

***Essentials of Life Span Development 6th edition
Santrock Test Bank***

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Essentials of Life-Span Development, 6e (Santrock)
Chapter 2 Biological Beginnings

- 1) Red-feathered and blue-feathered birds occupy the same environment. The birds with the red feathers are better able to survive and avoid predators. This means that the population of red-feathered birds will increase in future generations. This illustrates the process of
- A) genetic selection.
 - B) natural adaptation.
 - C) natural selection.
 - D) genetic survival.
- 2) _____ introduced the theory of evolution by natural selection in 1859.
- A) Sigmund Freud
 - B) Charles Darwin
 - C) Stephen Hawking
 - D) Wilhelm Wundt
- 3) If a baboon learns to eat different kinds of fruit instead of relying on only one kind for its nutritive needs, we would argue that this behavior promotes its survival. Thus, the behavior is
- A) adaptive.
 - B) aggressive.
 - C) dominant.
 - D) submissive.
- 4) Evolution takes place
- A) over the course of many generations.
 - B) almost immediately.
 - C) when a species is ready for it.
 - D) because of active attempts at change on the part of a species.
- 5) Psychology's newest approach, _____, emphasizes the importance of adaptation, reproduction, and "survival of the fittest" in shaping behavior.
- A) behavioral psychology
 - B) humanistic psychology
 - C) cognitive psychology
 - D) evolutionary psychology
- 6) According to evolutionary developmental psychologists, many evolved psychological mechanisms are _____. That is, the mechanisms apply only to a specific aspect of a person's psychological makeup.
- A) domain-specific
 - B) maladjusted
 - C) nonoperational
 - D) unconditional

- 7) Which of the following statements is true of evolutionary developmental psychology?
- A) Many evolved psychological mechanisms apply only to a specific aspect of a person's psychological makeup.
 - B) The mind is a general-purpose device that can be applied equally to a vast array of problems.
 - C) All behaviors that were adaptive for our prehistoric ancestors serve us well today.
 - D) Evolution has not impacted human development.
- 8) The food-scarce environment of our ancestors likely led to humans' propensity to gorge when food is available and to crave high-caloric foods, a trait that might lead to an epidemic of obesity when food is plentiful. This illustrates how
- A) socialization influences the development of behavior and cognitive skills in human beings.
 - B) evolved mechanisms are not always adaptive in contemporary society.
 - C) organisms pass on characteristics they acquire during their lifetime to their offspring.
 - D) the benefits of evolutionary selection decrease with age.
- 9) In the context of evolutionary psychology, Albert Bandura (1998) acknowledged that
- A) "one-sided evolutionism" is primarily used to explain social behavior.
 - B) evolutionary pressures created changes in biological structures.
 - C) evolution dictated behavior.
 - D) social behavior is strictly a product of evolved biology.
- 10) As an alternative to "_____ evolutionism" presented in evolutionary psychology, Albert Bandura proposed a _____ view.
- A) bidirectional; unidirectional
 - B) one-sided; bidirectional
 - C) dynamic; linear
 - D) balanced; biased
- 11) A fertilized human egg cannot grow into a crocodile, duck, or fish specifically because of
- A) social influence.
 - B) environmental influence.
 - C) adaptive behavior.
 - D) genetic code.
- 12) _____ is a complex molecule with a double helix shape, like a spiral staircase, and contains genetic information.
- A) RNA
 - B) A chromosome
 - C) DNA
 - D) A ribosome
- 13) _____, the units of hereditary information, are short segments of deoxyribonucleic acid (DNA). They help cells to reproduce themselves and to assemble proteins.
- A) Genes
 - B) Chromosomes
 - C) RNA

D) Ribosomes

14) The nucleus of each human cell contains _____, which are threadlike structures made up of deoxyribonucleic acid (DNA).

- A) mitochondria
- B) ribosomes
- C) chromosomes
- D) mesosomes

15) _____ are the building blocks of cells as well as the regulators that direct the body's processes.

- A) Genes
- B) Proteins
- C) Ribosomes
- D) DNA

16) Adam, who has a cardiovascular disease, participated in a research study to identify genetic variations linked to cardiovascular disease. His DNA, along with DNA from other patients suffering from the same cardiovascular disease, was obtained. For the purpose of comparison, the researchers also took DNA samples from participants who did not have the disease. Each participant's DNA was assessed to determine markers of genetic variation. The researchers found that genetic variations occurred more frequently in people who had the cardiovascular disease. This led them to pinpoint the region in the human genome linked to the disease. Which of the following approaches to gene identification and discovery did the researchers use in this study?

- A) next-generation sequencing
- B) linkage analysis
- C) the Thousand Genomes Project
- D) the genome-wide association method

17) In the context of approaches to gene identification and discovery, _____, in which the goal is to discover the location of a gene (or genes) in relation to a marker gene (whose position is already known), is often used to search for disease-related genes.

- A) the Thousand Genomes Project
- B) genome-wide association
- C) linkage analysis
- D) next-generation sequencing

18) Which of the following statements is true of the activity of genes?

- A) Genes are not collaborative.
- B) A single gene codes for a single, specific protein.
- C) Genetic expression is unaffected by environmental factors.
- D) Events that occur inside of the cell can excite or inhibit genetic expression.

19) Scientists have found that certain genes become turned on or off as a result of exercise mainly through a process called _____, in which tiny atoms attached themselves to the outside of a gene.

- A) genotyping
- B) methylation
- C) glycolysis
- D) hydroxylation

20) Meiosis is a specialized form of cell division that occurs to form

- A) split zygotes.
- B) extra chromosomes.
- C) somatic cells.
- D) eggs and sperm.

21) _____ is a stage in reproduction whereby an egg and a sperm fuse to create a single cell.

- A) Fertilization
- B) Osmosis
- C) Meiosis
- D) Mitosis

22) During the process of _____, a cell's nucleus—including the chromosomes—duplicates itself and the cell divides, resulting in the formation of two cells.

- A) meiosis
- B) osmosis
- C) fertilization
- D) mitosis

23) A cell that contains 46 chromosomes arranged in 23 pairs undergoes the process of _____ to produce two new cells, each containing the same DNA as the original cell, arranged in the same 23 pairs of chromosomes.

- A) mitosis
- B) osmosis
- C) meiosis
- D) fertilization

24) Which of the following is true of mitosis?

- A) Mitosis is the cellular reproduction that occurs to form the sperm and the egg cells.
- B) Mitosis results in the formation of four new cells.
- C) Mitosis results in the formation of two new cells with 23 pairs of chromosomes.
- D) Mitosis results in the formation of three new cells.

25) A cell that contains 23 pairs of chromosomes divides by mitosis to form two new cells. How many pairs of chromosomes does each new cell contain?

- A) 12
- B) 23
- C) 6
- D) 48

- 26) Except for the sperm and the egg, all cells in the human body have _____ chromosomes.
- A) 10
 - B) 32
 - C) 23
 - D) 46
- 27) During _____, a cell of the testes in men or ovaries in women duplicates its chromosomes and then divides twice, thus forming four cells, each of which has only half the genetic material of the parent cell.
- A) meiosis
 - B) mitosis
 - C) osmosis
 - D) fertilization
- 28) In human beings, by the end of meiosis, each egg or sperm has _____ chromosomes.
- A) 46 paired
 - B) 23 unpaired
 - C) 23 paired
 - D) 46 unpaired
- 29) During fertilization, an egg and a sperm fuse to create a single cell called a _____.
- A) blastocyst
 - B) fetus
 - C) gamete
 - D) zygote
- 30) Sasha's 23rd chromosome pair contains two X chromosomes. This indicates that Sasha
- A) has Down syndrome.
 - B) has fragile X syndrome.
 - C) is a female.
 - D) is a male.
- 31) Jule's 23rd chromosome pair consists of an X chromosome and a Y chromosome. This indicates that Jule
- A) has Down syndrome.
 - B) has XYY syndrome.
 - C) is a female.
 - D) is a male.
- 32) Combining the genes of two parents in offspring increases _____ in the population, which is valuable for a species because it provides more characteristics for natural selection to operate on.
- A) the number of males
 - B) the number of females
 - C) genetic variability
 - D) genetic uniformity

33) _____ develop from a single zygote that splits into two genetically matching replicas, each of which becomes a person.

- A) Triplets
- B) Identical twins
- C) Fraternal twins
- D) Quadruplets

34) Melody and Harmony are identical twins. This means that they developed from

- A) a single egg that was fertilized by a single sperm.
- B) a single egg that was fertilized by two different sperms.
- C) two eggs that were fertilized by a single sperm.
- D) two eggs that were fertilized by two different sperms.

35) Jerome and Tyrone are fraternal twins. This means that they developed from

- A) a single egg that was fertilized by a single sperm.
- B) a single egg that was fertilized by two different sperms.
- C) two eggs that were fertilized by a single sperm.
- D) two eggs that were fertilized by two different sperms.

36) A mistake by the cellular machinery, or damage from an environmental agent such as radiation, may produce a _____, which is a permanently altered segment of DNA.

- A) susceptibility gene
- B) vulnerability gene
- C) longevity gene
- D) mutated gene

37) _____ genes are those that make an individual more vulnerable to specific diseases or accelerated aging.

- A) Susceptibility
- B) Longevity
- C) Vulnerability
- D) Mutated

38) Ethel is 50 years old but appears much more aged. Most of Ethel's relatives have not lived past the age of 60. Which of the following genes are responsible for the accelerated aging observed in Ethel and her family members?

- A) susceptibility genes
- B) longevity genes
- C) vulnerability genes
- D) mutated genes

39) _____ genes are those that make an individual less vulnerable to certain diseases and more likely to live to an older age.

- A) Susceptibility
- B) Longevity

- C) Vulnerability
- D) Mutated

40) Erin, a 90-year-old, is healthy and leads an active lifestyle. Most of her relatives have lived to an old age. Researchers have found that Erin's family carries genes related to stress resistance, immunity, and metabolism that help extend life by repairing and protecting body tissues. In this scenario, which of the following genes is most likely responsible for Erin living to an old age?

- A) susceptibility genes
- B) longevity genes
- C) complimentary genes
- D) mutated genes

41) Carla is diagnosed with breast cancer. She informs her doctor that her mother and her grandmother have also had breast cancer. The doctor explains to Carla that she has specific genes that make her more vulnerable to breast cancer and that she is genetically predisposed to develop the disease. In this scenario, these genes are known as

- A) susceptibility genes.
- B) conditional lethal genes.
- C) complementary genes.
- D) duplicate genes.

42) While studying a sample for height differences, researchers observed that the height of the participants varied significantly regardless of whether the participants' parents were short or tall. This suggests that the physical characteristic of height is most likely an example of

- A) niche-picking.
- B) X-linked inheritance.
- C) genetic imprinting.
- D) polygenic inheritance.

43) Emma and Anna are identical twins who were adopted by different families a few weeks after their birth. Although genetically identical, they grew up with different physical and psychological characteristics. For example, though both inherited a tendency to grow large, Anna was slim and athletic because of the active lifestyle practiced in her adoptive family. This variability can be explained by how

- A) each zygote is unique.
- B) longevity genes can make an individual less vulnerable to certain diseases.
- C) for each genotype, a range of phenotypes can be expressed.
- D) mutated genes can be a source of genetic variability.

44) Vanda's genetic heritage comprising her actual genetic material makes up her

- A) phenotype.
- B) metabolome.
- C) genotype.
- D) proteome.

- 45) _____ is the way an individual's genotype is expressed in observed and measurable characteristics.
- A) RNA
 - B) DNA
 - C) A phenotype
 - D) A stereotype
- 46) Marly describes her friend Gina as having blond hair, green eyes, and fair skin with freckles. Marly has described Gina's
- A) genotype.
 - B) genetic imprint.
 - C) phenotype.
 - D) X-linked inheritance.
- 47) Phenotypes include _____ and _____ characteristics.
- A) physical; environmental
 - B) conscious; subconscious
 - C) biological; ecological
 - D) physical; psychological
- 48) For each genotype, a range of _____ can be expressed, thus providing a source of variability.
- A) genetic imprints
 - B) phenotypes
 - C) karyotypes
 - D) monotypes
- 49) In some cases of genotypic expression, one gene of a pair always exerts its effects overriding the potential influence of the other gene. This is the _____ principle.
- A) sex-linked genes
 - B) dominant-recessive genes
 - C) genetic imprinting
 - D) polygenic inheritance
- 50) Clark's eyes are brown in color. However, both his parents have eyes that are blue in color. According to the dominant-recessive genes principle, the most likely reason for Clark's eyes being brown in color is that
- A) Clark's grandparents had brown-colored eyes.
 - B) Clark has a mutation in his genotype resulting in the change in eye color.
 - C) Clark's family history shows that the family has a dominant gene for brown-colored eyes.
 - D) Clark's parents are carriers of genes contributing to brown eyes.
- 51) Carla has brown hair, and her husband also has brown hair. However, Carla's son is born with blond hair. This most likely indicates that Carla's son
- A) inherited the dominant genes for blond hair.

- B) inherited the recessive genes for blond hair.
- C) has a susceptibility gene.
- D) has a longevity gene.

52) Carrie's parents have brown hair. However, Carrie gets genes for blond hair from both of her parents, and as a result she has blond hair. This indicates that the gene for blond hair is a

- A) recessive gene.
- B) dominant gene.
- C) susceptibility gene.
- D) longevity gene.

53) A(n) _____ gene overrides the potential influence of a recessive gene.

- A) longevity
- B) dominant
- C) susceptible
- D) aggressive

54) A recessive gene exerts its influence only if both genes of a pair are

- A) recessive.
- B) complementary.
- C) conditional lethals.
- D) dominant.

55) Females who have one abnormal copy of a mutated gene on the X chromosome are known as

- A) inhibitors.
- B) patients.
- C) carriers.
- D) promoters.

56) Most individuals who have X-linked diseases are males because

- A) males have only one copy of the X chromosome.
- B) the diseases are triggered by the male sex hormone, testosterone.
- C) males have an extra Y chromosome.
- D) males have an extra X chromosome, making them XXY.

57) Which of the following conditions is due to an X-linked inheritance?

- A) Beckwith-Wiedemann syndrome
- B) hemophilia
- C) Wilms tumor
- D) diabetes

58) Genetic testing has found that Gary, Ben, Tara, and Matt all carry a copy of a gene for hemophilia. However, Tara, who is the only female out of the four, does not show any signs of the disease, whereas Gary, Ben, and Matt have developed the disease. In this scenario, it can be inferred that hemophilia is most likely a(n)

- A) X-linked disease.
- B) sex-linked chromosomal abnormality.
- C) gene-linked abnormality.
- D) autosomal dominant disorder.

59) Which of the following is an example of a chromosomal abnormality that occurs when whole chromosomes do not separate properly during meiosis?

- A) down syndrome
- B) hemophilia
- C) Huntington's disease
- D) sickle-cell anemia

60) Jason, a 4-year-old, has an intellectual disability and has shorter limbs than other children his age. His pediatrician observes that Jason has a protruding tongue and an extra fold of skin over his eyelids. Jason's mother informs the pediatrician that she was 30 at the time of Jason's birth and that he was born with a flat skull. From this information, the pediatrician will most likely diagnose Jason with

- A) Turner syndrome.
- B) Klinefelter syndrome.
- C) Down syndrome.
- D) XYY syndrome.

61) Which of the following is true of Down syndrome?

- A) It primarily occurs in African American children.
- B) It occurs when genetic imprinting goes awry.
- C) Its symptoms include retardation of motor and mental abilities.
- D) It is caused by the presence of an extra copy of chromosome Y.

62) Which of the following women has the highest probability of giving birth to a child with Down syndrome?

- A) Sarah, a 21-year-old Asian woman
- B) Jane, a 41-year-old Euro-American woman
- C) Ella, a 27-year-old African American woman
- D) Destiny, a 38-year-old African American woman

63) Human embryos must possess _____ to be viable.

- A) at least one X chromosome
- B) two Y chromosomes
- C) at least one Y chromosome
- D) three Y chromosomes

64) Timothy's wife is having trouble conceiving a child despite reports on her reproductive fitness being normal. However, on examining Timothy, the doctor determines that his testes are undeveloped, and that he has enlarged breasts. He also observes that Timothy is unusually tall, although his parents and grandparents are of short stature. The doctor informs Timothy that these symptoms are due to Timothy having an extra X chromosome, making him XXY instead of XY.

Timothy most likely suffers from

- A) Down syndrome.
- B) Fragile X syndrome.
- C) Klinefelter syndrome.
- D) Turner syndrome.

65) Tristan has a genetic disorder because of which he has an intellectual disability. His mother informs Tristan's pediatrician that Tristan has an extremely short attention span for any task. Based on Tristan's symptoms, the pediatrician is most likely to diagnose Tristan with

- A) Fragile X syndrome.
- B) XYY syndrome.
- C) Turner syndrome.
- D) Tay-Sachs disease.

66) Which of the following is true of fragile X syndrome?

- A) It occurs more frequently in males than in females.
- B) It occurs only in females.
- C) It makes a female XO instead of XX.
- D) It results in XXY males.

67) Harry is an autistic child and has a short attention span for any task. His intellectual abilities are much lower than other children his age. His pediatrician reveals that Harry has a genetic disorder due to an abnormality in his X chromosome, which has become constricted. Harry most likely suffers from

- A) Turner syndrome.
- B) Fragile X syndrome.
- C) XYY syndrome.
- D) Klinefelter syndrome.

68) Natasha has a short stature, although everyone in her family is tall. Unlike her family members and relatives, she has a webbed neck. She dislikes mathematics as she has difficulty understanding the subject. However, she takes part in and enjoys activities that require verbal communication. Natasha's doctor informs her parents that she is missing an X chromosome, making her XO instead of XX. The symptoms and the cause of the symptoms most likely indicate that Natasha has _____.

- A) Fragile X syndrome
- B) XYY syndrome
- C) Klinefelter syndrome
- D) Turner syndrome

69) Sandra excels in reading and spelling but struggles with mathematics. She is shorter than her peers and has a webbed neck. Her doctor has determined that she has one X chromosome missing. Sandra most likely has

- A) XYY syndrome.
- B) Fragile X syndrome.

- C) Turner syndrome.
- D) XXO syndrome.

70) Which of the following statements about Turner syndrome is true?

- A) Turner syndrome occurs exclusively in females.
- B) People with Turner syndrome have extremely poor verbal ability.
- C) Males with Turner syndrome are short in stature and have webbed necks.
- D) Turner syndrome occurs in approximately 1 of every 25,000 live female births.

71) Which of the following is most likely a characteristic of persons with Klinefelter syndrome?

- A) They have undeveloped testes.
- B) They are usually short in stature.
- C) They usually have small breasts.
- D) They have an extra fold of skin over their eyelids.

72) Brianna goes to a doctor who specializes in identifying genetic flaws to help prevent the risk of abnormalities. This doctor is called

- A) a genealogist.
- B) a genetic counselor.
- C) a chromosomal advisor.
- D) a physiologist.

73) Phenylketonuria (PKU) is a genetic disorder in which an individual cannot properly metabolize _____, an amino acid.

- A) phenylamine
- B) phenylalanine
- C) phenylacetylene
- D) phenylacetamide

74) Which of the following is true of phenylketonuria?

- A) It results from a recessive gene.
- B) It is a chromosomal disorder.
- C) It results in death by the age of five.
- D) It is caused by an accumulation of lipids in the nervous system.

75) Mateo, an infant, is on a special diet as his parents are aware that he has a genetic disorder in which he cannot metabolize phenylalanine, an amino acid. Mateo's parents are also aware of the importance of this diet and that excess phenylalanine buildup in the infant will produce intellectual disability and hyperactivity. This genetic disorder results from a

- A) dominant gene.
- B) recessive gene.
- C) complementary gene.
- D) longevity gene.

76) Which of the following is a gene-linked abnormality?

- A) Down syndrome
- B) Phenylketonuria (PKU)
- C) Turner syndrome
- D) Klinefelter syndrome

77) Tamara, an African American, is born with a genetic disorder that causes her body's red blood cells to become hook shaped instead of being disk shaped, impairing the normal oxygen-carrying capacity of the cells. The doctors explain to Tamara's parents that this condition, however, makes her resistant to malaria. Which of the following disorders is Tamara most likely suffering from?

- A) Tay-Sachs disease
- B) Sickle-cell anemia
- C) Leukemia
- D) Huntington's disease

78) _____ is a genetic abnormality in which delayed blood clotting causes internal and external bleeding.

- A) Hemophilia
- B) Phenylketonuria
- C) Sickle-cell anemia
- D) Tay-Sachs disease

79) Paul has a gene-linked abnormality, and as a result he suffers from an X-linked inheritance disease. Because of this disease, Paul suffers from internal and external bleeding due to delayed blood clotting. Which of the following will effectively treat Paul's condition?

- A) hydroxyurea
- B) blood transfusions
- C) anticoagulants
- D) blood irradiation therapy

80) Samantha is diagnosed with a genetic disorder. She suffers from glandular dysfunction that hinders mucus production. She has difficulty in breathing, and her digestion is hampered. She also has frequent lung infections and suffers from shortness of breath. In this scenario, which of the following genetic disorders is Samantha most likely suffering from?

- A) Cystic fibrosis
- B) Huntington's disease
- C) Phenylketonuria
- D) Tay-Sachs disease

- 81) _____ is a gene-linked abnormality in which the central nervous system deteriorates, producing problems in muscle coordination and mental deterioration.
- A) Cystic fibrosis
 - B) Phenylketonuria
 - C) Huntington's disease
 - D) Tay-Sachs disease
- 82) Which of the following would be an appropriate course of treatment for a person diagnosed with cystic fibrosis?
- A) medication for pain, antibiotics, blood transfusions, and hydroxyurea
 - B) insulin treatment
 - C) blood transfusions/injection
 - D) physical and oxygen therapy, synthetic enzymes, and antibiotics
- 83) Mary and Jim are expecting a child. During prenatal diagnostic testing, the doctor confirms that the fetus has a genetic abnormality that will lead to a neural tube disorder causing brain and spine abnormalities. He also tells the parents that the baby will most likely have protruding tissue, especially from the lower back, and that the abnormality can be treated with corrective surgery at birth, orthopedic devices, and physical or medical therapy. Which of the following disorders is Mary and Jim's child suffering from?
- A) Spina bifida
 - B) Tay-Sachs disease
 - C) Phenylketonuria
 - D) Huntington's disease
- 84) Lindsay's body does not produce enough insulin, causing abnormal metabolism of sugar. She is receiving insulin treatment. Lindsay has
- A) spina bifida.
 - B) hemophilia.
 - C) phenylketonuria.
 - D) diabetes.
- 85) Joshua, a two-year-old, has been diagnosed with _____, a blood disorder that limits the body's oxygen supply and can cause joint swelling and heart and kidney failure. This genetic disorder can be treated through penicillin, pain medication, antibiotics, blood transfusions, and hydroxyurea.
- A) spina bifida
 - B) Tay-Sachs disease
 - C) sickle-cell anemia
 - D) Huntington's disease
- 86) Benny has been diagnosed with a gene-linked abnormality characterized by deceleration of mental and physical development caused by an accumulation of lipids in the nervous system. He has been put on medication and a special diet, but his family has been told that he will probably not live beyond the age of five. Benny is suffering from
- A) spina bifida.

- B) Tay-Sachs disease.
- C) phenylketonuria.
- D) Huntington's disease.

87) Gwendolyn, a pregnant woman, is undergoing a prenatal medical procedure in which her doctor directs high-frequency sound waves into her abdomen to create a visual representation of the fetus's inner structures. The doctor informs her that the procedure will reveal the number of fetuses she is carrying, detect abnormalities in the fetus, and give clues to the sex of the baby. In this scenario, which of the following prenatal medical procedures is Gwendolyn most likely undergoing?

- A) chorionic villus sampling
- B) triple screen
- C) amniocentesis
- D) ultrasound sonography

88) _____ refers to an abnormally small brain of a fetus that can lead to intellectual disability.

- A) Spina bifida
- B) Klinefelter syndrome
- C) Hemophilia
- D) Microencephaly

89) _____ uses a powerful magnet and radio images to generate detailed images of the body's organs and structures.

- A) Triple screen
- B) MRI
- C) Ultrasound sonography
- D) Amniocentesis

90) Esperanza, who is in the 11th week of her pregnancy, is undergoing a prenatal diagnostic test that involves the removal of a small sample of the placenta. The doctor informs her that the test may detect any genetic defects and chromosomal abnormalities in the fetus and that she will have to wait for at least 10 days for the diagnosis. In this scenario, which of the following prenatal medical procedures is Esperanza most likely undergoing?

- A) chorionic villus sampling (CVS)
- B) amniocentesis
- C) noninvasive prenatal diagnosis (NIPD)
- D) triple screen

91) Which of the following is the vascular organ that links the fetus to the mother's uterus?

- A) the fallopian tube
- B) the ovary
- C) the placenta
- D) the cervix

92) Amniocentesis brings a small risk of

- A) mental retardation.
- B) limb deformity.
- C) miscarriage.
- D) Down syndrome.

93) Which of the following statements regarding chorionic villus sampling (CVS) and amniocentesis is true?

- A) Both CVS and amniocentesis provide valuable information about the presence of birth defects.
- B) Both CVS and amniocentesis increase the risk of miscarriage.
- C) Both CVS and amniocentesis increase the risk of limb deformities in the fetus.
- D) Amniocentesis allows a decision on abortion to be made sooner than CVS.

94) The current maternal blood screening test is called the triple screen because

- A) it is performed three times.
- B) it diagnoses three diseases.
- C) it measures three substances in the mother's blood.
- D) it is the third prenatal diagnostic test performed in a pregnancy.

95) Don and Ellie are trying to conceive a baby. How long should they wait before they suspect infertility?

- A) 3 months
- B) 12 months
- C) 18 months
- D) 24 months

96) Which of the following is most likely to be a cause of infertility in a woman?

- A) unblocked fallopian tubes
- B) increased muscle mass
- C) eggs lacking motility
- D) a disease that hinders the implantation of the embryo into the uterus

97) By far the most common high-tech assisted reproduction technique used is

- A) artificial insemination.
- B) in vitro fertilization.
- C) spermatogenesis.
- D) in vivo fertilization.

98) David and Kelly are seeking help for infertility. Under their physician's guidance, they decide to undergo a procedure in which Kelly's eggs are combined in a laboratory dish with her husband's sperms. What is this procedure called?

- A) gamete transfer
- B) intracytoplasmic sperm injection

- C) zygote intrafallopian transfer
- D) in vitro fertilization

99) Which of the following is the main risk factor that a couple must be aware of when undergoing fertility treatments?

- A) high birth weight in babies conceived through such treatments
- B) an increase in the possibility of multiple births when such treatments are used
- C) negative psychological impact on children conceived through such treatments
- D) significant differences in developmental outcomes for children conceived through such treatments

100) _____ is the field that seeks to discover the influence of heredity and environment on individual differences in human traits and development.

- A) Behavior influence
- B) Behavior therapy
- C) Behavior genetics
- D) Behavior development

101) In twin studies, it is most common to

- A) assess the behavioral similarity of identical twins compared with the behavioral similarity of non-twin siblings.
- B) determine the behavioral similarity of identical twins compared with the behavioral similarity of fraternal twins.
- C) to conduct genetic studies of the difference between identical twins in their genetic makeup.
- D) to compare adopted fraternal twins with each other.

102) Rachel loves to read books, and she also encourages her daughter to read by regularly taking her to the local library and buying her lots of books. Rachel's daughter is now an avid reader. This reflects a(n) _____ correlation.

- A) passive genotype-environment
- B) evocative genotype-environment
- C) influential genotype-environment
- D) active (niche-picking) genotype-environment

103) Tracy's parents are avid sports fans. Since she was a child, they took her to numerous baseball and football games, and Tracy regularly watched the sports channel with her dad. When she was old enough, her parents made her join the little league team at her school and she performed well. This is an example of a(n)

- A) evocative genotype-environment correlation.
- B) active (niche-picking) genotype-environment correlation.
- C) passive genotype-environment correlation.
- D) gene-gene correlation.

104) _____ correlations occur because a child's genetically influenced characteristics elicit certain types of environments.

- A) Passive genotype-environment

- B) Evocative genotype-environment
- C) Influential genotype-environment
- D) Active (niche-picking) genotype-environment

105) Charlie is a cooperative, attentive child and is a favorite at home and school; he receives positive, instructive responses from adults. This is indicative of a(n)

- A) passive genotype-environment correlation.
- B) evocative genotype-environment correlation.
- C) influential genotype-environment correlation.
- D) active (niche-picking) genotype-environment correlation.

106) Timothy is a shy 6-year-old who is usually withdrawn in class. He is always distracted in class and refuses to cooperate with other students during class activities. He does not volunteer to answer questions, and as his teachers find it difficult to elicit any response from him, they choose to ignore him. He is not liked by his classmates as he never shares his belongings. As a result, he mostly plays by himself. According to Sandra Scarr's description of the three ways that heredity and environment can be correlated, which of the following correlations is most likely exhibited in this scenario?

- A) passive genotype-environment correlation
- B) active genotype-environment correlation
- C) niche-picking genotype-environment correlation
- D) evocative genotype-environment correlation

107) Brad is an athletic child, and he is in every sports team in school as he enjoys sports immensely. He regularly practices football, tennis, and basketball and hopes to become the captain of one of the sports teams. This scenario most likely reflects _____ correlations that occur when children seek out environments that they find compatible and stimulating.

- A) passive genotype-environment
- B) evocative genotype-environment
- C) active (niche-picking) genotype-environment
- D) influential genotype-environment

108) According to Sandra Scarr's description of the three ways that heredity and environment can be correlated, passive genotype-environment correlations occur because

- A) biological parents provide a rearing environment for a child.
- B) children seek out environments that are stimulating.
- C) a child's genetically influenced characteristics elicit certain types of environments.
- D) certain genes evoke environmental support.

109) Which of the following is an example of a passive genotype-environment correlation?

- A) Uncooperative, distractible children receive more unpleasant and disciplinary action from parents and teachers.
- B) Outgoing children tend to seek out social contexts in which to interact with people.
- C) Parents who have a genetic predisposition to be musically inclined encourage their children to learn how to play a musical instrument.
- D) Infants who smile more receive more attention from the individuals in their social

environment.

110) The _____ view states that development is the result of an ongoing, bidirectional interchange between heredity and the environment.

- A) epigenetic
- B) biosocial
- C) sociogenic
- D) congenital

111) _____ is the interaction of a specific measured variation in the DNA and a specific measured aspect of the environment.

- A) Heredity-environment correlation
- B) Evocative genotype-environment correlation
- C) Gene $\times$ environment ($G \times E$) interaction
- D) Passive genotype-environment interaction

112) _____ occurs when a single sperm cell from the male unites with an ovum (egg) in the female's fallopian tube in a process called fertilization.

- A) Ovulation
- B) Meiosis
- C) Conception
- D) Mitosis

113) Salma is trying to get pregnant and therefore visits her doctor to understand more about pregnancy and childbirth. She asks her doctor about the duration of the typical prenatal development. Which of the following would be her doctor's response?

- A) 38 to 40 weeks
- B) 24 to 30 weeks
- C) 28 to 33 weeks
- D) 20 to 28 weeks

114) Which of the following is the correct sequence of the periods of prenatal development?

- A) fertile; embryonic; postterm
- B) preterm; germinal; postterm
- C) gestational; germinal; postnatal
- D) germinal; embryonic; fetal

115) Rachel is in the first period of prenatal development. This scenario indicates the _____ of prenatal development.

- A) fetal period
- B) embryonic period
- C) implantation period
- D) germinal period

- 116) The germinal period of development takes place in the _____ after conception.
- A) first two weeks
 - B) first two months
 - C) first three months
 - D) first seven weeks
- 117) An egg is fertilized in the _____ period of prenatal development.
- A) fetal
 - B) embryonic
 - C) implantation
 - D) germinal
- 118) Voletta is at the stage of pregnancy where the zygote has attached itself to the uterine wall. This scenario indicates the _____ stage of prenatal development.
- A) embryonic
 - B) postpartum
 - C) germinal
 - D) fetal
- 119) _____ refers to the attachment of the zygote to the uterine wall.
- A) Implantation
 - B) Conception
 - C) Fertilization
 - D) Involution
- 120) The _____ consists of an inner mass of cells that eventually develops into an embryo.
- A) trophoblast
 - B) blastocyst
 - C) endoblast
 - D) cytocyst
- 121) The blastocyst differs from the trophoblast in that the blastocyst
- A) is composed of an inner layer of cells that will finally develop into the embryo.
 - B) is the outermost layer of the embryo that will eventually produce the surface parts.
 - C) is the outer layer of cells that later provides nutrition and support for the embryo.
 - D) is a disk-shaped group of tissues in which small blood vessels from the mother and the offspring intertwine but do not join.
- 122) The _____ is the outer layer of cells of the blastocyst that later provides nutrition and support for the embryo.
- A) ectoderm
 - B) perineum
 - C) cytocyst
 - D) trophoblast

123) Implantation, the attachment of the zygote to the uterine wall, takes place about _____ days after conception.

- A) six to eight
- B) eight to ten
- C) eleven to fifteen
- D) fourteen to sixteen

124) Which of the following is a feature of the embryonic period of prenatal development?

- A) the creation of the fertilized egg
- B) the formation of the blastocyst
- C) the attachment of the zygote to the uterine wall
- D) the formation of support systems for cells

125) Carla is three-and-a-half weeks pregnant. This indicates that her child is in the _____ period of prenatal development.

- A) embryonic
- B) fetal
- C) placental
- D) germinal

126) The attachment of the blastocyst to the uterine wall begins the _____ period of prenatal development.

- A) germinal
- B) embryonic
- C) fetal
- D) zygotic

127) Cell differentiation intensifies and organs appear in the _____ period of prenatal development.

- A) embryonic
- B) zygotic
- C) fetal
- D) germinal

128) In the period of prenatal development that occurs from two to eight weeks after conception, the blastocyst attaches to the uterine wall. During this period, the mass of cells is referred to as a(n)

- A) trophoblast.
- B) follicle.
- C) fetus.
- D) embryo.

129) The _____ consists of three layers of cells: the endoderm, the mesoderm, and the ectoderm.

- A) blastocyst
- B) fetus
- C) embryo
- D) trophoblast

130) The inner layer of cells of the embryo is referred to as the

- A) mesoderm.
- B) epidermis.
- C) endometrium.
- D) endoderm.

131) The embryo's _____ develops into the digestive and respiratory systems.

- A) ectoderm
- B) endoderm
- C) trophoblast
- D) mesoderm

132) The outermost layer of the embryo is called the

- A) mesoderm, which produces the digestive system.
- B) cytoderm, which produces the circulatory system.
- C) endoderm, which produces the reproductive system.
- D) ectoderm, which produces the nervous system.

133) Which of the following statements is true of the middle layer of the embryo?

- A) It will develop into the circulatory system, bones, muscles, excretory system, and reproductive system.
- B) It will develop into the nervous system and brain, sensory receptors, and skin parts.
- C) It primarily produces internal body parts.
- D) It primarily produces surface parts.

134) The _____ is a layer of the embryo, which primarily produces parts that surround the internal areas.

- A) endoderm
- B) ectoderm
- C) mesoderm
- D) epidermis

135) Which of the following statements is true of the layers of cells of an embryo?

- A) The mesoderm develops into the nervous system and brain, sensory receptors, and skin parts.
- B) The ectoderm primarily produces surface parts.

- C) The endoderm is composed of the mesoderm and the ectoderm.
- D) The mesoderm primarily produces internal body parts and sensory receptors.

136) The life-support systems for the embryo include the

- A) umbilical cord, placenta, and amnion.
- B) circulatory, nervous, and digestive systems.
- C) digestive system, umbilical cord, and amnion.
- D) nervous system, digestive system, and umbilical cord.

137) The _____ consists of a group of tissues in which small blood vessels from the mother and the offspring intertwine but do not join.

- A) amnion
- B) placenta
- C) embryo
- D) umbilical cord

138) The structure that contains two arteries and one vein, and connects the developing embryo to the mother's body, is called the

- A) amnion.
- B) placenta.
- C) embryo.
- D) umbilical cord.

139) The _____ prevents large molecules like red blood cells and harmful substances, such as most bacteria and maternal wastes, from entering the fetus.

- A) umbilical cord
- B) placental wall
- C) amniotic sheath
- D) ectoderm

140) The _____ is like a bag or envelope and contains a clear fluid in which the developing embryo floats.

- A) placenta
- B) umbilical cord
- C) amnion
- D) cervix

141) The _____ provides an environment that is temperature and humidity controlled, as well as shockproof.

- A) placental wall
- B) pericardial fluid

- C) umbilical cord
- D) amniotic fluid

142) Which of the following is a small molecule that would be able to pass through the placental wall?

- A) a red blood cell
- B) carbon dioxide
- C) a hormone
- D) maternal wastes

143) The process of organ development during the first two months of prenatal development is known as

- A) organogenesis.
- B) spermatogenesis.
- C) urogenesis.
- D) oogenesis.

144) Tara has just entered the fetal period. Therefore, it has been _____ months since conception.

- A) two
- B) three
- C) four
- D) five

145) The fetus that Calista is carrying has reached the age of viability, meaning that it has a chance of surviving outside of the womb. Therefore, it can be inferred that Calista is _____ weeks pregnant.

- A) 4 to 8
- B) 16 to 18
- C) 24 to 25
- D) 10 to 12

146) Sidney is expecting her first child. She has recently begun to feel the fetus kicking. Sidney's current stage of pregnancy would fall under the _____ of prenatal development.

- A) embryonic period
- B) fetal period
- C) germinal period
- D) implantation period

147) During pregnancy, which of the following organs or systems is the first to develop?

- A) the visual system
- B) the spinal cord
- C) the urogenital system

D) the liver

148) Petra is in the fourth month of her pregnancy. Her unborn child is now referred to as a(n) _____.

- A) gamete
- B) zygote
- C) fetus
- D) embryo

149) Uma has completed her third trimester and has just given birth. Which of the following is most likely to be true assuming that the baby is perfectly average?

- A) The baby is 19 to 20 inches long and weighs 6 to 7.5 pounds.
- B) Lanugo covers the baby's body.
- C) Vernix caseosa begins to form after the baby is delivered.
- D) The baby is more active than it was at 28 weeks.

150) Mariah is at a particular stage of pregnancy where the fetus' heartbeat is audible with an ordinary stethoscope. Which prenatal developmental stage is the fetus currently in?

- A) the first trimester
- B) the second trimester
- C) the fourth trimester
- D) the conception stage

151) Melania has tested positive to a pregnancy test. She is very happy and visits her doctor to find out the sex of her unborn child so that she can hold a gender reveal party for her family. Her doctor tells her that it is too early to determine the sex of the child and that it can be determined only after _____ weeks.

- A) two
- B) four
- C) eight
- D) twelve

152) Cathy is preparing for the birth of her first child. She asks her doctor when her baby may begin to assume the birth position. Which of the following would be her doctor's response?

- A) 32 weeks onward
- B) 24 weeks onward
- C) 20 weeks onward
- D) 16 weeks onward

153) The long hollow tube formed by the mother's nervous system and located on the embryo's back is called the _____.

- A) embryonal tube
- B) neural tube
- C) anacephal tube

D) fetal tube

154) The generation of new neurons that begins to take place in the fifth prenatal week and occurs throughout pregnancy is called

- A) neurogenesis.
- B) neuronal migration.
- C) neuronal connectivity.
- D) neural revitalization.

155) Cells moving outward from their original point to their appropriate locations and creating different levels, structures, and regions of the brain is called

- A) neurogenesis.
- B) neuronal migration.
- C) neuronal connectivity.
- D) neural revitalization.

156) Neural connectivity begins at around the

- A) 20th prenatal week.
- B) 23rd prenatal week.
- C) 26th prenatal week.
- D) 29th prenatal week.

157) _____ and _____ are the two birth defects that occur when the neural tube fails to close 27 days after conception.

- A) Down syndrome; Tay-Sachs disease
- B) Trisomy 13; trisomy 18
- C) Spina bifida; anencephaly
- D) ADHD; autism

158) Sophia has just learned that she is pregnant. Her doctor advises a change in her diet to avoid any potential neural tube defects. Which of the following does her doctor recommend?

- A) consuming food rich in vitamin C
- B) consuming adequate amounts of the B vitamin folic acid
- C) consuming additional calcium supplements
- D) consuming additional iron supplements

159) Which of the following statements best distinguishes neurogenesis from neuronal migration?

- A) Neurogenesis refers to the closure of the neural tube 27 days after conception, whereas neuronal migration refers to the formation of the neural tube 18 days after conception.
- B) Neurogenesis is the occurrence of connections between neurons postnatally, whereas neuronal migration is the formation of the blastocyst and trophoblast.
- C) Neurogenesis occurs 24-30 hours after fertilization, whereas neuronal migration occurs during the first two weeks after conception.
- D) Neurogenesis refers to the formation of new neurons, whereas neuronal migration refers to the movement of cells outward to create the different levels, structures, and regions of the brain.

160) Sarah is a 20-year-old college student who is paralyzed from the waist down. She can walk with difficulty using crutches but prefers her wheelchair. Sarah's condition is due to a birth defect that occurs when the neural tube fails to close during gestation. Which of the following birth defects does Sarah most likely have?

- A) anencephaly
- B) neuronal migration
- C) multiple sclerosis
- D) spina bifida

161) Which of the following statements is true of neuronal migration?

- A) It results in the closure of the neural tube 27 days after conception.
- B) It causes birth defects such as anencephaly and spina bifida.
- C) At its peak, close to 200,000 neurons are generated every minute.
- D) It occurs 6 to 24 weeks after conception.

162) "Teratogen" comes from the Greek word "tera," which means _____.

- A) deformed
- B) monster
- C) earth
- D) evil

163) A teratogen is any agent that can cause

- A) organogenesis.
- B) birth defects.
- C) fetal movement.
- D) maternal back pain.

164) Which of the following statements is true of the impact of teratogens?

- A) Very few fetuses are exposed to teratogens, so it is easy to determine which teratogen causes which defect.
- B) Fetuses are safe from the effects of teratogens during the first trimester.
- C) Teratogens cause anatomical defects only after organogenesis is complete.
- D) Exposure to teratogens does more damage when it occurs at some points in development than at others.

165) During which period of development is the unborn baby most at risk of developing a structural defect due to the effects of a teratogen?

- A) at conception
- B) during the germinal period
- C) during the embryonic period
- D) during the fetal period

166) _____ act on the nervous system to alter states of consciousness, modify perceptions, and change moods.

- A) Antiemetics
- B) Biofeedback therapies
- C) Antihypertensives
- D) Psychoactive drugs

167) Which of the following is advised for pregnant women by the U.S. Food and Drug Administration?

- A) Pregnant women should not consume caffeine or consume it only sparingly.
- B) Pregnant women can consume as much caffeine as they want in chocolate but not in coffee.
- C) Pregnant women can safely drink three cups of coffee each day after the third month of pregnancy.
- D) Pregnant women should not consume caffeine in soda or tea but can consume caffeine safely through coffee.

168) Which of the following is the U.S. Surgeon General's recommendation regarding alcohol intake during pregnancy?

- A) It is wise to consume alcohol in moderation at the time of conception.
- B) One or two servings of beer or wine a few days a week can have positive effects on the fetus.
- C) No alcohol should be consumed during pregnancy.
- D) One or two servings of hard liquor a few days a week can have positive effects on the fetus.

169) Jessica is a 25-year-old woman who often drinks alcohol. Now that she is pregnant, her doctor has advised her to avoid alcohol as it has been proven to cause abnormalities in the offspring. According to recent research, which of the following is a known abnormality?

- A) lower birth weight
- B) withdrawal symptoms
- C) lower quality of reflexes at one month of age
- D) facial deformities

170) Kate is addicted to smoking. Even though her doctor advises her to quit smoking during her pregnancy, she continues smoking. Which of the following is a possible consequence of her action?

- A) Her baby will suffer from attention deficit hyperactivity disorder.
- B) Her baby will have higher than average birth weight.
- C) Her baby will suffer from autism.
- D) Her baby will suffer from schizophrenia.

171) Alicia is pregnant and is a heavy smoker. Which of the following risks does her baby face?

- A) facial and limb deformities
- B) sudden infant death syndrome
- C) cognitive defects
- D) tremors and increased general irritability

172) According to research, which of the following risks is linked to environmental tobacco smoke?

- A) reduced head circumference in newborns
- B) withdrawal symptoms in newborns
- C) lower quality of reflexes at one month of age in newborns
- D) impaired connectivity of the thalamus and prefrontal cortex in newborns

173) Prenatal cocaine exposure has been linked to

- A) decreased blood pressure at nine years of age.
- B) impaired language development and information processing.
- C) increased head circumference at birth.
- D) quicker motor development at two years of age.

174) Which of the following statements is true of cocaine use during pregnancy?

- A) Cocaine quickly crosses the placenta to reach the fetus.
- B) Cocaine is broken down in the mother's bloodstream before it can reach the fetus.
- C) Cocaine molecules are too large to pass through the placenta.
- D) Cocaine exposure during prenatal development has no negative effects on the fetus.

175) Sammy is conducting a seminar on the effects of cocaine use by pregnant women. Which of the following statements, if true, would she focus on during her seminar?

- A) Cocaine exposure during prenatal development is associated with increased birth weight.
- B) Prenatal cocaine exposure has been linked to higher arousal.
- C) Cocaine exposure during prenatal development is associated with reduced length and head circumference.
- D) Children born to cocaine users exhibit higher quality of reflexes at one month of age.

176) Which of the following statements is true of the effect of substance abuse by pregnant mothers?

- A) Infants whose mothers are addicted to heroin show several behavioral difficulties at birth, including withdrawal symptoms.
- B) Prenatal marijuana exposure is related to higher intelligence in children.
- C) Cocaine exposure during prenatal development is linked to low blood pressure of the child at nine years of age.
- D) Maternal smoking is linked to enhanced ovarian functioning in female offspring.

177) Which of the following statements is true of the effects of marijuana exposure on one's offspring?

- A) Research has concluded that marijuana use by pregnant women is associated with facial deformities in their offspring.
- B) Research has indicated that mothers who use marijuana while pregnant have a higher risk of having a child who develops depression by age 10.
- C) Research has shown that offspring exposed to marijuana prenatally tended to use marijuana by age 14.
- D) Research has concluded that controlled doses of marijuana are associated with increased memory in the developing offspring.

178) Janis, a 30-year-old woman, has been in and out of drug rehabilitation programs several times over the last few years. Recently, she gave birth to a baby girl. The doctor noticed that the infant showed symptoms of tremors, irritability, abnormal crying, disturbed sleep, and impaired motor control. The doctor diagnosed these withdrawal symptoms as the effects of a drug to which Janis was addicted. Identify the drug.

- A) methamphetamine
- B) nicotine
- C) marijuana
- D) heroin

179) The doctor warned Selena, a 30-year-old pregnant woman, that using methadone for her treatment will result in severe consequences. Why is Selena considering methadone for her treatment, and what is the consequence of using this drug?

- A) Selena is addicted to alcohol. Methadone is a common treatment for alcohol addiction but is known to cause very low birth weight in newborns.
- B) Selena is addicted to heroin. Methadone is a common treatment for heroin addiction but is known to cause very severe withdrawal symptoms in newborns.
- C) Selena is addicted to smoking. Methadone is a common treatment for nicotine addiction but is known to cause lower intelligence in children.
- D) Selena is addicted to marijuana. Methadone is a common treatment for marijuana addiction but is known to cause lower quality of reflexes at one month of age.

180) Rubella, also known as German measles, is a maternal disease that can cause prenatal defects. Identify the most common fetal and neonatal outcome of this disease.

- A) microcephaly
- B) eye lesions
- C) stillbirth
- D) skin lesions

181) Zia is pregnant and has a disease that, if untreated, may result in eye and skin lesions in her baby. Which of the following diseases does Zia have?

- A) genital warts
- B) syphilis
- C) rubella
- D) hepatitis C

182) During delivery, which of the following diseases is transmitted to a newborn through the birth canal?

- A) diabetes
- B) west Nile virus
- C) rubella
- D) genital herpes

183) Sylvia is almost nine months pregnant and is very close to her delivery date. The doctors have found that she has an active case of genital herpes. Which of the following is the best

course of action to prevent Sylvia's baby from contracting the disease?

- A) performing a cesarean section
- B) terminating the pregnancy
- C) delivering the baby through the birth canal
- D) giving the baby blood transfusions

184) Megan and Kate are studying nursing, having chosen obstetrics as their elective. They are having a discussion on the causes and effects of genital herpes on a newborn baby. Megan thinks that the newborn will contract the virus while still in the mother's uterus. However, Kate who is more familiar with the infection, thinks otherwise. Which of the following statements supports Kate's views?

- A) Newborns contract the virus during gestation across the placenta.
- B) Newborns contract the virus when they are delivered through the birth canal of a mother with the infection.
- C) Newborns contract the virus when they are breast-fed by a mother who has the infection.
- D) Newborns have the virus in their blood, but the symptoms only show up once they are born.

185) Bella contracted a sexually transmitted infection from her partner a couple of years ago. When she became pregnant, her doctor advised her to avoid breast-feeding her baby once born, as the baby could contract the infection from her. Which of the following maternal diseases did Bella have?

- A) rubella
- B) syphilis
- C) genital herpes
- D) AIDS

186) Which of the following statements is true of babies born to HIV-infected mothers?

- A) Babies can contract HIV during sperm/egg adhesion in the fertilization process.
- B) All babies born to HIV-infected mothers are infected with HIV.
- C) Babies born to HIV-infected mothers can be infected but asymptomatic.
- D) Babies seldom contract HIV through breast feeding by an infected mother.

187) Marlana, who just found out she is pregnant, has very poor eating habits. Her total calorie intake is very low. She eats little protein and unbalanced amounts of vitamins and minerals. If she continues her present eating habits, which of the following is most likely to occur?

- A) The baby will not be affected.
- B) The baby will develop Down syndrome.
- C) The baby is more likely to be malformed.
- D) The baby is more likely to have severe withdrawal symptoms.

188) Priscilla just found out she is pregnant, and her doctor prescribed her a B-complex vitamin that promotes normal prenatal development and reduces the risk of preterm deliveries. Which of the following is the vitamin prescribed by Priscilla's doctor?

- A) thiamine
- B) riboflavin
- C) pantothenic acid
- D) folic acid

189) The lack of _____ in maternal nutrition has been associated with neural tube defects in offspring.

- A) vitamin C
- B) folic acid
- C) ferrous sulfate
- D) vitamin E

190) Identify the age group of women who are least likely to obtain prenatal care.

- A) late twenties
- B) early thirties
- C) adolescence
- D) early forties

191) Which maternal age group has increased risk of low birth weight, preterm delivery, and fetal death?

- A) eighteen years or younger
- B) between 18 and 25 years
- C) between 25 and 30 years
- D) thirty-five years and older

192) Susan is trying to conceive. She has been advised by her doctor that because of her age she should be prepared for adverse perinatal outcomes including spontaneous abortion, preterm birth, stillbirth, and fetal growth restriction. Which of the following age groups does she belong to?

- A) eighteen years or younger
- B) between 18 and 25 years
- C) between 35 and 39 years
- D) forty years and older

193) Before the delivery of her baby, Karen experiences several traumatic life changes. She separates from her husband, discovers that her mother is seriously ill, and begins a more stressful job. Will Karen's baby be significantly affected by all the stress in Karen's life?

- A) Yes, the baby will develop good coping skills.
- B) No, fetuses are not significantly affected by the mother's emotional stress.
- C) No, any effects on the fetus will be temporary and will not produce lasting problems.
- D) Yes, the baby will be at risk for attention deficit hyperactivity disorder (ADHD) and language delay.

194) Julianne lost her baby early in her pregnancy. Which of the following paternal factors could

have possibly led to this outcome?

- A) Her partner was overweight.
- B) Her partner was a heavy smoker, even during her pregnancy.
- C) Her partner is deficient in vitamin C.
- D) Her partner was undergoing severe emotional stress during her pregnancy.

195) Carla's husband was 50 years of age when she became pregnant. Studies have shown that this paternal factor is connected to

- A) increased risk of autism and schizophrenia in the baby.
- B) increased success of in vitro fertilization.
- C) increased risk of childhood cancer.
- D) increased cardiac malfunction in the fetus.

196) CenteringPregnancy is an innovative prenatal care program in the United States that provides complete prenatal care

- A) in individual homes.
- B) in rural clinical settings.
- C) in group settings.
- D) to low-income women only.

197) _____ replaces traditional 15-minute physician visits with 90-minute peer group support settings and self-examination led by a physician or certified nurse-midwife.

- A) CenteringPregnancy
- B) The use of doulas
- C) The use of professional midwives
- D) Nurse Family Partnership

198) According to a recent study, which of the following observations was made about women who participated in the CenteringPregnancy program?

- A) More women felt secure without the aid of midwives.
- B) Many women reported feeling more stressed after a session.
- C) Women had higher breast-feeding rates.
- D) Low-income women benefited less from the program.

199) Angela is 30 weeks pregnant. Since her due date is approaching, she is looking for a caregiver who will provide her with continuous physical, emotional, and educational support before, during, and after childbirth. Which of the following terms refers to this kind of caregiver?

- A) doula
- B) midwife
- C) pregnancy preparation specialist
- D) healer

200) Which of the following statements is true of the birth process?

- A) The birth process occurs in three stages.

- B) The final stage terminates when the baby completely emerges from the mother's body.
- C) Afterbirth is the second stage of the birth process.
- D) The final stage is the longest stage lasting approximately 45 minutes.

201) By the end of the _____, contractions dilate the cervix to an opening of about 10 centimeters (four inches), so that the baby can move from the uterus to the birth canal.

- A) second trimester
- B) second birth stage
- C) third trimester
- D) first birth stage

202) The second stage of childbirth begins with the _____ and ends with the _____.

- A) emergence of the child's head; delivery of the placenta
- B) opening of the cervix; delivery of the child
- C) emergence of the child's head; delivery of the child
- D) opening of the cervix; delivery of the placenta

203) Which of the following statements is true of the third stage of the birth process?

- A) The placenta, umbilical cord, and other membranes are detached and expelled.
- B) It is the longest stage in the birth process.
- C) It involves complete delivery of the child.
- D) The third stage usually begins when the baby's head starts to move through the cervix and the birth canal.

204) Natasha is entering the third stage of childbirth, also known as the _____ stage.

- A) postpartum
- B) umbilical procedure
- C) afterbirth
- D) detachment

205) _____ is the shortest of the three birth stages.

- A) Involution
- B) Afterbirth
- C) Implantation
- D) Waterbirth

206) Which of the following is true of the stages of childbirth?

- A) The first stage terminates when the baby completely emerges from the mother's body.
- B) Uterine contractions start in the final stage of the birth process.
- C) The first stage is the longest of the three birth stages.
- D) The first stage of birth is longer for a woman who is having her second or third child.

207) Gisela is having her first baby and has received a drug that will numb the entire lower area

of her body during labor. Gisela has been given

- A) an epidural block.
- B) oxytocin.
- C) an analgesic.
- D) a hormone.

208) French obstetrician Ferdinand Lamaze developed a method similar to natural childbirth that is known as

- A) induced childbirth.
- B) prepared childbirth.
- C) simulated delivery.
- D) organic delivery.

209) Which of the following is a conclusion drawn by the current proponents of prepared childbirth methods?

- A) Midwifery is the most important support required during pregnancy and childbirth.
- B) When information and support are provided, women know how to give birth.
- C) Medication should be totally avoided during pregnancy.
- D) Natural childbirth methods are superior to aided methods or cesarean sections.

210) The _____ position refers to the baby's position in the uterus that causes the buttocks to be the first part to emerge from the vagina.

- A) fetal
- B) breech
- C) asynclitic
- D) standard

211) Which of the following techniques is used to overcome the threat of problems related to the breech position during delivery?

- A) massage therapy
- B) music therapy
- C) acupuncture
- D) cesarean section

212) Which of the following is a threat to the infant caused by the breech position?

- A) bone malformation
- B) down syndrome
- C) respiratory problems
- D) spina bifida

213) Brenda's baby was born just minutes ago, and the doctor is checking the baby's heart rate, respiratory effort, body color, reflex irritability, and muscle tone. Brenda's baby is being tested with the

- A) Apgar Scale.
- B) preterm outcome test.
- C) Rogers-Randall Assessment.
- D) Brazelton Neonatal Behavioral Assessment Scale.

214) Helen is using nonmedical techniques for pain management during labor; she has someone insert fine needles into specific locations of her body. She is most likely using _____.

- A) acupressure
- B) acupuncture
- C) aromatherapy
- D) allostatics

215) What is the rationale for the practice of waterbirth?

- A) Water pressure reduces the strain of contractions.
- B) It creates an environment similar to that inside the amniotic sac.
- C) Getting into water speeds up the labor process.
- D) Water makes the contractions more intense.

216) Which of the following statements is true of the condition of a newborn infant based on the Apgar Scale reading?

- A) A total score of four and below is considered normal and indicates that the baby is healthy.
- B) A total score of one to three indicates that the risk of developing attention deficit hyperactivity disorder (ADHD) in childhood is absent.
- C) A total score of seven to ten indicates that the newborn's condition is good.
- D) A total score of five and above indicates an emergency and that the baby may not survive.

217) The Apgar Scale is a method used to assess the health of newborns. A score of three would indicate

- A) that the newborn's condition is good.
- B) that there may be some developmental difficulties.
- C) an emergency because the baby's survival is in doubt.
- D) that the evaluator has not made a proper reading.

218) In assessing the health of newborns, the _____ identifies high-risk infants who need resuscitation.

- A) Rogers-Randall Assessment
- B) Brazelton Neonatal Behavioral Assessment Scale
- C) Wechsler Infant Intelligence Scale
- D) Apgar Scale

219) Which of the following is evaluated by the Apgar Scale?

- A) the newborn's kidney function
- B) the newborn's birth weight
- C) the newborn's height
- D) the newborn's heart rate

220) The Apgar Scale is especially good at determining

- A) the severity of limb deformities of the newborn.
- B) the newborn's susceptibility to common postnatal complications.
- C) the newborn's ability to cope with the stress of delivery.
- D) the newborn's lactose tolerance.

221) Dakota was born after 40 weeks of gestation and weighed four pounds. Dakota would be considered

- A) a preterm baby.
- B) a premature baby.
- C) to have a low birth weight.
- D) normal and average for babies born today.

222) Malorie was born during her mother's 32nd week of pregnancy. Malorie would be termed a(n) _____ baby.

- A) preterm
- B) aged
- C) average
- D) normal

223) Juan-Carlos was born full term but was underweight for his gestational age. He would be considered

- A) preterm.
- B) premature.
- C) normal.
- D) small for date.

224) Which of the following statements is true of the different conditions that pose threats for newborns?

- A) Small for date infants weigh less than five and a half pounds at birth.
- B) Low birth weight babies weigh between six and seven pounds.
- C) Small for date infants have below normal weight when the length of the pregnancy is considered.
- D) Low birth weight babies weigh less than 90 percent of all babies of the same gestational age.

225) Sandra's baby was born at 27 weeks. Her baby is considered a(n)

- A) very preterm infant.
- B) moderately preterm infant.
- C) mildly preterm infant.
- D) extremely preterm infant.

226) Two increasingly used interventions in the neonatal intensive care unit (NICU) are _____ and _____.

- A) bottle feeding; music therapy
- B) massage therapy; kangaroo care
- C) breast feeding; antenatal steroids

D) bottle feeding; kangaroo care

227) When the _____ is delivered, estrogen and progesterone levels drop steeply and remain low until the ovaries start producing hormones again.

- A) baby
- B) placenta
- C) embryo
- D) blastocyst

228) Mariah has given birth to a baby girl. One month after delivery, she is still experiencing very strong feelings of sadness and anxiety. She is so morose that she is having trouble coping with daily tasks. Mariah is most likely suffering from

- A) posttraumatic stress disorder.
- B) postpartum blues.
- C) paranoid schizophrenia.
- D) postpartum depression.

229) Michael and Jessica are having their first child and have told their physician they would like a rooming-in arrangement. This means that

- A) Michael can stay overnight in Jessica's room.
- B) Jessica's hospital room will be more like a nursery.
- C) Jessica's baby will stay in her room most of the time during its hospital stay.
- D) Jessica will stay in the hospital for the first two months after pregnancy.

230) Identify the period of prenatal development that occurs two to eight weeks after conception. During this time, the rate of cell differentiation intensifies, support systems for the cells form, and organs appear.

231) Candice is studying the anatomy of the female reproductive system and the prenatal developmental stages. She reads about a disk-shaped group of tissues and small blood vessels from the mother and the offspring that intertwine. This part acts like the life-support system of the embryo. Identify this part.

232) Sergio's wife is pregnant, but he smokes all the time inside the house. Cigarette smoke has been known to cause birth defects and negatively alter cognitive and behavioral outcomes in unborn babies. Sergio is exposing his child to which type of agent?

233) Justus and Rochelle are taking prenatal classes that involve a special breathing technique to control pushing in the final stages of labor and a detailed anatomy and physiology course. On which obstetrician's work is this method based?

234) Veronica is one week from her due date when her doctor tells her that the baby hasn't turned yet, meaning he is in the _____.

235) Tadi lives in a community where women generally keep preterm babies close for skin-to-skin contact. This is called _____ in the U.S.

236) Identify the formation of a close connection, especially a physical bond, between parents and their newborn in the period shortly after birth.

237) Victoria delivered a healthy baby girl a week ago. Since then, Victoria has not been herself. She was active during her pregnancy. However, she now tends to cry for the slightest reasons. She has distanced herself from her family and friends. She stays in her room all day and refuses to meet anyone. She feels lonely and sad, despite her family being around her. Identify the condition Victoria has developed.

238) Gertrude, an obstetrician, usually recommends that newborns be kept with their mothers in the same room during their stay at the hospital. Identify the term used to describe this arrangement.

239) Describe the three main periods of prenatal development, and the major steps for developing into a person for each stage.

240) Explain the four important phases of brain development.

241) Define a teratogen, and illustrate your answer with an example. List at least six teratogens one should avoid during pregnancy.

242) How can maternal obesity negatively impact pregnancy outcomes for the mother and the child?

243) Xiomara is considering hiring a doula to help with childbirth. Who are doulas, and how are they different from midwives?

244) Name three different types of drugs that are used during labor. Illustrate your answer with examples.

245) Naia's doctor has told her that because her baby has not turned, he would like to perform a cesarean delivery. What can Naia expect to happen?

246) Bronwyn is interested in using nonmedical techniques to assist her in dealing with pain during childbirth. Based on the text and class discussion, what are the two best options available to her and why?

247) Briefly describe postpartum depression. What are some of the symptoms that distinguish it from a more typical case of baby blues? Based on the text and class, what would you consider the two effective treatment methods for postpartum depression?

- 248) What is bonding, and why do some hospitals deter bonding?
- 249) Describe the rooming-in arrangement provided by hospitals. If parents do not opt for this arrangement, does this have an impact on the baby?
- 250) What is the behavior that promotes an organism's survival in its natural habitat?
- 251) What is the psychological perspective that emphasizes the importance of adaptation, reproduction, and "survival of the fittest" in shaping human behavior?
- 252) What is the complex molecule that has a double helix shape and contains genetic information?
- 253) What are the short segments of DNA that are located on the chromosomes and considered to be the basic units of hereditary information?
- 254) Cell division occurs in the eggs and sperms. A cell duplicates its chromosomes and divides twice. This leads to the formation of four cells that contain only half of the genetic material of the parent cell. What is this process called?
- 255) During the early stages of a pregnancy, a single zygote splits into two genetically identical replicas. The genetically identical replicas of the single zygote indicate that the pregnant person will have _____ twins.
- 256) Xiomarra is tall with dark curly hair and brown eyes. She is outgoing and friendly. The way that Xiomarra's genotype is expressed in these observable characteristics is referred to as her _____.
- 257) Sherry, a 3-year-old, has an extra copy of chromosome 21. She is often made fun of by other children because of her unusual looks; she has a round face and her skull is flat. She has a protruding tongue, and she finds it difficult to play because of her short limbs. Her parents find that her mental abilities are impaired when compared with other children her age. Sherry is most likely suffering from a chromosomal abnormality called _____.
- 258) Violet, who is in the 11th week of pregnancy, is undergoing a prenatal medical procedure to detect genetic defects and chromosomal abnormalities in the fetus. During the procedure, her obstetrician removes a small sample of the placenta for analysis. Name the prenatal medical procedure that Violet is undergoing.
- 259) Name a prenatal medical procedure in which a sample of amniotic fluid is withdrawn by a syringe and tested for chromosomal or metabolic disorders.
- 260) Yelena is an outgoing person; therefore, people naturally tend to like her and find her personable. According to Scarr-McCartney, which genotype-environment interaction does this best represent?

- 261) Deshawn believes that development is the result of an ongoing, bidirectional interchange between heredity and environment. He has most likely adopted which theoretical perspective?
- 262) Explain the genome-wide association method, and how it has been used to help identify genetic variations of diseases.
- 263) List the four genetic principles. In your opinion, which do you think is the most serious, and why?
- 264) List four sex-linked chromosomal abnormalities.
- 265) List five gene-linked abnormalities.
- 266) Name and describe three prenatal diagnostic tests.
- 267) What are some of the possible causes of infertility in women and men? Name two strategies that can be used to overcome infertility.
- 268) Identify and describe the two common studies used by behavior geneticists to investigate the influence of heredity on behavior.
- 269) What are the three ways that heredity and environment are correlated as described by behavior geneticist Sandra Scarr?
- 270) Assume that in the case study of the Jim and Jim twins, it was found that their similar development trajectories were a result of similar temperament and interests, which caused them to seek out similar environments that were compatible and stimulating to them. Which heredity-environment correlation is reflected in this scenario?
- 271) Define gene $\times$ environment ($G \times E$) interaction. Give an example of a study (either your own or one from the book) that could illustrate the interaction between genes and the environment.