

Name: _____ Date: _____

1. List in order and explain each of the five basic steps of the scientific method.
2. Define *nature* and *nurture* and give an example of each. Also, describe the nature–nurture debate.
3. Describe the perspective that most modern developmentalists take on the nature–nurture debate. Provide an example of a research topic that illustrates this perspective.
4. Define a critical period and a sensitive period. Explain the difference between the two periods, and give an example of each.
5. Explain Urie Bronfenbrenner's ecological-systems theory and describe his five systems.
6. Define *cohort*, explain its effects, and give an example of one.
7. Describe culture and explain why researchers who are interested in human development study different cultures.
8. Define and discuss the term *plasticity* as it relates to human development. What factors influence plasticity in development? Offer at least one example of plasticity that has operated or is operating in your own life.
9. Name and define the three main research designs for studying age-related changes. Explain the problems associated with each.
10. Imagine that you are interested in the relationship between age and reading ability for children at 8 and 12 years old. Briefly define a cross-sectional research design and summarize how you could test this relationship using that design.
11. Define *correlation* and give an example. Can one determine cause and effect from correlations? Explain why or why not.

12. What practices must be built into a research study to protect participants?
13. What are ethics and why are ethical standards so important to scientific research?
14. The science of human development seeks to understand _____ people—all kinds of people, everywhere, of every age—change over time.
15. In order to minimize subjective opinions and personal biases when conducting research, it is important to employ the _____ method.
16. A hypothesis is a specific prediction that can be _____ with empirical evidence.
17. Empirical evidence refers to _____.
18. In scientific research, repeating a study with different participants is known as _____.
19. The term that refers to the traits inherited at conception is _____.
20. Tim told his friend that he is tall because he inherited “tall” genes from his dad. Tim was claiming that _____ was responsible for his height.
21. _____ refers to environmental influences on traits.
22. The combination of all environmental influences that affect a developing person is called _____.
23. The science of the interaction between nature and nurture is known as _____.
24. A _____ period of development is a time in which something *must* or *must not* occur to ensure normal development.

25. A _____ period of development is a time in which a particular development occurs easily.
26. Thalidomide only caused birth defects if a pregnant woman ingested the drug during the _____ period of prenatal development.
27. Tanner's friends do well in school, but Tanner has never really done well in school. They decide to meet once a week to study, and soon Tanner is doing better in school. Within the ecological-systems perspective, the influence of Tanner's friends on Tanner's school performance comes from the _____.
28. A(n) _____ is a group of people born at about the same time that experience the same historical events and cultural shifts.
29. A person's income and level of education is part of his or her _____ status.
30. The system of shared ideas, beliefs, and patterns of behavior is known as _____.
31. Two people from different cultures may value the need for achievement or success differently because of the _____ of each culture.
32. The human tendency to assume that people unlike us are inferior is called the _____ error.
33. People of a specific _____ group share certain attributes such as national origin, religion, and language.
34. Our text suggests that the word _____ is a social construction that should be eliminated from our scientific vocabulary.
35. Development is divided into three domains: biosocial, _____, and psychosocial.
36. Human traits can be molded, and yet people maintain a certain durability of identity. This indicates that development is _____.

37. The approach called _____ refers to the idea that human development is an ongoing and ever-changing interaction.
38. _____ observation requires researchers to record behaviors systematically and objectively.
39. Dr. Clady counts how many times an infant kicks her legs when lying on her back in her crib. Dr. Clady is using the method of _____.
40. Researchers who want to establish that one variable causes another must use a research design called a(n) _____.
41. Differences between the experimental group and the _____ group are examined in experiments.
42. A(n) _____ is a quick way to collect data from a large number of people.
43. Dr. Paul is curious whether a tendency toward aggression changes with age. He gathers a group of 5-year-old children and administers a test to assess their aggressive tendencies. He then retests the children when they are 10 years old and again when they are 15 years old. This type of research is known as _____.
44. Cross-sequential research can be thought of as a mix between a cross-sectional design and a(n) _____ design.
45. As children get older, they tend to sleep fewer hours. This relationship is an example of a(n) _____ correlation.
46. _____ research data can be categorized, ranked, or numbered.
47. Research that asks open-ended questions is known as _____.

48. The Institutional Review Board (IRB) determines whether a research project follows certain _____ guidelines.
49. What does the science of human development seek to understand?
- A) the meaning of life
 - B) theories that have not been subjected to scientific testing
 - C) the works of Freud, Piaget, and Erikson
 - D) how and why people change over time
50. Dr. Furth is curious about whether a specific brain chemical can be suppressed if a patient is given a large dose of vitamin E. Dr. Furth's question demonstrates the _____ step in the scientific method.
- A) first
 - B) second
 - C) third
 - D) fourth
51. Dr. Hernandez predicts that a certain drug will help patients with schizophrenia. Her prediction is called _____.
- A) a conclusion
 - B) empirical evidence
 - C) a hypothesis
 - D) a result
52. A researcher designed and conducted an experiment to determine whether 350 mg of a certain drug would help patients with bipolar disorder. By designing and conducting this experiment, the researcher _____.
- A) drew conclusions
 - B) demonstrated proof
 - C) tested the hypothesis
 - D) confirmed the results
53. Dr. Henderson is curious to know more about how children develop over time. To avoid relying on opinion or personal bias, Dr. Henderson should _____.
- A) use the scientific method to collect data and establish facts
 - B) have the children undergo psychoanalysis
 - C) talk with many children's parents
 - D) read Dr. Spock's book, *Baby and Child Care*

54. The first step in the scientific method involves _____.
A) posing a question
B) conducting research
C) supporting or refuting a hypothesis
D) developing a hypothesis
55. The second step in the scientific method involves _____.
A) posing a question
B) conducting research
C) developing a hypothesis
D) sharing the results
56. The third step in the scientific method involves _____.
A) posing a question
B) conducting research
C) sharing the results
D) developing a hypothesis
57. The fourth step in the scientific method involves _____.
A) posing a question
B) conducting research
C) developing a hypothesis
D) supporting or refuting a hypothesis
58. Empirical evidence is based on _____.
A) theories and speculation
B) observation, experience, or experiment
C) inferences rooted in personal biases
D) opinions generated by several groups of people
59. After posing a question, a researcher using the scientific method _____.
A) draws conclusions
B) runs an experiment
C) selects a group of participants
D) develops a hypothesis

60. The final step in the five steps of the scientific method is to _____.
A) test a hypothesis
B) pose a question
C) conduct research
D) report the results
61. What is a researcher's first step when designing a research study on children's language acquisition?
A) recruit children and their parents as participants in the study
B) develop a hypothesis on the way language is acquired in children
C) pose a research question about language acquisition
D) draw conclusions on the way children acquire language
62. A hypothesis is a(n) _____.
A) experiment
B) prediction that can be tested
C) conclusion drawn from research
D) replication of a scientific study
63. What is replication of a study?
A) the repetition of a study using different participants
B) the repetition of a study using the same participants
C) designing a new study based on information from a previous study
D) designing a new study using new ideas and information
64. Dr. Kong conducts a study in which he finds that smoking is correlated with an increased risk of high blood pressure. He publishes his results, and Dr. Mecó reads the report about the study. Then Dr. Mecó does the same study using different participants in another city. Dr. Mecó's work is an example of _____.
A) scientific controversy
B) replication
C) ethics
D) observation

65. Dr. Seldor does a study in which she finds that alcohol consumption is correlated with an increased risk of diabetes. She publishes her results, and Dr. Al-Jaher reads the report about the study. Then Dr. Al-Jaher does the same study using different participants in another nation. Dr. Al-Jaher's work is an example of _____.
A) scientific controversy
B) replication
C) empirical evidence
D) a hypothesis
66. Parents who spend a great deal of time and money trying to find the best school for their children believe in the importance of _____ as it relates to development.
A) nurture
B) replication
C) nature
D) classical conditioning
67. The term for all of the environmental influences that affect development after conception is _____.
A) proteins
B) nurture
C) nature
D) amino acids
68. In the science of human development, "nature" refers to _____.
A) the genes that people inherit
B) environmental influences
C) patterns of development
D) developmental differences
69. In the science of human development, "nurture" refers to _____.
A) universal traits
B) biological traits
C) environmental influences
D) unique traits

70. Most developmental psychologists believe that development is the result of _____.
A) nature and nurture acting separately
B) primarily nature
C) nature and nurture acting together
D) primarily nurture
71. Dr. Towne believes that heredity is primarily responsible for personality traits. Dr. West believes that environmental influences are primarily responsible for personality traits. They are on different sides of the _____ debate.
A) nature versus nurture
B) intelligent design versus evolution
C) genes versus development
D) traits versus conditioning
72. Susie, who is 5 years old, is the tallest person in her kindergarten class. When her teacher asked her how she got so tall, Susie said proudly, "My mom and dad are tall, and I eat good food!" Susie's statement reflects that she understands that human development comes from _____.
A) heredity
B) the environment
C) learning
D) environment and heredity combined
73. Which is an example of the influence of nature?
A) having a mother who smoked during pregnancy
B) having the gene for epilepsy
C) eating a healthy diet
D) living in a loud neighborhood
74. The impact of any good or bad experience depends on _____.
A) nature
B) nurture
C) nature and nurture
D) neither nature nor nurture

75. Even though Chris has genetic markers that put him at higher risk for a particular disease, he never shows any signs of the disorder. What factor explains this?
- A) genes
 - B) environment
 - C) epigenetics
 - D) rearing
76. Brooke and her half-brother Colton were raised in an impoverished home, where they were often left home alone while both parents worked more than one minimum-wage job to support the family. Despite this upbringing, Brooke has developed into a happy, healthy adult, while Colton has developed into a depressed alcoholic. Even though they shared an upbringing, their different outcomes indicate that they had ____.
- A) epigenetics
 - B) differential susceptibility
 - C) different nurture
 - D) different environments
77. Even though Aaron eats well and exercises regularly, by age 70 he developed type 2 diabetes. Clement, on the other hand, eats fast food regularly and rarely exercises. At 70 years of age, his blood sugar levels remain in the normal range. What might account for the differences in their outcomes?
- A) differential susceptibility
 - B) cultural differences
 - C) sex differences
 - D) cohort differences
78. Differential susceptibility means that certain people have genes that ____.
- A) make them more vulnerable to particular experiences
 - B) contribute similarly to a specific developmental outcome
 - C) do not impact development within the context of particular experiences
 - D) have an unknown impact on individuals
79. The tragic case of Brenda/David revealed that some sex differences are mainly a result of ____.
- A) upbringing
 - B) culture
 - C) nurture
 - D) epigenetics

80. By the age of 1, most babies raised in English-speaking households have lost the ability to distinguish the sounds of the two Ts in the Hindi language. This loss of ability that accompanies increasing ability illustrates the concept that development is _____.
A) multidirectional
B) multicontextual
C) multicultural
D) multidisciplinary
81. The human fetus develops fingers and toes between 28 and 54 days after conception but cannot develop fingers and toes before or after that time. This is an example of _____.
A) a sensitive period
B) a critical period
C) discontinuity
D) continuity
82. Which example clearly illustrates a critical period?
A) a child learning to walk
B) a child learning a second language before age 4
C) a fetus developing fingers and toes between 28 and 54 days in utero
D) a child learning to ride a bike between 5 and 6 years of age
83. Which example clearly illustrates a sensitive period?
A) a child being born blind
B) an egg being fertilized
C) a fetus developing fingers and toes
D) a child learning to speak a second language
84. Between 1957 and 1961, many pregnant women took thalidomide to alleviate morning sickness; this drug disrupted a(n) _____ period of prenatal development.
A) sensitive
B) critical
C) early
D) late

85. During her pregnancy, a woman in Honduras worked in a field that had been treated with pesticides. When her son was born, she was horrified to find that he had no limbs. Her pesticide exposure must have occurred during a(n) _____ period of prenatal development.
- A) critical
 - B) early
 - C) late
 - D) sensitive
86. Bobby was not taught to read until he was an adolescent. When he did learn to read, it was much harder for him to learn, and it took him longer to learn to read than it would have during his early- to middle-childhood years. Bobby had a hard time learning to read because he did not learn to do so during the _____ period.
- A) critical
 - B) early
 - C) late
 - D) sensitive
87. Which developmentalist was the first to emphasize the role of context on development?
- A) Vygotsky
 - B) Piaget
 - C) Bronfenbrenner
 - D) Skinner
88. Which term is associated with Urie Bronfenbrenner's ecological-systems approach?
- A) mastosystems
 - B) microsystems
 - C) extrasystems
 - D) intrasystems
89. In Bronfenbrenner's ecological-systems approach, the _____ refers to the interactions among systems.
- A) macrosystem
 - B) exosystem
 - C) microsystem
 - D) mesosystem

90. What term did Bronfenbrenner use to describe the impact of the specific time in history on a person's development?
- A) macrosystem
 - B) exosystem
 - C) microsystem
 - D) chronosystem
91. Dorothy was born during the Great Depression. Within the context of the ecological-systems approach, knowing this fact allows one to know about her _____.
- A) chronosystem
 - B) exosystem
 - C) microsystem
 - D) macrosystem
92. Dwayne was born to a single mother living in Chicago. Within the context of the ecological-systems approach, knowing this fact allows one to know something about his _____.
- A) chronosystem
 - B) exosystem
 - C) microsystem
 - D) macrosystem
93. Dr. Kilbey is studying the impact of exosystems on human development. Which of these would she be most interested in examining?
- A) cultural values and economic processes
 - B) family and peer groups
 - C) medical centers and religious institutions
 - D) the development of the skeletal structure in children
94. The ecological-systems approach was proposed by _____.
- A) Maslow
 - B) Baltes and Baltes
 - C) Bronfenbrenner
 - D) Skinner

95. In Bronfenbrenner's ecological-systems model, a hospital in the community is an example of which system?
- A) the ecosystem
 - B) the microsystem
 - C) the health-care system
 - D) the exosystem
96. In Bronfenbrenner's ecological-systems model, family and peers are part of a person's ____.
- A) microsystem
 - B) exosystem
 - C) macrosystem
 - D) social system
97. A person's macrosystem includes ____.
- A) political processes
 - B) the peer group
 - C) school and church
 - D) historical setting
98. Within Bronfenbrenner's ecological-systems approach, he called the historical context that affects other systems the ____.
- A) ecosystem
 - B) chronosystem
 - C) mesosystem
 - D) macrosystem
99. Bettie belongs to one cohort; Zahara belongs to another. The only required difference between these two women is ____.
- A) membership in community groups
 - B) socioeconomic status
 - C) age
 - D) ethnic or racial group
100. High school classmates are part of the same ____.
- A) social construction
 - B) network
 - C) socioeconomic status
 - D) cohort

101. The people in which of the following groups can be defined as members of the same cohort?
- A) women who are pilots
 - B) men with learning disabilities
 - C) citizens of the United States
 - D) current middle school students
102. Jamal, Wei, Liam, and Vladimir were all born and raised in England. Which statement is true?
- A) They could share the same ethnicity.
 - B) They come from different ethnic groups.
 - C) They could share the same culture.
 - D) They come from different cultures.
103. Jack observed his coworker Jane crying when she was called into the boss's office. Jack thinks that crying at work is a sign of weakness that makes women unfit for employment in his industry. Jack is displaying ____.
- A) critical thinking
 - B) a social construction
 - C) work culture orientation
 - D) the difference-equals-deficit error
104. People whose ancestors were born in the same region and who usually share the same language and religion are called a(n) ____.
- A) race
 - B) ethnic group
 - C) socioeconomic group
 - D) exosystem
105. According to the text, race is ____.
- A) part of the microsystem
 - B) a social construction
 - C) defined by heritage
 - D) multidirectional

106. Some social scientists believe that focusing on _____ exaggerates minor differences between people.
- A) skin color
 - B) diversity
 - C) genetic analysis
 - D) culture
107. Social scientists are convinced, based on genetic analysis, that race is a(n) _____.
- A) biological difference
 - B) culture
 - C) social construction
 - D) ethnicity
108. The _____ domain includes development of emotions, temperament, and social skills.
- A) biosocial
 - B) cognitive
 - C) psychosocial
 - D) biopsychosocial
109. The _____ domain includes all of the mental processes that a person uses to obtain knowledge or to think about the environment.
- A) biosocial
 - B) cognitive
 - C) psychosocial
 - D) biopsychosocial
110. The _____ domain includes all of the growth and change that occur in a person's body and the genetic, nutritional, and health factors that affect that growth and change.
- A) biosocial
 - B) cognitive
 - C) psychosocial
 - D) biopsychosocial

111. Genes alone do not determine development. Human traits can be molded, which has led to the understanding that many human characteristics are _____.
A) plastic
B) epigenetic
C) static
D) diverse
112. Plasticity refers to the _____.
A) fact that many academic fields contribute data to the science of development
B) universals and specifics of human development in many cultural settings
C) vast array of contexts in which development occurs
D) potential for human traits to be molded during development but also to remain durable
113. What is plasticity?
A) a time in development when it is optimum to develop certain traits or abilities
B) the amount of flexibility a human possesses at birth
C) the idea that human traits may change or stay the same over time
D) the idea that human traits are mostly inborn
114. Which of these is an example of plasticity?
A) a man who consistently drives his car too fast
B) a teenager who spends a summer in Chile and learns to speak Spanish
C) a woman who leaves her job to stay home with her newborn
D) a person who is in a coma
115. The idea that human development is an ongoing, ever-changing interaction between the body, mind, and every aspect of the environment is known as the _____.
A) dynamic-systems approach
B) theory of evolution
C) concept of universality
D) domino effect
116. If a researcher watches 1-week-old babies and records how many times they open and close their eyes while lying in their cribs, he is most likely using _____.
A) the case-study method
B) a controlled experiment
C) cross-sectional research
D) scientific observation

117. Scientific observation allows for the _____.
A) study of individuals' behaviors in a systematic and objective manner
B) determination of cause-and-effect relationships
C) precise control of the environment so that a cause-and-effect relationship can be assessed
D) systematic manipulation of variables
118. Which statement about scientific observation is true?
A) It requires a large number of participants.
B) It requires specialized equipment such as video recorders.
C) It involves recording behavior systematically and objectively.
D) It must take place in a lab setting.
119. Which of the following is an example of naturalistic observation?
A) A 1-year-old is brought to a laboratory and observed while playing.
B) A researcher goes to a 1-year-old's home and observes the baby at play.
C) A researcher divides a group of 1-year-olds into an experimental group and a control group.
D) The parents of 1-year-olds are interviewed about their baby's play patterns.
120. Experiments allow researchers to _____.
A) study the natural environment
B) study the complexity of an individual
C) use the scientific method in a cost-effective way
D) determine a cause-and-effect relationship
121. When a researcher wants to determine the cause of a particular behavior, the appropriate research method to use is a(n) _____.
A) case study
B) scientific observation
C) experiment
D) survey

122. What is a dependent variable?
- A) It is the measured variable that may change depending on manipulation of an independent variable.
 - B) It is any unmeasured variable that is uncontrolled within the context of the experiment.
 - C) It is the variable that is intentionally manipulated by the researcher.
 - D) It is an external variable that cannot be controlled by the researcher.
123. What is an independent variable?
- A) It is the measured variable that may change depending on manipulation of an independent variable.
 - B) It is any unmeasured variable that is uncontrolled within the context of the experiment.
 - C) It is the variable that is intentionally manipulated by the researcher.
 - D) It is an external variable that cannot be controlled by the researcher.
124. What is the only research method that can establish a cause-and-effect relationship?
- A) a case study
 - B) a survey
 - C) an experiment
 - D) scientific observation
125. An example of a dependent variable in an experiment might be ____.
- A) gender
 - B) blood type
 - C) eye color
 - D) level of depression
126. In an experiment, the group of participants who receive the imposed treatment or special condition is referred to as the ____ group.
- A) independent
 - B) dependent
 - C) experimental
 - D) comparison

127. To determine whether vitamin D consumption slows the progress of multiple sclerosis, a researcher would most likely use _____.
A) an experiment
B) a survey
C) naturalistic observation
D) the case-study method
128. _____ is a quick way to study the development of a large group of people.
A) A case study
B) Survey research
C) A cohort-sequential study
D) Longitudinal research
129. Which of the following is a benefit of using the survey method in research?
A) It is the best way to gather completely accurate information.
B) It is simple to verify the accuracy of the responses.
C) The responses are very objective.
D) The results provide good information for understanding groups.
130. Because there is a boy who is a bully in Dr. Hirsh's 8-year-old son's class, he wonders whether boys might be more likely to be bullies than girls. The best way for Dr. Hirsh to answer this question would be to conduct _____.
A) a case study
B) survey research
C) a cohort-sequential study
D) longitudinal research
131. Which of the following is one of the problems associated with survey research?
A) Data collection takes too long.
B) It costs more than other research methods.
C) Respondents may not tell the truth.
D) It is difficult to recruit participants.

132. Dr. Bloom wanted to learn whether ice cream preferences are different at different stages of development. For her study, she conducted a one-time assessment in which she asked a group of 5-year-olds, a group of 15-year-olds, and a group of 30-year-olds to identify their favorite ice cream. Dr. Bloom conducted a _____.
A) case study
B) cross-sectional study
C) longitudinal study
D) cross-sequential study
133. Dr. Breslin would like to determine whether age affects reaction time, and he needs to find the answer quickly. Which research method would you recommend?
A) case study
B) cross-sectional study
C) longitudinal study
D) cross-sequential study
134. Which factor is a problem with longitudinal research?
A) the aging of the participants
B) finding new participants for each time measurement
C) changing historical context
D) participants failing to change their behavior despite repeated tests
135. Which type of research design combines the cross-sectional design with the longitudinal research design?
A) cross-sequential
B) cross-sectional
C) meta-sequential
D) cross-longitudinal
136. The Seattle Longitudinal Study began with several groups of people, ranging in age from 25 to 81. Then the researchers retested each group every seven years. This study is a good example of a _____ design.
A) cross-sequential
B) cross-sectional
C) meta-sequential
D) cross-longitudinal

137. A correlation does not indicate that one variable causes the other to occur; rather, it indicates that there is a _____ between the two variables.
- A) proof
 - B) validity
 - C) reliability
 - D) relationship
138. A negative correlation is when _____.
- A) both variables decrease
 - B) both variables increase
 - C) one variable increases while the other variable decreases
 - D) change in one variable is unrelated to change in the other variable
139. A zero correlation is when _____.
- A) one variable increases while the other decreases
 - B) both variables decrease
 - C) both variables increase
 - D) there is no connection between the variables
140. The more Hank eats, the less hungry he feels. The correlation between Hank's food intake and his hunger is _____.
- A) positive
 - B) negative
 - C) zero
 - D) causal
141. If a researcher finds a positive correlation between school grades and school attendance, one can conclude that _____.
- A) high attendance and high grades occur together
 - B) high attendance causes high grades
 - C) high attendance rarely means high grades
 - D) high grades cause high attendance
142. If a researcher finds that there is a correlation between secondhand smoke and children's asthma, he can be certain that _____.
- A) secondhand smoke causes children's asthma
 - B) secondhand smoke does not cause children's asthma
 - C) children exposed to smoke in utero often get asthma
 - D) asthma and secondhand smoke have some connection

143. Quantitative research relies on data that can be _____.
A) collected exclusively with surveys
B) categorized, ranked, or numbered
C) reported in professional journals
D) analyzed in narrative form
144. Data that is reported in numbers is known as _____.
A) qualitative
B) quantitative
C) narrative
D) categorical
145. Data that is reported in narrative form is known as _____.
A) qualitative
B) quantitative
C) numerical
D) categorical
146. Dr. Carlson interviewed a group of respondents, who replied in narrative form.
Dr. Carlson is collecting _____ data.
A) quantitative
B) correlational
C) cross-sequential
D) qualitative
147. IRB stands for _____.
A) Institutional Review Board
B) International Research Board
C) Internal Review Board
D) Intelligence Research Board
148. Participants in a research study must understand and agree to the research procedures and also be made aware of any potential risks associated with the research participation. This process is known as _____.
A) holding harmless
B) informed consent
C) release of liability
D) rite of research

149. The science of human development examines how, but not why, people change over time.
A) True
B) False
150. The purpose of the scientific method is to conduct research that will only support researchers' hypotheses.
A) True
B) False
151. A research question becomes a hypothesis when it is stated as a prediction that can be tested.
A) True
B) False
152. The conclusions of a scientific study are based on whether the evidence supports or refutes the hypothesis.
A) True
B) False
153. If Dr. Hall conducts a study in the exact same way that Dr. Jeeves did but uses different participants, Dr. Hall is demonstrating replication.
A) True
B) False
154. Nature is more important than nurture in how a trait or behavior is expressed.
A) True
B) False
155. The influence of nurture begins at conception.
A) True
B) False

156. Since starting school Sam had struggled with math. His teacher offered to help him with math after school. Now Sam does well on his math assignments. The example of Sam's teacher helping Sam with math to improve his math ability is an example of how nature can influence development.
- A) True
B) False
157. Today, developmental science studies mostly young children and adolescents.
- A) True
B) False
158. The term *plasticity* refers to how a person's development is completely determined by the environment.
- A) True
B) False
159. Most periods of development are critical periods.
- A) True
B) False
160. Within the context of Bronfenbrenner's ecological-systems approach, a person's immediate surroundings, such as family or peer group, are part of the macrosystems level.
- A) True
B) False
161. Individuals in the same cohort are exposed to the same values, events, technologies, and culture of the era.
- A) True
B) False
162. The term *cohort* refers to individuals born in the same geographical region and within the same social class.
- A) True
B) False

163. Socioeconomic status is also called social class.
A) True
B) False
164. Culture refers to a system of shared beliefs, conventions, norms, behaviors, and expectations.
A) True
B) False
165. The difference-equals-deficit error may lead people to believe that their nation or culture is better than others.
A) True
B) False
166. Race and ethnicity are the same thing.
A) True
B) False
167. Scientists believe that race is genetic.
A) True
B) False
168. Miguel worked in the fields and did not learn how to read or write until he entered school at age 13. It will take him longer to learn to read at age 13 than it would have when he was younger.
A) True
B) False
169. A positive correlation between how long parents stay when dropping off their children at day care and how long it takes their children to become engaged in the toys and their friends means that longer parental lingering is associated with longer delay in engagement by the children.
A) True
B) False

170. Developmental researchers agree that nature is much more important than nurture in determining psychological outcomes such as intelligence and personality.
- A) True
 - B) False
171. According to the dynamic-systems approach, human development is a static process.
- A) True
 - B) False
172. Friends Jill and Susan both experienced poverty as children. In addition, they were raised by single parents and went to a poor quality school. By the time they were in late adolescence, Jill had dropped out of school and had two children. Susan, in contrast, was academically ranked number one in her graduating class and had a full academic scholarship to Harvard. This example illustrates the concept of differential susceptibility.
- A) True
 - B) False
173. The main advantage of scientific observation as a research method is that it allows the scientist to determine cause and effect.
- A) True
 - B) False
174. In an experiment, the group receiving the special treatment is referred to as the comparison group.
- A) True
 - B) False
175. The purpose of a survey is to allow a researcher to collect data quickly from a large population.
- A) True
 - B) False
176. One problem with the data from surveys is that participants may not tell the truth.
- A) True
 - B) False

177. Dr. Tucker wanted to learn how aggression changes across development. He designed a study in which he assessed aggression among 100 children who were 3 years old and then reassessed aggression among these individuals every three years until the participants were 21 years old. Dr. Tucker's research design was cross-sectional.
- A) True
 - B) False
178. In longitudinal research, the same people are measured at multiple assessment points over a period of time.
- A) True
 - B) False
179. Cross-sequential research is a combination of a cross-sectional approach and a longitudinal approach.
- A) True
 - B) False
180. When two variables are not connected, the correlation between them is zero.
- A) True
 - B) False
181. Most research conducted on humans cannot begin without the approval of the Institutional Review Board.
- A) True
 - B) False
182. A volunteer showed up to participate in Dr. Allen's research study. Dr. Allen failed to inform the volunteer that her participation was voluntary. Dr. Allen was being ethical in conducting the study, as sharing with the volunteer that research participation is voluntary is not part of informed consent.
- A) True
 - B) False
183. Science is needed in the study of human development because ____.
- A) nonempirically based opinions arise from research
 - B) people usually agree on how children should be raised
 - C) research provides data and facts that will enable people to fulfill their potential
 - D) the information we get from research is definitive

184. Which step of the scientific method involves making a specific prediction?
- A) draw conclusions
 - B) test the hypothesis
 - C) pose a question
 - D) develop a hypothesis
185. Other names for the nature versus nurture debate include ____.
- A) learning versus experience
 - B) experience versus environment
 - C) heredity versus genetics
 - D) heredity versus environment
186. In the nature–nurture debate, most developmentalists believe that ____.
- A) nature is more influential
 - B) nature and nurture combine to determine outcomes
 - C) nurture is more influential
 - D) nature and nurture are both unimportant when compared to genes and environment
187. People who came of age during the Great Depression all come from the same ____.
- A) region
 - B) socioeconomic class
 - C) race
 - D) cohort
188. The difference-equals-deficit error causes us to assume that ____.
- A) genetics make us who we are
 - B) people unlike us are inferior
 - C) the environment makes us who we are
 - D) what is considered normal is the same across cultures
189. According to social scientists, race is ____.
- A) part of the microsystem
 - B) a social construction
 - C) defined by heritage
 - D) multidirectional

190. The multidisciplinary approach _____.
A) emphasizes the biological factors in development
B) underestimates the role of cognition in development
C) considers the biological, psychological, and social influences in development
D) is unpopular in modern psychology
191. Human development is plastic, which means that traits _____.
A) are rigid and unchanging
B) can be molded, yet are durable
C) are flexible and never durable
D) are entirely dependent on experience
192. Which of the following is a characteristic of scientific observation?
A) It requires a large number of participants.
B) It requires specialized equipment such as video recorders.
C) It involves observing and recording behavior systematically.
D) It must take place in a lab setting.
193. The only research method that establishes a possible cause-and-effect relationship is _____.
A) a case study
B) a survey
C) an experiment
D) scientific observation
194. For which research method is the primary data source information gained from interviews and questionnaires?
A) case study
B) survey
C) correlational
D) scientific observation
195. Which of these research designs studies changes over time?
A) survey
B) cross-sequential
C) cross-durational
D) observational

196. What does it mean when a correlation exists between two variables?
- A) There is a relationship between two variables.
 - B) Cause and effect have been established.
 - C) One variable caused the other to change.
 - D) A relationship between two variables was not established.

197. Which is unethical research behavior?
- A) halting the study if potential harm is suspected
 - B) offering a modest incentive to participate
 - C) changing the data to support the hypothesis
 - D) reporting results to participants

Answer Key

1. Step 1: Begin with curiosity. Pose a question based on a theory, prior research, or personal observation. Step 2: Develop a hypothesis, which is a specific research question that can be tested through research. Step 3: Test the hypothesis. Design and conduct research to gather empirical evidence (data). Step 4: Draw conclusions. Using the evidence gathered in the research, conclude whether the hypothesis is supported or refuted. Step 5: Report the results by sharing the data, conclusions, and alternative explanations with other scientists.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
List steps of scientific method in order	States the five steps in order	States three of the steps in order	States fewer than three steps <i>or</i> does not state the steps in order
Explain each step	Describes the five steps	Describes three steps	Describes fewer than three steps <i>or</i> does not describe steps accurately

2. *Nature* refers to the influence of genes on a person, and *nurture* refers to environmental influences on a person. Environmental influences begin with the health and diet of the embryo's mother and continue lifelong, including family, school, community, and society. An example of nature would be having a gene that predisposes one to addiction. An example of nurture would be having that gene but avoiding addictions as a result of not being exposed to abuse or parental addictions. The debate concerns how much of any person's characteristics, behaviors, or emotions is the result of genes and how much is the result of the person's experiences.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define <i>nature</i> and <i>nurture</i>	Accurately defines both terms and gives an example of each	Accurately defines one term and gives at least one accurate example	Does not accurately define both terms or supply accurate examples
Describe the debate	Accurately describes both sides of the debate	Accurately describes one side of the debate	Does not accurately describe the debate

3. Modern researchers have learned that neither nature alone nor nurture alone can provide a complete way to understand development. Both nature and nurture matter, as both genes and environment affect nearly every characteristic. The study of language acquisition illustrates the perspective that nature and nurture interact. Babies start speaking because of maturation of the brain, mouth, and vocal cords (nature). This allows them to express connections between objects and words (nurture), which could not occur unless people talked to them (nurture).

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
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State researchers' viewpoint	States modern researchers' stance that both matter	Is vague about modern researchers' stance	Incorrectly states modern researchers' stance
Provide an example	Gives an example	Gives a vague example	Gives an incorrect example <i>or</i> doesn't give an example

4. A critical period is a time when something must occur to ensure normal development, and a sensitive period is a time when a specific developmental task occurs most easily. An example of a critical period would be the fetus growing arms and legs and hands and feet—this can occur only at a specific time in utero. Language development is an example of a sensitive period. It occurs most easily at a young age but can occur at a later age as well.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define and differentiate	Defines both periods; differentiates between them	Defines just one period <i>or</i> is vague about differentiation	Fails to define both periods <i>or</i> fails to differentiate
Give examples	Gives a correct example for each period	Gives a correct example of either period	Does not give any examples

5. Bronfenbrenner believed that each person is affected by his or her social context. Over the course of his career, he identified five systems. The first is the microsystem (e.g., one's family and peer group), the second is the exosystem (school, clubs, and church), and the third is the macrosystem (larger social setting, such as cultural values and economic policies). The fourth system, called the chronosystem, is the role of historical context, and the fifth system, the mesosystem, is the interaction that occurs between all of the other systems.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Explain ecological-systems theory	Clearly states what the theory is	Gives a vague explanation of the theory	Is unable to describe the theory
Identify the systems	Identifies the five systems and gives an example of microsystem, exosystem, and macrosystem	Identifies three of the systems <i>or</i> gives examples for three of the systems	Identifies fewer than three of the systems <i>or</i> gives fewer than three examples

6. A cohort is a group of people born within a few years of each other who move through time together. Cohorts travel through life affected by the interaction of their chronological age with the values, events, technologies, and culture of the era. Cohort examples will vary but should show an understanding of a cohort; common examples include the Greatest Generation (people who lived through the Great Depression and World War II), the baby-boom generation (born between 1946 and 1964), Generation X (born between 1965 and 1980), and the Millennials (Generation Y, born between 1980 and 2000).

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Explain cohort	Correctly defines <i>cohort</i> and explains its effects on members	Defines <i>cohort</i> without explaining its effects on members	Does not define <i>cohort</i> correctly
Give an example	Gives an example of a cohort	Gives a vague example of a cohort	Gives an incorrect example <i>or</i> doesn't give an example

7. Culture is a strong social construction, a concept created by a society. Such social constructions affect how people think and act—what they value, praise, ignore, and punish. Different cultures may view the same behavior or phenomenon as either an asset or a deficit. Therefore, by studying different cultures, researchers can identify which patterns are universal among humans and which occur only in certain cultures. This provides insights into the effects of different environments.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Describe culture	Clearly describes culture	Gives a definition of <i>culture</i> without describing it	Does not define culture
Explain why researchers study different cultures	Clearly explains why researchers study different cultures	Is vague about why researchers study different cultures	Does not explain why researchers study different cultures

8. *Plasticity* is the molding of human traits while simultaneously maintaining some durability of identity. The idea of plasticity is that human development is an ongoing, ever-changing interaction between the body and the mind and between the individual and every aspect of his or her environment. Influences that affect plasticity include culture, upbringing, and genes. The example should relate to some aspect of growth in one's life, such as how a high-functioning person on the autism spectrum can eventually earn a college degree. (The autism remains [durability], but with school and other societal interventions, the person can still achieve traditional milestones.)

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define and discuss plasticity	Defines and discusses plasticity	Defines <i>or</i> discusses plasticity	Cannot define or discuss plasticity
List factors that influence plasticity	Lists three factors that influence plasticity	Lists two factors that influence plasticity	Lists one or no factors that influence plasticity
Give plasticity example	Gives an example of plasticity	Gives a vague example of plasticity	Does not give an example of plasticity

9. The three main research designs are cross-sectional, longitudinal, and cross-sequential. In cross-sectional research, different groups of participants who are currently different ages are recruited. In longitudinal research, one group of participants is tested multiple times as they age. In cross-sequential research, the study begins as a cross-sectional design and then the groups are retested multiple times, as in a longitudinal design. Differences between groups in the cross-sectional method are attributed to age-related changes, but they could be due to cohort effects. Longitudinal research is subject to

error as the participants may withdraw from the study before completing it, or they might figure out what the study is about and change their behavior. The cross-sequential design is least prone to error, but it is expensive and time-consuming.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Name and define three research designs	Correctly names and defines the three main research designs	Names and defines two designs	Names and defines one or no designs
Explain the problem with each	Explains the problems with each of the three research designs	Explains the problem with two designs	Explains the problem with one or no designs

10. A cross-sectional design compares groups of people of one age with at least one other group of people of another age at a specific point in time. It is faster than a longitudinal study because all of the data is immediately available. Ideally, the participants should be matched at the same socioeconomic level.

To implement a cross-sectional design to test reading, first identify a group of children aged 8 and another group aged 12. Second, evaluate each individual child's reading ability. Finally, compare the children of different ages and look for differences in reading ability.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define cross-sectional design	Describes cross-sectional design and identifies that participants should be of a similar socioeconomic status	Describes cross-sectional design but doesn't elaborate about having similar socioeconomic status for participants	Gives a vague or incorrect description of cross-sectional design
Summarize how to do the research	Identifies the three parts of the research design	Identifies two parts of the research design	Identifies one part or cannot identify the research design

11. A correlation exists between two variables when one variable changes (increases or decreases) as the other variable changes. Examples will vary but should illustrate this concept, such as the number of people who drown increases as the number of ice cream sales increases. It is impossible to determine cause and effect from correlations. Even though correlations indicate a connection between two variables, they cannot determine the reason for the connection since no other variables are controlled. In the example above, people drowning and ice cream sales both increase during hot weather, so the correlation is caused by neither variable.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define <i>correlation</i>	Gives a strong definition for <i>correlation</i>	Gives an adequate definition for <i>correlation</i>	Gives inaccurate or no definition of <i>correlation</i>

Give an example of a correlation	Offers a good example of a correlation	Offers a vague or weak example of a correlation	Offers an incorrect or no example of a correlation
Explain relationship between causation and correlation	States that causation cannot be determined from a correlation	Implies that causation can be determined from a correlation	States that causation can be determined from a correlation

12. Researchers must ensure that people's participation is 1) voluntary, 2) confidential, and 3) harmless. They must obtain the informed consent of all participants. Informed consent means that participants must understand and agree to the procedures after being told of any risks involved. If children are involved, consent must be obtained from the children as well as their parents. Participants must also be allowed to end their participation at any time.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Summarize practices to protect participants	States all three conditions; describes informed consent and that participants can end participation	States two conditions; explains informed consent <i>or</i> that participants can end participation	States one condition; fails to explain informed consent

13. Ethics are a set of moral principles and specific practices that protect both participants and the integrity of research. Ethical standards provide study participants with the assurance of informed consent and knowing that their participation is voluntary, confidential, and that they will not be harmed.

Ethics are also a vital part of the reporting process after the research has been conducted. Reports of findings should be accurate, and the study should be able to be replicated under the same conditions. Collaboration, replication, and transparency are essential ethical safeguards for all scientists.

	Good (5 pts)	Fair (3 pts)	Weak (0-1 pts)
Define <i>ethics</i>	Defines <i>ethics</i>	Defines <i>ethics</i> only as they apply to participants <i>or</i> the reporting process	Does not define <i>ethics</i>
Explain the importance of ethics	States several ways in which ethics protect participants and how ethics protect findings and replication	Identifies only how ethics are important for participants <i>or</i> their importance on the reporting process and replication	Does not explain why ethical standards are important

14. how and why
15. scientific
16. tested (evaluated) (examined)
17. data
18. replication
19. nature
20. nature
21. Nurture

22. nurture
23. epigenetics
24. critical
25. sensitive
26. critical
27. microsystem
28. cohort
29. socioeconomic
30. culture
31. norms (social constructions)
32. difference-equals-deficit
33. ethnic
34. race
35. cognitive
36. plastic
37. dynamic systems
38. Scientific
39. scientific observation
40. experiment
41. comparison (control)
42. survey
43. longitudinal
44. longitudinal
45. negative
46. Quantitative
47. qualitative
48. ethical (ethics)
49. D
50. A
51. C
52. C
53. A
54. A
55. C
56. B
57. D
58. B
59. D
60. D
61. C
62. B
63. A
64. B
65. B
66. A
67. B

- 68. A
- 69. C
- 70. C
- 71. A
- 72. D
- 73. B
- 74. D
- 75. C
- 76. B
- 77. A
- 78. A
- 79. D
- 80. A
- 81. B
- 82. C
- 83. D
- 84. B
- 85. A
- 86. D
- 87. C
- 88. B
- 89. D
- 90. D
- 91. A
- 92. C
- 93. C
- 94. C
- 95. D
- 96. A
- 97. A
- 98. B
- 99. C
- 100. D
- 101. D
- 102. C
- 103. D
- 104. B
- 105. B
- 106. A
- 107. C
- 108. C
- 109. B
- 110. A
- 111. A
- 112. D
- 113. C

- 114. B
- 115. A
- 116. D
- 117. A
- 118. C
- 119. B
- 120. D
- 121. C
- 122. A
- 123. C
- 124. C
- 125. D
- 126. C
- 127. A
- 128. B
- 129. D
- 130. B
- 131. C
- 132. B
- 133. B
- 134. C
- 135. A
- 136. A
- 137. D
- 138. C
- 139. D
- 140. B
- 141. A
- 142. D
- 143. B
- 144. B
- 145. A
- 146. D
- 147. A
- 148. B
- 149. B
- 150. B
- 151. A
- 152. A
- 153. A
- 154. B
- 155. A
- 156. B
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- 166. B
- 167. B
- 168. A
- 169. A
- 170. B
- 171. B
- 172. A
- 173. B
- 174. B
- 175. A
- 176. A
- 177. B
- 178. A
- 179. A
- 180. A
- 181. A
- 182. B
- 183. C
- 184. D
- 185. D
- 186. B
- 187. D
- 188. B
- 189. B
- 190. C
- 191. B
- 192. C
- 193. C
- 194. B
- 195. B
- 196. A
- 197. C