

1. The science of human development examines how, but not why, people change over time.
A) True
B) False

2. The primary goal of the scientific method is to generate data that support the researcher's hypotheses.
A) True
B) False

3. A research question becomes a hypothesis when it is stated as a prediction that can be examined.
A) True
B) False

4. Using careful analysis of evidence gathered in the research, investigators are able to conclude whether the hypothesis is supported.
A) True
B) False

5. If Dr. Hall conducts a study in the exact same way that Dr. Jeeves did but uses different participants than Dr. Jeeves, Dr. Hall is engaging in replication.
A) True
B) False

6. The influence of nurture begins at conception.
A) True
B) False

7. 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. This example illustrates how nature can influence development.
A) True
B) False

8. Nature is more important than nurture in how a trait or behavior is expressed.
A) True
B) False

9. Jenny learned to play the piano as a child and played very well until she stopped practicing in her late teenage years. In her 40s, Jenny decided to start playing the piano again. She quickly realized that she had lost most of her ability to play, so she took lessons to relearn how to play the piano. After several years of lessons, Jenny plays the piano very well. This example illustrates the multidirectional nature of development.
- A) True
 - B) False
10. Most of our development occurs during critical periods.
- A) True
 - B) False
11. Within the context of Bronfenbrenner's ecological-systems approach, a person's immediate surroundings, such as family or peer group, are part of the macrosystem.
- A) True
 - B) False
12. Individuals in the same cohort are exposed to the same values, events, technologies, and culture of the era.
- A) True
 - B) False
13. The term *cohort* refers to individuals born in the same geographical region and within the same social class.
- A) True
 - B) False
14. *Socioeconomic status* is also called “social class.”
- A) True
 - B) False
15. *Culture* refers to a system of shared beliefs, conventions, norms, behaviors, and expectations.
- A) True
 - B) False

16. The “difference-equals-deficit” error may lead people to believe that their nation or culture is better than others.
A) True
B) False
17. *Race* and *ethnicity* are different terms for the same thing.
A) True
B) False
18. Scientists believe that race is a genetic construct.
A) True
B) False
19. Dr. Hide is a nutritionist, Dr. Sparrow is a sociologist, and Dr. Anderson is a psychologist. They meet to discuss the rising rates of obesity among children, adolescents, and adults. Each offers a different perspective for the increasing rates. This example illustrates how development is multidisciplinary.
A) True
B) False
20. According to the dynamic-systems approach, human development is a static process.
A) True
B) False
21. Friends Jill and Susan both experienced poverty as children. In addition, they were raised by single parents and attended poor-performing schools. By 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 sensitivity.”
A) True
B) False
22. The main advantage of scientific observation as a research method is that it allows the investigator to determine cause and effect.
A) True
B) False

23. In an experiment, the group receiving the special treatment is referred to as the “comparison group.”
A) True
B) False
24. The purpose of a survey is to allow a researcher to collect data quickly from a large population.
A) True
B) False
25. One limitation of using surveys is that participants may not tell the truth.
A) True
B) False
26. Dr. Tucker and his research team are interested in how aggression changes as we age. The team will recruit 100 3-year-old children and assess their levels of aggression every three years until the participants turn 21. This is an example of cross-sectional research.
A) True
B) False
27. In longitudinal research, the same participants are measured at multiple assessment points over a period of time.
A) True
B) False
28. The cohort-sequential design combines cross-sectional and longitudinal research.
A) True
B) False
29. When two variables are unrelated, the correlation between them is zero.
A) True
B) False

Answer Key

1. B
2. B
3. A
4. A
5. A
6. A
7. B
8. B
9. A
10. B
11. B
12. A
13. B
14. A
15. A
16. A
17. B
18. B
19. A
20. B
21. A
22. B
23. B
24. A
25. A
26. B
27. A
28. A
29. A

1. The science of human development seeks to understand _____.
 - A) the meaning of life
 - B) the accuracy of new theories
 - C) the works of Freud, Piaget, and Erikson
 - D) how and why people change over time

2. Dr. Furth wonders whether a specific brain chemical can be suppressed if a patient is given a large dose of vitamin E. Dr. Furth has just demonstrated the _____ step in the scientific method.
 - A) first
 - B) second
 - C) third
 - D) fourth

3. Dr. Hernandez predicts that a certain drug will reduce hallucinations in patients with schizophrenia. Her prediction is called _____.
 - A) a "conclusion."
 - B) "empirical evidence."
 - C) a "hypothesis."
 - D) an "observation."

4. A researcher designed and conducted an experiment to determine whether a particular drug would help patients with bipolar disorder. By designing and conducting this experiment, the researcher was able to _____.
 - A) establish a positive correlation
 - B) demonstrate proof
 - C) test the hypothesis
 - D) confirm the results

5. Dr. Henderson is curious to know more about how children's peer relationships develop over time. To gain an understanding of this subject that is not based 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) interview parents and teachers
 - D) read Dr. Spock's book *Baby and Child Care*

6. The first step in the scientific method involves _____.
A) posing a question
B) conducting research
C) analyzing evidence
D) developing a hypothesis
7. The second step in the scientific method involves _____.
A) posing a question
B) conducting research
C) developing a hypothesis
D) sharing the results
8. The third step in the scientific method involves _____.
A) posing a question
B) conducting research
C) sharing the results
D) developing a hypothesis
9. 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
10. Empirical evidence is based on _____.
A) theories and speculation
B) observation, experience, or experiment
C) inferences based on personal biases
D) opinions generated by focus groups
11. 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

12. The final step in the scientific method involves _____.
- A) testing a hypothesis
 - B) posing a question
 - C) conducting research
 - D) reporting the results
13. Dr. Feigl is interested in designing a study on children's language acquisition. What is the first step that Dr. Feigl should take, according to the scientific method?
- A) Recruit children and their parents as participants in the study.
 - B) Develop a hypothesis regarding language acquisition.
 - C) Pose a research question about language acquisition.
 - D) Draw conclusions on the way children acquire language.
14. A *hypothesis* is a(n) _____.
- A) experiment
 - B) prediction that can be tested
 - C) conclusion drawn from research
 - D) replication of a scientific study
15. *Replication* involves _____.
- 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
16. Dr. Kong conducts a study in which he finds that smoking is related to an increased risk of high blood pressure. He publishes his results. Then Dr. Mecco conducts the same study using different participants in another city. Dr. Mecco's work is an example of _____.
- A) scientific controversy
 - B) replication
 - C) ethics
 - D) data analyses

17. Due to findings from the Framingham Heart Study, _____.
A) childhood obesity rates have soared since the early 1980s
B) cigarette smoking is down, exercise is up, and doctors routinely monitor blood pressure, weight, and cholesterol
C) cigarette smoking and obesity rates are up, but cancer risk has decreased dramatically
D) more parents are monitoring their children's use of harmful substances, such as alcohol and drugs
18. According to the feature in your text titled "Are Children Too Overweight?" researchers predicted that overweight children will have a higher rate of heart attacks, strokes, diabetes, and death in adulthood, even if they slim down before adulthood. The data from this study _____.
A) disproved the hypothesis
B) were inconclusive
C) supported the hypothesis
D) could not be replicated
19. 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
20. _____ refers to all the environmental influences that affect development after conception.
A) Epigenetics
B) Nurture
C) Nature
D) Differential susceptibility
21. In the science of human development, *nature* refers to _____.
A) the influence of the genes that people inherit
B) environmental influences
C) patterns of development
D) developmental differences

22. In the science of human development, *nurture* refers to _____ traits.
- A) hereditary
 - B) genetic
 - C) environmental
 - D) unique
23. 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–nurture
 - B) intelligent design–evolution
 - C) genes–development
 - D) traits–conditioning
24. Most developmental psychologists believe that development is the result of _____.
- A) nature and nurture acting separately
 - B) genetic traits
 - C) nature and nurture acting together
 - D) environmental influences
25. Which of the following illustrates the influence of nature in development?
- 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
26. _____ studies the many ways in which the environment alters gene expression.
- A) Differential susceptibility
 - B) Ethology
 - C) Epigenetics
 - D) The nature–nurture debate

27. Travis and Marcus, close friends, grew up in the same neighborhood. Both were exposed to chronic poverty, gang violence, and family dysfunction. By the time they were in high school, Travis was flunking most of his classes, had a child, and had been arrested numerous times for drug-related crimes and theft. Marcus, on the other hand, was a good student, played football, and had aspirations to attend college. These different developmental trajectories, despite similar environmental influences, illustrate the concept of _____
- A) “epigenetics.”
 - B) a “critical period.”
 - C) a “sensitive period.”
 - D) “differential susceptibility.”
28. In one study that looked at the effects of maternal depression during pregnancy and child outcomes, researchers found that children who had a particular type of the serotonin transporter gene were likely to be emotionally immature if their mothers were depressed. However, children with this gene were more mature than average if their mothers were not depressed. These findings illustrate the concept of _____
- A) “epigenetics.”
 - B) a “critical period.”
 - C) a “sensitive period.”
 - D) “differential susceptibility.”
29. The life-span perspective takes into account development from _____.
- A) birth to death
 - B) childhood to middle age
 - C) birth to adolescence
 - D) conception to death
30. Late adulthood begins at age _____.
- A) 45
 - B) 55
 - C) 65
 - D) 75
31. A developmental perspective requires consideration of _____.
- A) time
 - B) one's birthday
 - C) observer bias
 - D) scientific conclusions

32. With respect to the concept of multidirectional development, when change is rapid and dramatic, such as when a larva becomes a mosquito, it is an example of _____.
A) continuity
B) discontinuity
C) genetics
D) nurture
33. The concept of multidirectional development suggests that when change is gradual, as when a tortoise grows larger over its 150-year lifespan, it is an example of _____.
A) continuity
B) discontinuity
C) genetics
D) nurture
34. Which example best illustrates a *critical period*?
A) a child learning to walk
B) a child learning a second language before age 4
C) a human 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
35. Which example best illustrates a *sensitive period*?
A) a child who is born blind
B) an egg being fertilized
C) a fetus developing fingers and toes
D) a child learning to speak a second language
36. 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
37. A woman in Honduras worked in a field treated with pesticides during her pregnancy. Her son was subsequently born with no arms or legs. Her pesticide exposure likely occurred during a(n) _____ period of prenatal development.
A) critical
B) early
C) late
D) sensitive

38. Bobby did not learn to read until he was an adolescent. When he did learn to read, it was much harder for him than it was for his peers. If Bobby had learned to read during the early and middle childhood years, he would have acquired literacy skills much more efficiently. Bobby's difficulty learning to read as an adolescent demonstrates the concept of a(n) "_____ period."
- A) critical
 - B) early
 - C) late
 - D) sensitive
39. The effects of climate, noise, population density, family size, and multiethnic communities illustrate that development is _____.
- A) linear
 - B) multidirectional
 - C) multicontextual
 - D) multicultural
40. The ecological-systems approach was proposed by _____.
- A) Maslow
 - B) Freud
 - C) Bronfenbrenner
 - D) Skinner
41. In Bronfenbrenner's ecological-systems approach, the _____ refers to the interactions among systems.
- A) *macrosystem*
 - B) *exosystem*
 - C) *microsystem*
 - D) *mesosystem*
42. Which 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*

43. Dorothy was born during the Great Depression. Within the context of the ecological-systems approach, Dorothy's experience of growing up during this time period falls within the _____.
A) chronosystem
B) exosystem
C) microsystem
D) macrosystem
44. Dwayne was born to a single mother living in Chicago. According to Bronfenbrenner's theory, Dwayne's experience in this social context is an example of the _____.
A) chronosystem
B) exosystem
C) microsystem
D) macrosystem
45. Dr. Kolbe is studying the impact of exosystems on human development. Which of the following would Dr. Kolbe 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
46. In Bronfenbrenner's ecological-systems model, a hospital in the community is an example of the _____.
A) ecosystem
B) microsystem
C) chronosystem
D) exosystem
47. In Bronfenbrenner's ecological-systems model, family and peers are part of one's _____.
A) microsystem
B) exosystem
C) macrosystem
D) social system
48. A person's macrosystem includes _____.
A) political processes
B) the peer group
C) school and church
D) the historical setting

49. According to Bronfenbrenner's ecological-systems approach, the historical context that affects other systems is called the “_____.”
- A) ecosystem
 - B) chronosystem
 - C) mesosystem
 - D) macrosystem
50. Bettie grew up in the Great Depression, while her granddaughter is part of the millennial generation. Bettie and her granddaughter belong to different _____.
- A) socioeconomic groups
 - B) microsystems
 - C) cohorts
 - D) cultural groups
51. High school classmates are part of the same _____.
- A) social construction
 - B) network
 - C) socioeconomic status
 - D) cohort
52. *Socioeconomic status* refers to an individual's _____.
- A) culture
 - B) ethnicity
 - C) social class
 - D) race
53. An individual's socioeconomic status includes, among other things, his or her _____.
- A) ethnicity
 - B) education level
 - C) political beliefs
 - D) religion
54. An individual's socioeconomic status includes, among other things, his or her _____.
- A) ethnicity
 - B) political beliefs
 - C) neighborhood
 - D) religion

55. Zachary is a part-time construction worker. Noah is an attorney. These occupations reflect Zachary and Noah's _____.
A) SES
B) political values
C) cohorts
D) family values
56. Jameel has a college degree, lives in a nice neighborhood, and earns more than \$50,000 a year. This information defines his _____.
A) economic potential
B) socioeconomic status
C) cohort
D) microsystem
57. A system of shared beliefs, conventions, norms, behaviors, expectations, and symbolic representations is the definition of _____.
A) a *cohort*
B) *culture*
C) *nature*
D) *nurture*
58. The general term for a concept that is created by society is _____.
A) *culture*
B) a *cohort*
C) a *social construction*
D) *SES*
59. Li, age 11, is a recent Chinese immigrant. Li's new teachers have noticed that he rarely talks, does not make eye contact, and seems very shy. When they speak to Li's parents, they are surprised, as these characteristics are valued in Li's culture. The perception of Li's behavior reflects the concept of a(n) "_____."
A) microsystem
B) exosystem
C) social construction
D) social phobia

60. One historical example of the “different-equals-deficit” error is _____.
A) men perceiving women as intellectually inferior
B) European immigrants crossing the ocean to settle in America
C) how people’s IQ scores have been steadily rising for more than 100 years
D) women taking factory jobs during World War II
61. An example of the “difference-equals-deficit” error is _____.
A) assuming that children who are hearing impaired cannot communicate as well as children who can hear
B) failing to compare typical and atypical behavior
C) ignoring inconsistencies in a child’s language development
D) identifying flaws within the scientific method
62. People whose ancestors were born in the same region and who usually share the same language and religion are called a(n) “_____.”
A) racial group
B) ethnic group
C) SES group
D) exosystem
63. According to the text, *race* is _____.
A) part of the microsystem
B) a social construction
C) defined by heritage
D) multidirectional
64. Some social scientists believe that _____ terms exaggerate minor differences between people.
A) color
B) diversity
C) genetic analysis
D) culture
65. The fact that race is a social construction _____.
A) reflects inconsistencies in ethnic categories
B) does not make the term meaningless
C) means that it should be replaced with the term “culture”
D) shows how powerful genetic influences are on development

66. The three domains of development are _____.
A) genetic, environmental, and cultural
B) nature, nurture, and SES
C) biosocial, cognitive, and psychosocial
D) physical, social, and emotional
67. *Epigenetics* is _____.
A) the study of defective human genes
B) the study of how the environment affects which genes are expressed
C) a theory that emphasizes nature over nurture
D) a theory that explains how motivation can alter biological traits
68. Genes alone do not determine development; environmental forces also shape development. This information has led to the understanding that many human characteristics are _____.
A) plastic
B) epigenetic
C) static
D) diverse
69. The following are categories that are associated with potential causes of depression EXCEPT for _____.
A) genes
B) neurology
C) environmental influences
D) ethnicity
70. *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 modeled during development but also to remain durable
71. The term *plasticity* reminds us that _____.
A) human development is linear
B) critical and sensitive periods predict developmental outcomes
C) developmental change is possible
D) human traits are mostly inborn

72. The idea that human development is an ongoing, ever-changing interaction between the body, mind, and every aspect of the environment reflects the _____.
A) dynamic-systems approach
B) theory of evolution
C) concept of universality
D) domino effect
73. Which of these is the BEST example of plasticity?
A) a child who experiences a traumatic brain injury and relearns how to walk and talk
B) a teenager who spends a summer in Chile as part of his church youth group
C) a woman who leaves her job to stay home with her newborn
D) a man who is in a serious car wreck and remains in a coma five years later
74. In the case study of David, he was exposed to _____ during his mother's pregnancy.
A) HIV
B) cancer-causing pesticides
C) rubella
D) pneumonia
75. In the case study of David, his IQ changed from about 40 to about 130, and his physical disabilities improved with age. These changes reflect which characteristic of development?
A) multidirectional
B) multidisciplinary
C) multicontextual
D) plasticity
76. *Differential sensitivity* means that certain people have genes that _____.
A) make them more vulnerable to particular experiences
B) interact and coordinate to influence developmental outcomes
C) determine their social interactions and intellectual outcomes
D) have an unknown impact on their long-term development
77. Scientific observation allows for the _____.
A) study of individuals' behaviors in a systematic and objective manner
B) determination of cause-and-effect relationships
C) observation of participants without their knowledge
D) systematic manipulation of variables

78. 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.
79. 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
80. 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) meta-analysis
C) experiment
D) survey
81. A *dependent variable* is _____.
A) the measured variable that may change depending on manipulation of an independent variable
B) any unmeasured variable that is uncontrolled within the context of the experiment
C) the variable that is intentionally manipulated by the researcher
D) an external variable that cannot be controlled by the researcher
82. An *independent variable* is _____.
A) the measured variable that may change depending upon manipulation of a dependent variable.
B) any unmeasured variable that is uncontrolled within the context of the experiment.
C) the variable that is intentionally manipulated by the researcher.
D) an external variable that cannot be controlled by the researcher.
83. An example of a dependent variable in an experiment might be _____.
A) gender
B) blood type
C) eye color
D) level of depression

84. 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
85. The purpose of an experiment is to find out whether _____.
- A) an independent variable affects the dependent variable
 - B) a positive correlation can be established
 - C) the dependent variable can be manipulated
 - D) the hypothesis is flawed or influenced by researcher bias
86. “_____ research” is a quick way to study the development of a large group of people.
- A) Experimental
 - B) Survey
 - C) Cohort-sequential
 - D) Longitudinal
87. Which of the following is a limitation of survey research?
- A) Participants often drop out of the research.
 - B) It is expensive and time-consuming.
 - C) It requires experimental control.
 - D) Participants may be dishonest in their answers.
88. The quickest and least expensive way to study development over time is with _____ research.
- A) survey
 - B) cross-sectional
 - C) longitudinal
 - D) experimental
89. Dr. Bloom wanted to learn whether ice cream preferences change 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 ice cream preferences. Dr. Bloom conducted a _____ study.
- A) case
 - B) cross-sectional
 - C) longitudinal
 - D) cross-sequential

90. _____ research involves studying the same individuals over time, as their development is repeatedly assessed.
- A) Survey
 - B) Cross-sectional
 - C) Longitudinal
 - D) Observational
91. Which is NOT a limitation associated with longitudinal research?
- A) the aging of the participants
 - B) losing participants over time
 - C) changing historical context
 - D) participants becoming aware of the goals of the study and changing their behaviors or answers
92. 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) quasi-experimental
93. A correlation indicates that there is _____ between two variables.
- A) a causal link
 - B) validity
 - C) reliability
 - D) a relationship
94. A correlation is considered to be negative if _____.
- 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
95. A correlation is considered to be zero if _____.
- A) one variable increases while the other decreases
 - B) both variables decrease
 - C) both variables increase
 - D) there is no relationship between the variables

96. The more Hank eats, the less hungry he feels. The correlation that exists between Hank's food intake and his hunger is _____.
- A) positive
 - B) negative
 - C) zero
 - D) causal
97. The more parents read to their children, the higher their children score on achievement tests. This relationship between parents reading to their children and child achievement represents a(n) _____.
- A) causal relationship
 - B) inverse correlational
 - C) positive correlation
 - D) negative correlation
98. If a researcher finds that there is a correlation between secondhand smoke and children's asthma, he knows for SURE that _____.
- A) secondhand smoke causes children's asthma
 - B) secondhand smoke does not cause children's asthma
 - C) prenatal exposure to smoking leads to asthma
 - D) asthma and secondhand smoke have some connection
99. _____ research can be categorized, ranked, or numbered.
- A) Quantitative
 - B) Qualitative
 - C) Correlational
 - D) Observational
100. _____ research involves asking open-ended questions and reporting answers in narrative, not numerical, form.
- A) Quantitative
 - B) Qualitative
 - C) Correlational
 - D) Observational

101. _____ research reflects cultural and contextual diversity but is also more vulnerable to bias and harder to replicate.
- A) Experimental
 - B) Quantitative
 - C) Qualitative
 - D) Longitudinal
102. *IRB* stands for _____.
- A) Institutional Review Board
 - B) International Research Board
 - C) Internal Review Board
 - D) Intelligence Research Board
103. The most important caution for all scientists, particularly those studying human development, is to _____.
- A) have an advanced degree
 - B) only conduct experimental research
 - C) uphold ethical standards
 - D) avoid using vulnerable populations
104. _____ are essential ethical safeguards.
- A) Promotion, social awareness, and publication
 - B) Independence, privacy, and funding
 - C) Political correctness, scientific advancement, and medical treatment
 - D) Collaboration, replication, and transparency
105. From an ethical stance, researchers should choose topics of study that _____.
- A) may be researched quickly
 - B) may be researched inexpensively
 - C) can help all people live better lives
 - D) are politically correct

Answer Key

1. D
2. A
3. C
4. C
5. A
6. A
7. C
8. B
9. D
10. B
11. D
12. D
13. C
14. B
15. A
16. B
17. B
18. A
19. A
20. B
21. A
22. C
23. A
24. C
25. B
26. C
27. D
28. D
29. D
30. C
31. A
32. B
33. A
34. C
35. D
36. B
37. A
38. D
39. C
40. C
41. D
42. D
43. A
44. C

45. C
46. D
47. A
48. A
49. B
50. C
51. D
52. C
53. B
54. C
55. A
56. B
57. B
58. C
59. C
60. A
61. A
62. B
63. B
64. A
65. B
66. C
67. B
68. B
69. D
70. D
71. C
72. A
73. A
74. C
75. D
76. A
77. A
78. C
79. D
80. C
81. A
82. C
83. D
84. C
85. A
86. B
87. D
88. B
89. B
90. C

- 91. A
- 92. A
- 93. D
- 94. C
- 95. D
- 96. B
- 97. C
- 98. D
- 99. A
- 100. B
- 101. C
- 102. A
- 103. C
- 104. D
- 105. C

1. The science of human development seeks to understand _____ people—all kinds of people, everywhere, of every age—change over time.
2. To prevent unexamined opinions and personal biases from influencing research findings, it is important to employ the _____ method.
3. A hypothesis is a specific prediction that can be _____ by various research methods.
4. *Empirical evidence* refers to “_____.”
5. In scientific research, collecting additional evidence by studying different participants than used in the original study is known as “_____.”
6. _____ refers to the traits, capacities, and limitations that each individual inherits genetically from his or her parents at the moment of conception.
7. The _____ Heart Study, which began in 1948, has resulted in reduced rates of cigarette smoking, increased rates of exercise, and worldwide prevention against premature deaths.
8. Tim told his friend that he is tall because he inherited “tall” genes from his dad. Tim was claiming that _____, but not _____, was responsible for his height.
9. The combination of all environmental influences that affect an individual after conception is called “_____.”
10. _____ is the study of how environmental factors affect genes and genetic expression.
11. Although they are sisters, Terri and Neeva respond very differently to stressful events. Terri becomes emotionally and physically upset and has a difficult time focusing on what is positive in her life. Neeva, on the other hand, deals with stressful events directly and tends to remain optimistic. These differences illustrate the concept of “_____.”
12. The _____ takes into account all phases of life, from conception through death.

13. A _____ period of development is a time in which a particular type of development must occur if it is to occur at all.
14. A _____ period of development is a time in which a particular development occurs more easily—but not exclusively—at a certain time.
15. Thalidomide only caused birth defects if a pregnant woman ingested the drug during the _____ period of prenatal development.
16. Language learning illustrates the concept of a “_____ period of development.”
17. Although Tanner's friends do well in school, he is a low-achieving student. Tanner and his friends decide to meet once a week to study; soon, Tanner's grades start to improve. Within the ecological-systems perspective, the influence of Tanner's friends on his school performance illustrates the “_____.”
18. According to the ecological-systems approach, _____ are part of the larger social setting, such as cultural values, economic policies, and political processes.
19. Today's generation of children and young adults is heavily influenced by social media. That is, their historical context is very different from that of their grandparents. This illustrates Bronfenbrenner's concept of the “_____.”
20. A(n) _____ is a group of people born at about the same time who experience the same historical events and cultural shifts.
21. A person's income and level of education is part of his or her _____ status.
22. The system of shared beliefs, norms, behaviors, and expectations that persist over time and prescribe social behavior and assumptions is known as “_____.”
23. Two people from different cultures may value the need for achievement or success differently because of the _____ of each culture.

24. The human tendency to assume that people unlike us are inferior is called the “_____ error.”
25. People of a specific _____ group share certain attributes, such as religion and language.
26. Ethnicity is the product of the _____, not biology.
27. Afton is seeking therapy for depression. At the first therapy session, the therapist informs her that depression is caused by many factors, including genes, neurology, and development. Afton's therapist is referring to the _____ nature of depression, as many areas of discipline are needed to understand depression.
28. The _____ *approach* refers to the idea that human development is ongoing and ever-changing.
29. In David's story, although he was exposed to rubella during prenatal development, the higher socioeconomic status of his family made it possible for him to receive the medical and educational care that he needed to thrive. David also had two older brothers who watched out for him. The story of David illustrates the _____ characteristic of development.
30. The genes and expressions of each person prime him or her to respond in a particular way, and responses are plastic. This illustrates the concept of “_____.”
31. _____ observation requires researchers to record behaviors systematically and objectively.
32. Researchers who want to establish a causal relationship between two variables must use a research design called a(n) “_____.”
33. In an experiment, the researcher manipulates the _____ variable.
34. A _____ is a quick way to collect data from a large number of people.

35. In _____ research, groups of people of one age are compared with people of another age.
36. Dr. Elkhart is interested in whether adults value different romantic qualities in their partners as they age. She recruits 250 young adults and administers a survey on desired qualities in potential mates. Dr. Elkhart plans to re-administer the survey every three years until participants reach the age of 70. Dr. Elkhart is implementing the _____ research design.
37. Cross-sequential, or cohort-sequential, research combines the cross-sectional design with the _____ design.
38. As children age, they tend to sleep fewer hours. This relationship is an example of a(n) _____ correlation.
39. To determine how children throughout the world compare in certain academic subjects, such as math and science, researchers rely on achievement test scores. This is an example of _____ research.
40. Professor Marquette is interested in how parents from different ethnic groups view corporal punishment. Professor Marquette and her team interview hundreds of parents throughout the country, asking open-ended questions to gain further insight into parental beliefs. This is an example of _____ research.
41. Each academic discipline and professional society involved in the study of human development has a _____, or a set of moral principles.

Answer Key

1. how and why
2. scientific
3. tested (evaluated) (examined)
4. data
5. replication
6. Nature
7. Framingham
8. nature; nurture
9. nurture
10. Epigenetics
11. differential susceptibility
12. life-span perspective
13. critical
14. sensitive
15. critical
16. sensitive
17. microsystem
18. macrosystems
19. chronosystem
20. cohort
21. socioeconomic (SES)
22. culture
23. social construction
24. difference-equals-deficit
25. ethnic
26. pride
27. multidisciplinary
28. dynamic systems
29. multicontextual
30. differential susceptibility
31. Scientific
32. experiment
33. independent (experimental)
34. survey
35. cross-sectional
36. longitudinal
37. longitudinal
38. negative
39. quantitative
40. qualitative
41. code of ethics

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 how contemporary researchers view the perspective that most modern developmentalists take on the nature–nurture debate, and explain epigenetics.
4. Explain *differential susceptibility*, using the example of maternal depression and children's emotional maturity described in your textbook.
5. Define a *critical period* and a *sensitive period*. Explain the difference between the two periods, and give an example of each.
6. Explain Bronfenbrenner's ecological-systems theory, and describe his five systems.
7. Define *cohort*, explain its effects, and give an example of one.
8. Explain the term *SES*, including four components of SES.
9. Describe *culture*, and explain why researchers interested in human development study different cultures.
10. Ava believes that the terms *culture*, *ethnicity*, and *race* mean the same thing and are interchangeable. Explain why Ava is wrong, using examples from your textbook.
11. List at least six factors that have been linked to depression.
12. 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.

13. Imagine that you are interested in the relationship between age and reading ability for children ages 8 to 12 years old. Briefly define the cross-sectional design, and summarize how you could test this relationship using that design.
14. What practices must be built into a research study to protect participants?
15. Define *correlation*, and give an example. Can one determine cause and effect from correlations? Explain why or why not.
16. Differentiate *quantitative research* from *qualitative research*. What are the benefits of using qualitative research in developmental psychology?
17. What are ethics, and why are ethical standards so important to scientific research?

Answer Key

- 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 prediction that can be tested through research. Step 3: Test the hypothesis. Design and conduct research to gather empirical evidence (data). Step 4: Analyze the evidence gathered in the research. 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 (1–0 pts)
Lists steps of scientific method in order	States five of the steps in order	States three of the steps in order	States fewer than three steps or does not state the steps in order
Explains each step	Describes the five steps	Describes three steps	Describes fewer than three steps or does not describe steps accurately

- Nature refers to the influence of genes on a person, and nurture refers to environmental influences on a person. Environmental influences include the health and diet of the embryo's mother and continuing lifelong, including experiences in the family, school, community, and society. An example of nature would be inheriting a gene that predisposes one to addiction. An example of nurture would be having a predisposition to addiction but being raised in a warm, stimulating environment in which parents do not abuse drugs or alcohol, reducing the individual's risk for addiction as a result of not being exposed to abuse or parental addictions. The debate concerns how many of any person's characteristics, behaviors, or emotions are the result of genes and how many are the result of the person's experiences.

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

- 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 all of our characteristics. Epigenetics is the study of how environmental factors affect genes and genetic expression—enhancing, halting, shaping, or altering the expression of genes. This means that one's environment influences the expression of some genes.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
--	---------------	---------------	-----------------

Researchers' viewpoint	States modern researchers' stance that both matter	Is vague about modern researchers' stance	Incorrectly states modern researchers' stance
Epigenetics	Defines the term and clearly explains what it means	Defines the term without explaining its meaning	Does not describe the term or give an explanation

4. Differential susceptibility refers to the idea that people vary in how sensitive they are to particular experiences. These differences are often genetic. In one study, depression in pregnant women was assessed, and then the emotional maturity of their children was measured. Children who had a particular version of the serotonin transporter gene (5-HTTLPR) were likely to be emotionally immature if their mothers were depressed but more mature than average if their mothers were not depressed.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Defines differential susceptibility	Accurately defines the term	Partially defines the term	Does not accurately define the term
Refers to the example of maternal depression and children's emotional maturity	Provides the example presented in the textbook	Partially explains the link between maternal depression and children's emotional maturity	Does not provide the example or incorrectly explains the link between maternal depression and children's emotional maturity

5. 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 still develop at a later age as well.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Defines and differentiates	Defines both periods and differentiates between them	Defines just one period or is vague about differentiation	Fails to define both periods or fails to differentiate
Gives examples	Gives a correct example for both periods	Gives a correct example of either period	Does not give any examples

6. Bronfenbrenner's ecological-systems theory is a perspective on human development that considers all the influences from the various contexts of development. This approach recognizes three nested levels as well as two systems that affect these levels. He 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, called the mesosystem, is the interaction that occurs between all the other systems.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Explains ecological systems theory	Clearly states what the theory is	Gives a vague explanation of the theory	Is unable to describe the theory
Identifies the systems	Identifies the five systems and gives an example of each	Identifies three of the systems or gives examples of three of the systems	Identifies fewer than three of the systems or gives fewer than three examples

7. 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 historical period. Cohort examples will vary but should show an understanding of a cohort. Examples include the names that parents give their babies, “Occupy Wall Street,” “Black Lives Matter,” the 9/11 terrorist attacks, the assassination of John F. Kennedy, and attitudes about marijuana. The baby-boom generation is the example given in the text. Other common examples include the Greatest Generation (people who lived through the Depression and WWII) and the Millennials (Generation Y, born between the early 1980s and the early 2000s). Another example would be Generation X, born between the early 1960s and the early 1980s.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Explains cohort	Correctly defines cohort and explains its importance on members	Defines cohort without explaining its effect on members	Does not define cohort correctly
Gives an example	Gives an example of a cohort	Gives a vague example of cohort	Gives an incorrect example or does not give an example

8. SES, or socioeconomic status, is a person's position in society and is determined by education, occupation, neighborhood, and income.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Explains the term	Correctly explains the term	Partially explains the term	Does not explain the term
Provides the four components	Includes the four components	Includes two components of SES	Does not include the four components or includes incorrect components

9. Culture is the system of shared beliefs, conventions, norms, behaviors, expectations, and symbolic representations that persist over time and prescribe social rules of conduct. Culture is a powerful social construction, or 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 behaviors or phenomena as either assets or deficits. Therefore, by studying different cultures, researchers can identify which patterns are universal among humans and which occur only in certain cultures. This information provides insights into the effects of different environments.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Describes culture	Clearly describes culture	Gives a definition of culture without describing it	Does not define culture
Explains 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

10. Ethnic groups often share a culture, but not necessarily. There are multiple intersecting and interacting dimensions to ethnic identity. People may share ethnicity but differ culturally. For example, people of Irish descent in Ireland, Australia, and North America may come from several ethnic groups. In another example, African-born people in North America typically consider themselves African, but African people in Africa identify with more specific ethnic groups. Race refers to people who are regarded by themselves or by others on the basis of their physical appearance, typically skin color. However, social scientists are convinced that race is a social construction and that color terms exaggerate minor differences. For instance, dark-skinned people with African ancestors have high levels of within-population genetic diversity, and many dark-skinned people whose ancestors were not African share neither culture nor ethnicity with Africans.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Differentiates the three terms	Explains how culture, ethnicity, and race differ	Differentiates between two of the terms	Does not differentiate the three terms
Provides examples	Illustrates by example how the three terms differ	Partially illustrates by example differences between the three terms	Does not provide examples or provides incorrect examples

11. Students should list any 6 of these 12 factors:
- low serotonin level in the brain
 - low exposure to sunlight, especially in winter
 - being taken care of by a mother with postpartum depression
 - malnutrition (low hemoglobin)
 - a lack of close friends
 - serious diseases, such as Parkinson's or AIDS, or drugs to treat diseases
 - a life crisis (disruptive event)
 - death of a mother before age 10
 - absence of a father during childhood, especially due to divorce
 - siblings with eating disorders
 - poverty, especially in places with great disparity between the rich and poor
 - low cognitive skills

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Lists factors related to depression	Gives six factors from list above	Gives four factors from list above	Gives fewer than four factors from list above

12. Plasticity is the molding of human traits while simultaneously maintaining some durability of identity. The concept of plasticity reminds us that human development is an ongoing, ever-changing interaction between the body and mind and between the individual and every aspect of his or her environment. Influences that affect plasticity include culture, upbringing, and genes. Students' examples should relate to some aspect of growth in their individual lives, such as how they—or someone they know—have overcome adversity. For example, they could discuss 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 (1–0 pts.)
Defines and discusses plasticity	Defines the concept of plasticity and discusses it	Defines <i>or</i> discusses plasticity	Does not define or discuss plasticity
Lists factors that influence plasticity	Lists three factors that influence plasticity	Lists two factors that influence plasticity	Lists one or no factor that influence plasticity
Gives a plasticity example	Gives an example of plasticity	Gives an example of plasticity but does not relate it to a personal experience	Does not give an example of plasticity

13. 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. Although the people differ in age, they should be similar in other important characteristics. It is faster than a longitudinal study, because all the data are immediately available. Ideally, the participants should be matched at the same socioeconomic level.

To implement a cross-sectional design that examines age and reading ability, first identify two groups of children: 8-year-olds and 12-year-olds. Second, evaluate each individual child's reading ability. Finally, compare the children from each group, and look for differences in reading ability.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Defines cross-sectional design	Describes cross-sectional design and identifies that participants should be of a similar socioeconomic status	Describes cross-section design but does not elaborate about having similar socioeconomic statuses for participants	Gives a vague or incorrect description of cross-sectional design

Summarizes 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
-----------------------------------	---	---	--

14. Researchers must ensure that people's participation is (1) voluntary, (2) confidential, and (3) harmless. They must obtain the informed consent of all the 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 (1–0 pts.)
Summarizes 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

15. 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 relationship between increased ice cream sales and higher murder rates. It is impossible to determine cause and effect from correlations, because 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, both ice cream sales and violent crime increase during hot weather. Therefore, a third variable—heat—may explain this relationship.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Defines correlation	Gives an accurate definition of correlation	Gives an adequate definition of correlation	Gives an inaccurate or no definition of correlation
Gives 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
Explains the 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

16. Quantitative research provides data that can be expressed with numbers, such as ranks or scales. Qualitative research, in contrast, relies on open-ended questions, and information is presented in narrative rather than numerical form. Many developmental researchers rely on quantitative research, as it reflects cultural and contextual diversity.

	Good (5 pts.)	Fair (3 pts.)	Weak (1–0 pts.)
Differentiates quantitative and qualitative research	Explains the differences between the two types of research	Provides partial definitions of the two types of research	Does not differentiate the two types of research

Explains the benefits of using qualitative research in developmental psychology	Includes the benefits of using qualitative research	Only includes one benefit associated with qualitative research	Does not include the benefits of qualitative research
---	---	--	---

17. 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; the knowledge that their participation is voluntary and confidential; and the promise 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 (1–0 pts.)
Defines ethics	Defines ethics	Defines ethics only as they apply to participants <i>or</i> the reporting process	Does not define ethic
Explains the importance of ethics	Explains why ethics are important, including the three ethical safeguards—collaboration, replication, and transparency; 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 to the reporting process and replication	Does not explain why ethics are important