beyond what can be justified based on the data or empirical observations that one has
  - making observations in a way that simply reinforces preexisting thinking, rather than attempting to observe in a balanced and critical manner
  - making a judgment or reaching a decision and ending in an investigation, before one has the amount or depth of evidence required by scientific standards
  - allowing the prior reputation of persons, places, or things to color one's evaluations, rather than attempting to evaluate in a neutral, equal manner

Answer: B

Objective: To assess understanding of selective observations within observation and research.

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Level: Basic

11. Overgeneralization occurs when we have \_\_\_\_\_.
- statements that go far beyond what can be justified based on the data or empirical observations that one has
  - making observations in a way that simply reinforces preexisting thinking, rather than attempting to observe in a balanced and critical manner
  - making a judgment or reaching a decision and ending in an investigation, before one has the amount or depth of evidence required by scientific standards
  - allowing the prior reputation of persons, places, or things to color one's evaluations, rather than attempting to evaluate in a neutral, equal manner

Answer: A

Objective: To assess understanding of the effect of overgeneralization within research.

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Level: Intermediate

12. Making a judgment or reaching a decision and ending in an investigation before one has the amount or depth of evidence required by scientific standards is called \_\_\_\_\_.
- halo effect
  - premature closure
  - selective observation
  - overgeneralization

Answer: B

Objective: To assess basic understanding of premature closure of collecting data.

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Level: Basic

13. Statements that go far beyond what can be justified based on the data or empirical observations that one has is called \_\_\_\_\_.
- halo effect
  - premature closure
  - selective observation
  - overgeneralization

Answer: D

Objective: To assess understanding of the definition of overgeneralization.

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Level: Basic

14. Making observations in a way that simply reinforces preexisting thinking, rather than attempting to observe in a balanced and critical manner is called \_\_\_\_\_.
- halo effect
  - premature closure
  - selective observation

d. overgeneralization

Answer: C

Objective: To assess understanding of selective observation.

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Level: Basic

15. Which of the following is *not* a social science?

- a. criminal justice/criminology
- b. sociology
- c. psychology
- d. anthropology
- e. zoology

Answer: E

Objective: To assess understanding of what constitutes a field within the social sciences.

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Level: Intermediate

16. Which of the following is *not* a natural science?

- a. criminal justice
- b. biology
- c. chemistry
- d. physics
- e. geology

Answer: A

Objective: To assess understanding of what constitutes a field within the natural sciences.

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Level: Intermediate

17. The Enlightenment believed in \_\_\_\_\_.

- a. logical reasoning
- b. emphasis on experiences in the material world
- c. a belief in human progress
- d. a questioning of traditional religious authority
- e. all of the above

Answer: E

Objective: To assess understanding of the basic principles of the enlightenment.

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Level: Difficult

18. The idea that scientific knowledge does not progress in a simple linear and cumulative fashion; rather, knowledge progresses in the context of a community, meaning that professional, personal, and cultural interests play important roles was known as \_\_\_\_\_.

- a. Kuhn's progression of knowledge
- b. the scientific method
- c. methodology
- d. scientific inquiry
- e. none of the above

Answer: A

Objective: To assess understanding of Kuhn's scientific progression of knowledge.

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Level: Intermediate

19. A theory is \_\_\_\_\_.

- a. the empirical evidence or information that one gathers carefully according to rules or procedures. Data can be quantitative (i.e., expressed as numbers) or qualitative (i.e., expressed as words, pictures, or objects)
- b. a system of interconnected ideas that condenses and organizes knowledge for purposes of understanding and/or explanation
- c. observations that people experience through the senses—touch, sight, hearing, smell, and taste
- d. the scientific norm that says research should be judged only on the basis of scientific merit

Answer: B

Objective: To assess understanding of what constitutes theory.

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Level: Difficult

20. The word data means \_\_\_\_\_.

- a. the empirical evidence or information that one gathers carefully according to rules or procedures. Data can be quantitative (i.e., expressed as numbers) or qualitative (i.e., expressed as words, pictures, or objects)
- b. a system of interconnected ideas that condenses and organizes knowledge for purposes of understanding and/or explanation
- c. observations that people experience through the senses—touch, sight, hearing, smell, and taste
- d. the scientific norm that says research should be judged only on the basis of scientific merit

Answer: A

Objective: To assess understanding of what data is within scientific research.

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Level: Intermediate

21. Empirical evidence is defined as \_\_\_\_\_.

- a. the empirical evidence or information that one gathers carefully according to rules or procedures. Data can be quantitative (i.e., expressed as numbers) or qualitative (i.e., expressed as words, pictures, or objects)
- b. a system of interconnected ideas that condenses and organizes knowledge for purposes of

understanding and/or explanation

- c. observations that people experience through the senses—touch, sight, hearing, smell, and taste
- d. the scientific norm that says research should be judged only on the basis of scientific merit

Answer: C

Objective: To assess understanding of the basic components of empirical evidence.

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Level: Intermediate

22. Universalism is \_\_\_\_\_.

- a. the empirical evidence or information that one gathers carefully according to rules or procedures. Data can be quantitative (i.e., expressed as numbers) or qualitative (i.e., expressed as words, pictures, or objects)
- b. a system of interconnected ideas that condenses and organizes knowledge for purposes of understanding and/or explanation
- c. observations that people experience through the senses—touch, sight, hearing, smell, and taste
- d. the scientific norm that says research should be judged only on the basis of scientific merit

Answer: D

Objective: To assess understanding of universalism for the scientific community.

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Level: Intermediate

23. Disinterestedness is \_\_\_\_\_.

- a. the scientific norm that mandates researchers should strive to be impartial and open to unexpected finding and new ideas
- b. the scientific norm says that producing knowledge is a public act and the finding should be available for all to use. In order for it to be accepted into the community, it must be rigorously reviewed
- c. the scientific norm that demands utmost honesty in all aspects of the research process; dishonesty, fraud, or cheating is a major taboo
- d. the scientific norm that says research should be judged only on the basis of scientific merit
- e. a process of judging the merits of a research report in which the peer researchers do not know the identity of who conducted a study and the researcher does not know the identity of the evaluators in advance

Answer: A

Objective: To assess understanding of the worth of disinterestedness within research.

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Level: Intermediate

24. Communalism means \_\_\_\_\_.

- a. the scientific norm that mandates researchers should strive to be impartial and open to unexpected finding and new ideas

- b. the scientific norm says that producing knowledge is a public act and the finding should be available for all to use. In order for it to be accepted into the community, it must be rigorously reviewed
- c. the scientific norm that demands utmost honesty in all aspects of the research process; dishonesty, fraud, or cheating is a major taboo
- d. the scientific norm that says research should be judged only on the basis of scientific merit
- e. a process of judging the merits of a research report in which the peer researchers do not know the identity of who conducted a study and the researcher does not know the identity of the evaluators in advance

Answer: B

Objective: To assess understanding of communalism shared by the scientific community.

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Level: Intermediate

25. Research honesty means \_\_\_\_\_.

- a. the scientific norm that mandates researchers should strive to be impartial and open to unexpected finding and new ideas
- b. the scientific norm says that producing knowledge is a public act and the finding should be available for all to use. In order for it to be accepted into the community, it must be rigorously reviewed
- c. the scientific norm that demands utmost honesty in all aspects of the research process; dishonesty, fraud, or cheating is a major taboo
- d. the scientific norm that says research should be judged only on the basis of scientific merit
- e. a process of judging the merits of a research report in which the peer researchers do not know the identity of who conducted a study and the researcher does not know the identity of the evaluators in advance

Answer: C

Objective: To assess understanding of what research honesty means within conducting research.

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Level: Basic

26. A process of judging the merits of a research report in which the peer researchers do not know the identity of who conducted a study and the researcher does not know the identity of the evaluators in advance is called \_\_\_\_\_.

- a. peer pressure
- b. peer objectivity
- c. objectivity
- d. research honesty
- e. blind review

Answer: E

Objective: To assess understanding of how research reports are critiqued via blind review.

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Level: Basic

27. When a study examines information on many cases at one point in time it is referred to as \_\_\_\_\_.

- a. quantitative research steps
- b. qualitative research steps
- c. longitudinal research
- d. cross-sectional research

Answer: D

Objective: To assess understanding of cross sectional research.

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Level: Basic

28. A cohort study examines which of the following?

- a. the same people over time with check up points
- b. different people at multiple times
- c. a group of people at once
- d. a different group of people with similar characteristics over time
- e. a group of people over time

Answer: D

Objective: To assess understanding of what a cohort study consists of.

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Level: Basic

29. In Rebellon's and Gundy's study they found a relationship between \_\_\_\_\_.

- a. drugs usage and crime
- b. parental abuse and crime
- c. race and crime
- d. sex and crime
- e. age and crime

Answer: B

Objective: To assess understanding of an example of a panel study.

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Level: Intermediate

30. Lonnie Athens used what type of research in his study?

- a. quantitative research
- b. qualitative research
- c. experimentation
- d. large questionnaires
- e. record studies

Answer: B

Objective: To assess ability to identify a qualitative research example.

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Level: Intermediate

31. \_\_\_\_\_ and \_\_\_\_\_ are stages in Dr. Athens Theory of Violentization.

- a. Drug use and Alcohol Abuse
- b. Drug use and Violence Performances
- c. Alcohol abuse and Brutalization
- d. Belligerency and Virulency
- e. None of the Above

Answer: B

Objective: To assess understanding and findings of an example of a panel study.

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Level: Difficult

32. A cohort study is \_\_\_\_\_.

- a. any study that examines information on many cases at one point in time
- b. any research that examines information from many units or cases across more than one point in time
- c. longitudinal research in which information can be about different cases or people in each of several time periods
- d. longitudinal research in which information is about the identical cases or people in each of several time periods
- e. longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods

Answer: E

Objective: To assess understanding of the basic components of a cohort study.

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Level: Basic

33. A cross-sectional study is \_\_\_\_\_.

- a. any study that examines information on many cases at one point in time
- b. any research that examines information from many units or cases across more than one point in time
- c. longitudinal research in which information can be about different cases or people in each of several time periods
- d. longitudinal research in which information is about the identical cases or people in each of several time periods
- e. longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods

Answer: A

Objective: To assess understanding of the basic definition of a cross sectional study.

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Level: Basic

34. A longitudinal study is \_\_\_\_\_.

- a. any study that examines information on many cases at one point in time
- b. any research that examines information from many units or cases across more than one point in time
- c. longitudinal research in which information can be about different cases or people in each of several time periods
- d. longitudinal research in which information is about the identical cases or people in each of several time periods
- e. longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods

Answer: B

Objective: To assess understanding of the basic definition of longitudinal research.

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Level: Basic

35. A time-series study is \_\_\_\_\_.

- a. any study that examines information on many cases at one point in time
- b. any research that examines information from many units or cases across more than one point in time
- c. longitudinal research in which information can be about different cases or people in each of several time periods
- d. longitudinal research in which information is about the identical cases or people in each of several time periods
- e. longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods

Answer: C

Objective: To assess understanding of the basic definition of a time-series study.

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Level: Basic

36. A panel study is \_\_\_\_\_.

- a. any study that examines information on many cases at one point in time
- b. any research that examines information from many units or cases across more than one point in time
- c. longitudinal research in which information can be about different cases or people in each of several time periods
- d. longitudinal research in which information is about the identical cases or people in each of several time periods
- e. longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods

Answer: D

Objective: To assess understanding of the basic definition of a panel study.  
Page: 46  
Level: Basic

## Chapter 2 - Fill-in-the-Blank

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1. What people now call science grew from a major shift in thinking that began with the \_\_\_\_\_ or the Enlightenment.

Answer: age of reason  
Objective: To assess understanding of the enlightenment period.  
Page: 33  
Level: Difficult

2. The process of conducting a quantitative study begins with a researcher selecting a \_\_\_\_\_.

Answer: topic  
Objective: To assess understanding of the quantitative research process.  
Page: 39  
Level: Intermediate

3. The book, *The Creation of Dangerous Violent Criminals* was authored by \_\_\_\_\_.

Answer: Lonnie Athens  
Objective: To assess retention of an example of a research study.  
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Level: Intermediate

4. The book, *Why They Kill: the discoveries of a Maverick Criminologist*, was authored by Richard Rhodes about the research of \_\_\_\_\_.

Answer: Lonnie Athens  
Objective: To assess retention of an example of a research study.  
Page: 41  
Level: Intermediate

5. Foucault characterized his work as a “history of the \_\_\_\_\_?”

Answer: present  
Objective: To assess retention of an example highlighting research and time.  
Page: 45  
Level: Difficult

6. Any study that examines information on many cases at one point in time is called \_\_\_\_\_.

Answer: cross sectional research

Objective: To assess understanding of the basic definition of cross sectional research.

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Level: Basic

7. Any research that examines information from many units or cases across more than one point in time is called \_\_\_\_\_.

Answer: longitudinal research

Objective: To assess understanding of longitudinal research

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Level: Basic

8. Longitudinal research in which information can be about different cases or people in each of several time periods is called \_\_\_\_\_.

Answer: time-series research

Objective: To assess understanding of time-series research.

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Level: Basic

9. Longitudinal research in which information is about the identical cases or people in each of several time periods.

Answer: panel study

Objective: To assess understanding of the basic definition of panel studies.

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Level: Intermediate

10. Longitudinal research in which information about a category of cases or people that shared a common experience at one time period is traced across subsequent time periods is called \_\_\_\_\_.

Answer: cohort study

Objective: To assess understanding of what constitutes a cohort study.

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Level: Intermediate

11. A famous work, *Crime and Punish*, by \_\_\_\_\_ examined the history of discipline and punishment beginning in the eighteenth century and was characterized as a “history of the present.”

Answer: Michael Foucault

Objective: To assess retention of Foucault’s work highlighting time within scientific research.

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Level: Difficult

## Chapter 2 - True/False

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1. According to Bernard Harcourt “There is empirical evidence that disorder causes crime.”

Answer: F

Objective: To assess retention of how authority can influence the generation of knowledge.

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Level: Difficult

2. The crime fighting show *CSI* is a fairly accurate portrayal of policing in most cities.

Answer: F

Objective: To assess understanding of the importance of the credible generation of knowledge.

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Level: Basic

3. The most famous study on the effects of random patrolling on crime was done in New York City.

Answer: F

Objective: To assess understanding of the influence of traditional in the generation of knowledge

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Level: Difficult

4. Most, but not all, scholars consider Lombroso’s *Criminal Man* to be the defining work in the origin of scientific criminology.

Answer: T

Objective: To assess understanding of the influence of science within criminology

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Level: Difficult

5. The “age of reason” and the “Enlightenment” are two differ periods of time on two different continents.

Answer: F

Objective: To assess understanding of the enlightenment period.

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Level: Intermediate

6. The idea that scientific knowledge does not progress in a simple linear and cumulative fashion is associated with Thomas Kuhn.

Answer: T

Objective: To assess understanding of Kuhn's progression of knowledge  
Page: 34  
Level: Intermediate

7. The process of conducting a quantitative study begins with the researcher designing the study.

Answer: F

Objective: To assess understanding of the steps of conducting qualitative research  
Page: 39  
Level: Intermediate

8. The last step in the generic research process is informing others or publishing your findings.

Answer: T

Objective: To assess understanding of the overall research process.  
Page: 40  
Level: Intermediate

9. Qualitative research is generally geared toward exploratory, descriptive, and theoretical research objectives.

Answer: T

Objective: To assess understanding of the primary purposes of qualitative research.  
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Level: Intermediate

## **Chapter 2 - Essay**

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1. What are the five alternatives to research based science?

Answer: Student should identify and explain:

- A) Authority Knowledge - a basis of knowledge in which we rely on what someone in a position of authority thinks.
- B) Tradition Knowledge - a basis of knowledge in which we accept something as being true because of a long-running custom or belief.
- C) Common Sense Knowledge - a basis of knowledge in which we rely on commonly accepted, ordinary reasoning.
- D) Media Knowledge - a basis of knowledge in which we rely on the media's construction of the truth, which often relies on claims made by politicians and government officials.
- E) Personal Experience Knowledge - a basis of knowledge in which we rely on our own lived experiences.

Objective: To assess understanding between research-based knowledge and its alternative.  
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Level: 5

2. What are the four norms of the scientific community? Explain each.

Answer: Student should identify and explain:

- A) Universalism
- B) Disinterestedness
- C) Communalism
- D) Research Honesty

Objective: To assess understanding of the quantitative research process.

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Level: Difficult

3. What are the four errors of personal experience that reinforce each other in a person's life?

Answer: Student should identify and explain:

- A) Overgeneralization
- B) Selective observation
- C) Premature closure
- D) Halo effect

Objective: To assess understanding of the errors in personal experience of knowledge generation.

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Level: 5