# TOTAL ASSESSMENT GUIDE

### Chapter 2 Genetics, Prenatal Development, and Birth

Topic		Factual	Conceptual	Applied
LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment.	Multiple Choice	1-11	12	
	True/False			
	Essay			
LO 2.2: Compare monozygotic twins with dizygotic twins.	Multiple Choice	13, 16, 18-19	15	14, 17
	True/False			
	Essay			
LO 2.3: Describe how	Multiple Choice	20-22		
the sex of a child is determined.	True/False	179		
	Essay	212		
LO 2.4: Explain the	Multiple Choice	23-27, 29-33		28
mechanisms by which	True/False	180-185		
genes transmit information.	Essay			
LO 2.5: Describe the	Multiple Choice	34		
field of behavioral	True/False	186-189		
genetics.	Essay			
LO 2.6: Describe the major inherited disorders.	Multiple Choice	35, 41		36-40
	True/False	190	191	
	Essay	213-214		
LO 2.7: Describe the role	Multiple Choice	42-44, 46-53		45
of genetic counselors and	True/False	192-193		
differentiate between	Essay			
different forms of prenatal testing.				
LO 2.8: Explain how the environment and	Multiple Choice	54-55		
	True/False	196-197	194-195	
genetics work together to	Essay			
determine human	· · · · · · · · · · · · · · · · · · ·			
characteristics.	Maltinla Classic		50	
LO 2.9: Summarize the methods by which researchers study the	Multiple Choice	100.100	56	
	True/False	198-199	200	
interaction of genetic	Essay			
and environmental				
factors in development.				



# Chapter 2 Genetics, Prenatal Development, and Birth

Topic		Factual	Conceptual	Applied
LO 2.10: Examine how genetics and the	Multiple Choice	57-60		
	True/False	201-206		
environment jointly	Essay			
influence physical traits, intelligence, and				
personality.				
LO 2.11: Describe ways	Multiple Choice	61-64		207
in which genes influence	-			
the environment.	True/False			
	Essay			
LO 2.12: Describe the	Multiple Choice			
process of fertilization.	True/False			
-	Essay			
LO 2.13: Summarize the	Multiple Choice	65-72, 74-80, 82-84	73, 81	
three stages of prenatal	True/False			
development.	Essay			
LO 2.14: Describe major	Multiple Choice	85-89, 91-94		90
physical and ethical challenges that relate to pregnancy.	True/False			
	Essay			
LO 2.15: Analyze threats	Multiple Choice	95-105, 107-109, 111-		106, 110, 113
to the fetal environment,	-	112, 114-116		
and explain what can be	True/False	208-211		
done about them.	Essay	215		
LO 2.16: Describe the	Multiple Choice	117-118, 120-129		119
normal process of labor.	True/False			
	Essay			
LO 2.17: Describe the process of birth and	Multiple Choice	130-132, 134, 137- 138, 140	133, 135-136	139
analyze current approaches to childbirth.	True/False	100,110		
	Essay			
LO 2.18: Recognize	Multiple Choice	143-145, 147-149,	142, 146, 157	141, 150, 153, 155
threats and	r r	151-152, 154, 156,	, , ,	,,,
complications that may		158-164		
accompany childbirth, and explain how they can be addressed.	True/False			
	Essay			



# **Chapter 2** Genetics, Prenatal Development, and Birth

P				
Topic		Factual	Conceptual	Applied
LO 2.19: Describe the	Multiple Choice	165-171, 173-174	172	
process of Cesarean	True/False			
delivery, and explain	Essay			
why its use is increasing.	-			
LO 2.20: Describe infant	Multiple Choice	175-178		
mortality rates, and				
explain factors that affect those rates.	True/False			
	Essay			

### Chapter 2

#### Genetics, Prenatal Development, and Birth

### **MULTIPLE CHOICE**

2-1. Male and female reproductive cells are also known as

- a) gametes.
- b) zygotes.
- c) genes.
- d) chromosomes.

Answer: A Difficulty: Medium Page: 42 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-2. The blueprints for creating a person are stored and communicated in our

- a) zygotes.
- b) genes.
- c) gametes.
- d) ovum.

Answer: B Difficulty: Easy Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember 2-3 All genes are composed of specific sequences of \_\_\_\_\_ molecules.

- a) DNA
- b) zygote
- c) ovum
- d) sperm

Answer: A Difficulty: Medium Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-4. Humans have about \_\_\_\_\_ genes.

a) 50,000
b) 25,000
c) 100,000
d) 10,000

Answer: B Difficulty: Difficult Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-5. Specific \_\_\_\_\_\_ determine the nature and function of every cell in the body.

- a) chromosomes
- b) gametes
- c) zygotes
- d) genes

Answer: D Difficulty: Difficult Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember 2-6. What is the name of the rod-shaped portions of DNA that are organized in 23 pairs?

- a) genes
- b) gametes
- c) chromosomes
- d) ovum

Answer: C Difficulty: Easy Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-7. Genes are arranged in specific locations and in a specific order along \_\_\_\_\_ different chromosomes.

a) 52
b) 21
c) 46
d) 54

Answer: C Difficulty: Difficult Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-8. Rod-shaped portions of DNA called chromosomes are organized in \_\_\_\_\_ pairs.

a) 52
b) 23
c) 46
d) 54

Answer: B Difficulty: Medium Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember 2-9. The \_\_\_\_\_ chromosomes in a new zygote contain the genetic blueprint that will guide cell activity for the rest of the individual's life.

a) 52

- b) 46
- c) 54
- d) 32

Answer: B Difficulty: Difficult Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-10. The process of \_\_\_\_\_\_ accounts for the replication of most types of cells, so nearly all the cells of the body will contain the same 46 chromosomes as the zygote.

- a) meiosis
- b) cell division
- c) mitosis
- d) reproduction

Answer: C

Difficulty: Difficult

Page: 43

Skill: Factual

LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember

2-11. When gametes are formed in the human body, this is called

- a) division.
- b) meiosis.
- c) mitosis.
- d) genetic instruction.

Answer: B Difficulty: Difficult Page: 43 Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Remember 2-12. The ultimate outcome of meiosis, in combination with other processes, is tens of \_\_\_\_\_\_ of genetic combinations.

- a) billions
- b) millions
- c) thousands
- d) trillions

Answer: D Difficulty: Difficult Page: 43 Skill: Conceptual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment. Bloom's Taxonomy Level: Understand

2-13. Twins who are genetically identical are called \_\_\_\_\_\_ twins.

- a) gamete
- b) monozygotic
- c) dizygotic
- d) zygote

Answer: B Difficulty: Easy Page: 43 Skill: Factual LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Remember

2-14. Jason and Justin are twins and are genetically identical. They are \_\_\_\_\_\_ twins.

- a) gamete
- b) dizygotic
- c) monozygotic
- d) zygote

Answer: C Difficulty: Easy Page: 43 Skill: Applied LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Apply 2-15. Any differences in future development of monozygotic twins can be attributed only to \_\_\_\_\_\_ factors.

- a) genetic
- b) chromosome
- c) environmental
- d) DNA

Answer: C Difficulty: Medium Page: 43 Skill: Conceptual LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Understand

2-16. Twins who are produced when two separate ova are fertilized by two separate sperm at roughly the same time are called \_\_\_\_\_\_ twins.

- a) dizygotic
- b) monozygotic
- c) gametic
- d) identical

Answer: A Difficulty: Difficult Page: 43 Skill: Factual LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Remember

2-17. Evan and Evelyn are twins but are not genetically identical. They are \_\_\_\_\_\_twins.

- a) gamete
- b) dizygotic
- c) monozygotic
- d) zygote

Answer: B Difficulty: Medium Page: 43 Skill: Applied LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Apply 2-18. \_\_\_\_\_\_ twins are no more genetically similar than two siblings born at different times.

- a) Dizygotic
- b) Monozygotic
- c) Gamete
- d) Zygotic

Answer: A Difficulty: Difficult Page: 43 Skill: Factual LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Remember

2-19. Multiple births have \_\_\_\_\_\_ in the last 25 years due to fertility drugs and the rising average age of mothers giving birth.

- a) decreased
- b) remained the same
- c) increased
- d) varied up and down

Answer: C Difficulty: Medium Page: 44 Skill: Factual LO 2.2: Compare monozygotic twins with dizygotic twins. Bloom's Taxonomy Level: Remember

2-20. The 23<sup>rd</sup> pair of chromosomes in males contains the \_\_\_\_\_- shaped chromosome.

a) XX
b) XY
c) YX
d) YY

Answer: B Difficulty: Easy Page: 44 Skill: Factual LO 2.3: Describe how the sex of a child is determined. Bloom's Taxonomy Level: Remember 2-21. If the child has a XX pairing on the 23<sup>rd</sup> chromosome, the child will be

- a) male.
- b) monozygotic.
- c) dizygotic.
- d) female.

Answer: D Difficulty: Easy Page: 44 Skill: Factual LO 2.3: Describe how the sex of a child is determined. Bloom's Taxonomy Level: Remember

2-22. The fact that the \_\_\_\_\_\_ determines the gender of the child is leading to the development of techniques that will allow parents to increase the chances of choosing the child's gender.

- a) woman's ovum
- b) man's sperm
- c) chromosome type
- d) chromosome similarity

Answer: B Difficulty: Medium Page: 45 Skill: Factual LO 2.3: Describe how the sex of a child is determined. Bloom's Taxonomy Level: Remember

2-23. The one trait that is expressed when two competing traits are present is called

- a) recessive.
- b) genotype.
- c) dominant.
- d) phenotype.

Answer: C Difficulty: Medium Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember 2-24. A trait within an organism that is present but not expressed is called

- a) dominant.
- b) a genotype.
- c) a phenotype.
- d) recessive.

Answer: D Difficulty: Easy Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-25. An observable trait is labeled

- a) polygenic.
- b) recessive.
- c) a genotype.
- d) a phenotype.

Answer: D Difficulty: Medium Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-26. The underlying combination of genetic material that is present but not outwardly visible in an organism is called

- a) a genotype.
- b) a phenotype.
- c) dominant.
- d) polygenic.

Answer: A Difficulty: Difficult Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember 2-27. When a child inherits similar genes for a given trait from his/her parents, the child is said to be \_\_\_\_\_\_ for that trait.

- a) genotypical
- b) homozygous
- c) phenotypical
- d) heterozygous

Answer: B Difficulty: Difficult Page: 46 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-28. Eric has blue eyes. Since the gene for blue eyes is recessive, Eric must be \_\_\_\_\_\_ for that trait.

- a) genotypical
- b) homozygous
- c) phenotypical
- d) heterozygous

Answer: B Difficulty: Difficult Page: 46 Skill: Applied LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Apply

2-29. When a child receives different forms of a certain gene from his/her parents, he or she is said to be

- a) dominant.
- b) phenotypical.
- c) homozygous.
- d) heterozygous.

Answer: D Difficulty: Difficult Page: 46 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember 2-30. What is the name of the inherited disorder in which a child is unable to make use of an essential amino acid present in proteins found in milk and other foods, and which has the potential to cause brain damage and mental retardation?

- a) heterozygous
- b) phenylketonuria (PKU)
- c) homozygous
- d) chromosome deficiency

Answer: B Difficulty: Difficult Page: 46 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-31. In \_\_\_\_\_\_ inheritance, a combination of multiple gene pairs is responsible for the production of a particular trait.

- a) X-linked
- b) dizygotic
- c) polygenic
- d) heterozygous

Answer: C Difficulty: Easy Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-32. What type of gene is considered recessive and located only on the X chromosome?

- a) heterozygous
- b) X-linked
- c) homozygous
- d) recessive

Answer: B Difficulty: Easy Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember 2-33. Which of the following is a blood disorder produced by X-linked genes?

- a) rH incompatibility
- b) PKU
- c) polygenic inheritance
- d) hemophilia

Answer: D Difficulty: Difficult Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-34. What is the term applied to studying the effects of heredity on behavior?

- a) gene sequence
- b) mapping
- c) behavioral genetics
- d) human genome

Answer: C Difficulty: Easy Page: 47 Skill: Factual LO 2.5: Describe the field of behavioral genetics. Bloom's Taxonomy Level: Remember

2-35. Sometimes genes, for no known reason(s), change their form in a process called spontaneous

- a) acceleration.
- b) combustion.
- c) mutation.
- d) malformation.

Answer: C Difficulty: Medium Page: 48 Skill: Factual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Remember 2-36. Jose has an extra chromosome on the twenty-first pair of chromosomes. The disorder was once referred to as mongolism. This will cause him to have

- a) hemophilia.
- b) fragile X syndrome.
- c) sickle-cell anemia.
- d) Down syndrome.

Answer: D Difficulty: Easy Page: 48 Skill: Applied LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Apply

2-37. Sue has a disorder that is produced by an injury to a gene on the X chromosome, producing a mild to moderate mental retardation. She has

- a) Down syndrome.
- b) Tay-Sachs disease.
- c) fragile X syndrome.
- d) Klinefelter's syndrome.

Answer: C Difficulty: Medium Page: 48 Skill: Applied LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Apply

2-38. Toni has a blood disorder that gets its name from the shape of the red blood cells. She would be diagnosed with what disorder?

- a) sickle-cell anemia
- b) hemophilia
- c) Klinefelter's syndrome
- d) fragile X syndrome

Answer: A Difficulty: Easy Page: 48 Skill: Applied LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Apply 2-39. Tera has a disorder that is untreatable and produces blindness and muscle degeneration prior to death. Her diagnosis would be

- a) fragile X syndrome.
- b) Tay-Sachs disease.
- c) Klinefelter's syndrome.
- d) hemophilia.

Answer: B Difficulty: Difficult Page: 49 Skill: Applied LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Apply

2-40. Akili has the disorder that results from the presence of an extra X chromosome and produces underdeveloped genitals, extreme height, and enlarged breasts. She has

- a) Klinefelter's syndrome.
- b) Down syndrome.
- c) Tay-Sachs disease.
- d) fragile X syndrome.

Answer: A Difficulty: Difficult Page: 49 Skill: Applied LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Apply

2-41. Scientists have discovered that carrying the sickle-cell gene raises immunity to \_\_\_\_\_, which is a common disease in West Africa.

- a) hemophilia
- b) PKU
- c) malaria
- d) anemia

Answer: C Difficulty: Medium Page: 49 Skill: Factual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Remember 2-42. \_\_\_\_\_ counseling is the profession that focuses on helping people deal with issues relating to inherited disorders.

- a) Psychological
- b) Disorders
- c) Genetic
- d) Family

Answer: C Difficulty: Medium Page: 49 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-43. What is the process in which high-frequency sound waves scan the mother's womb to produce an image of the unborn baby, whose size and shape can then be assessed?

- a) first-trimester screen
- b) ultrasound sonography
- c) amniocentesis
- d) chorionic villus sampling (CVS)

Answer: B Difficulty: Medium Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember 2-44. What is the name of the earliest test administered to a pregnant woman, usually occurring in the 11<sup>th</sup> to 13<sup>th</sup> week of pregnancy, and which identifies chromosomal abnormalities and other disorders, such as heart problems?

- a) amniocentesis
- b) chorionic villus sampling (CVS)
- c) ultrasound sonography
- d) first-trimester screen

Answer: D Difficulty: Medium Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-45. Huela is pregnant and talks to her physician about assessing the health of her unborn child. The physician recommends a test, which combines a blood test and ultrasound sonography. Which procedure was recommended?

- a) amniocentesis
- b) sonogram
- c) first-trimester screen
- d) embryoscopy

Answer: C Difficulty: Difficult Page: 50 Skill: Applied LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Apply 2-46. What is used to find genetic defects and involves taking samples of hair-like material that surrounds the unborn baby?

- a) karyotype
- b) amniocentesis
- c) ultrasound sonography
- d) chorionic villus sampling (CVS)

Answer: D Difficulty: Difficult Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-47. What is the more invasive test that can be employed between the 8th and 11<sup>th</sup> weeks of pregnancy if blood tests and ultrasound have identified a potential problem or if there is a family history of inherited disorders?

- a) amniocentesis
- b) chorionic villus sampling (CVS)
- c) ultrasound sonography
- d) first-trimester screen

Answer: B Difficulty: Difficult Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember 2-48. What infrequently used test is most often performed between the 8<sup>th</sup> and 11<sup>th</sup> week of pregnancy but produces a risk of miscarriage of 1 in 100 to 1 in 200 pregnancies?

- a) amniocentesis
- b) ultrasound sonography
- c) chorionic villus sampling (CVS)
- d) first-trimester screen

Answer: C Difficulty: Difficult Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-49. Which procedure can identify a variety of genetic defects with nearly 100% accuracy?

- a) amniocentesis
- b) chorionic villus sampling (CVS)
- c) sonoembryology
- d) embryoscopy

Answer: A Difficulty: Difficult Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember 2-50. Name the process of identifying genetic defects by examining a small sample of fetal cells drawn by a needle inserted into the amniotic fluid surrounding the unborn fetus.

- a) amniocentesis
- b) karyotype
- c) ultrasound sonography
- d) chorionic villus sampling (CVS)

Answer: A Difficulty: Easy Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-51. Amniocentesis is carried out \_\_\_\_\_ weeks into the pregnancy.

a) 5-10
b) 10-15
c) 15-20
d) 20-25

Answer: C Difficulty: Difficult Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-52. Which test can be used to determine the sex of the child?

- a) preconception genetic screening
- b) amniocentesis
- c) chorionic villus sampling (CVS)
- d) first-trimester screen

Answer: B Difficulty: Medium Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember 2-53. Huntington's disease typically does not appear until people reach what age?

a) 50s

- b) 20s
- c) 70s
- d) 40s

Answer: D Difficulty: Medium Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-54. Patterns of arousal and emotionality that represent consistent and enduring characteristics in an individual are called

- a) genetics.
- b) genotype.
- c) temperament.
- d) phenotype.

Answer: C

Difficulty: Easy Page: 53 Skill: Factual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Remember 2-55. What term determines traits by a combination of both genetic and environmental factors, in which a genotype provides a range within which a phenotype may be expressed?

- a) multifactorial transmission
- b) inheritance
- c) natural selection
- d) role of environment

Answer: A Difficulty: Medium Page: 53 Skill: Factual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Remember

2-56. Nature has provided the potential to carry out various kinds of "natural experiments" in the form of

- a) genotypes.
- b) twins.
- c) phenotypes.
- d) genetics.

Answer: B Difficulty: Easy Page: 55 Skill: Conceptual LO 2.9: Summarize the methods by which researchers study the interaction of genetic and environmental factors in development. Bloom's Taxonomy Level: Understand 2-57. The closer the genetic link between two individuals, the greater the correspondence between their

- a) weight.
- b) blood pressure.
- c) overall IQ scores.
- d) respiration rate.

Answer: C Difficulty: Easy Page: 56 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-58. Which researcher argued that as much as 80% of intelligence is a result of heredity?

- a) Freud
- b) Erikson
- c) Scarr
- d) Jensen

Answer: D Difficulty: Difficult Page: 57 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-59. Which "Big Five" personality trait refers to the degree of emotional stability an individual characteristically displays?

- a) aggression
- b) neuroticism
- c) shyness
- d) fear

Answer: B Difficulty: Medium Page: 57 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember 2-60. Which "Big Five" personality trait refers to the degree to which a person seeks to be with others, to behave in an outgoing manner, and generally to be sociable?

- a) neuroticism
- b) gregarious
- c) social potency
- d) extroversion

Answer: D Difficulty: Medium Page: 57 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-61. What is the process by which a sperm and an ovum join to form a single new cell?

- a) fertilization
- b) sex
- c) germinal stage
- d) prenatal period

Answer: A Difficulty: Medium Page: 60 Skill: Factual LO 2.12: Describe the process of fertilization. Bloom's Taxonomy Level: Remember

2-62. Females are born with around \_\_\_\_\_ ova located in the two ovaries.

a) 500,000
b) 100,000
c) 1,000,000
d) 400,000

Answer: D Difficulty: Difficult Page: 60 Skill: Factual LO 2.12: Describe the process of fertilization. Bloom's Taxonomy Level: Remember 2-63. From puberty until menopause, a female will ovulate about every \_\_\_\_\_ days.

a) 42b) 28

- c) 15
- d) 60

Answer: B Difficulty: Easy Page: 60 Skill: Factual LO 2.12: Describe the process of fertilization. Bloom's Taxonomy Level: Remember

2-64. An adult male typically produces several \_\_\_\_\_ sperm a day.

- a) hundred thousand
- b) thousand
- c) hundred million
- d) million

Answer: C Difficulty: Difficult Page: 60 Skill: Factual LO 2.12: Describe the process of fertilization. Bloom's Taxonomy Level: Remember

2-65. Three days after fertilization, the organism consists of some \_\_\_\_\_ cells, and by the next day the number doubles.

a) 150 b) 32 c) 100 d) 64 Answer: B Difficulty: Difficult

Page: 60 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-66. The first, and the shortest, stage of the prenatal period is called the \_\_\_\_\_\_ stage.

- a) fetal
- b) germinal
- c) conceptual
- d) embryonic

Answer: B Difficulty: Medium Page: 60 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-67. During the germinal stage, the fertilized egg is now called a(n) \_\_\_\_\_\_, and travels toward the uterus where it becomes implanted in the uterus's wall.

- a) ovum
- b) sperm
- c) zygote
- d) blastocyst

Answer: D Difficulty: Medium Page: 60 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-68. A conduit between the mother and fetus, this organ provides nourishment and oxygen via the umbilical cord.

- a) amniotic sac
- b) ectoderm
- c) placenta
- d) endoderm

Answer: C Difficulty: Medium Page: 60 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-69. What is the name of the period from 2 to 8 weeks following fertilization during which significant growth occurs in the major organs and body systems?

- a) embryonic stage
- b) fetal stage
- c) fetus stage
- d) fertilization stage

Answer: A Difficulty: Medium Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-70. In the embryonic stage, what is the term for the outer layer that will form skin, hair, teeth, sense organs, the brain, and spinal cord?

- a) ectoderm
- b) placenta
- c) endoderm
- d) mesoderm

Answer: A Difficulty: Difficult Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-71. In the embryonic stage, what is the term for the inner layer that produces the digestive system, liver, pancreas, and respiratory system?

- a) ectoderm
- b) placenta
- c) endoderm
- d) mesoderm

Answer: C Difficulty: Difficult Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-72. In the embryonic stage, every part of the body is formed from one of \_\_\_\_\_ layers.

a) 5
b) 3
c) 8

d) 10

Answer: B Difficulty: Medium Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-73. One of the highlights of the \_\_\_\_\_\_ stage is the development of the major organs and basic anatomy.

- a) placenta
- b) germinal
- c) embryonic
- d) fetal

Answer: C Difficulty: Medium Page: 61 Skill: Conceptual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Understand

2-74. In the embryonic stage, what is the term for the layer that forms the muscles, bones, blood, and circulatory system?

- a) mesoderm
- b) ectoderm
- c) endoderm
- d) placenta

Answer: A Difficulty: Difficult Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-75. An 8-week-old embryo is only \_\_\_\_\_ inch(es) long with what appears to be gills and a tail-like structure, as well as rudimentary eyes, nose, lips, teeth, and stubby bulges that will form into arms and legs.

a) 5
b) 2
c) 10
d) 1

Answer: D Difficulty: Medium Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-76. In the embryonic stage, the brain begins to undergo rapid development, which causes the head to represent about \_\_\_\_\_ of the total length of the embryo.

- a) 25%
- b) 10%
- c) 50%
- d) 75%

Answer: C Difficulty: Difficult Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-77. In the embryonic stage, the nervous system begins to function around the \_\_\_\_\_ week, and weak brain waves begin to be produced.

a)  $2^{nd}$ b)  $5^{th}$ c)  $4^{th}$ d)  $8^{th}$ 

Answer: B Difficulty: Difficult Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-78. What is the stage that begins at about 8 weeks after conception and continues until birth?

- a) fertilization stage
- b) fetus stage
- c) embryonic stage
- d) fetal stage

Answer: D Difficulty: Medium Page: 31 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-79. What is the term for a developing child from 8 weeks after conception until birth?

- a) embryo
- b) baby
- c) fetus
- d) zygote

Answer: C Difficulty: Easy Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-80. It is not until the final period of prenatal development, the \_\_\_\_\_\_ stage, that the developing child becomes easily recognizable.

- a) embryonic
- b) germinal
- c) fetal
- d) birth

Answer: C Difficulty: Medium Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember 2-81. The \_\_\_\_\_\_ stage formally starts when the differentiation of the major organs has occurred.

- a) fetal
- b) embryonic
- c) germinal
- d) neonatal

Answer: A Difficulty: Difficult Page: 61 Skill: Conceptual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Understand

2-82. In which stage of development does the child undergo astoundingly rapid change, and increase some 20 times in size, including dramatic changes in proportion and weight?

- a) embryonic
- b) fetal
- c) germinal
- d) neonatal

Answer: B Difficulty: Medium Page: 61 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-83. By \_\_\_\_\_ months of age, the fetus swallows and urinates, arms and hands develop, and fingers develop nails.

a) 5
b) 6
c) 7
d) 3

Answer: D
Difficulty: Difficult
Page: 61
Skill: Factual
LO 2.13: Summarize the three stages of prenatal development.

Bloom's Taxonomy Level: Remember

2-84. The hormone \_\_\_\_\_\_ is produced in \_\_\_\_\_, which some scientists speculate may lead to differences in male and female brain structure, and later variations in gender-related behavior(s).

- a) oxytocin; males
- b) progestin; females
- c) androgen; males
- d) progesterone; females

Answer: C Difficulty: Difficult Page: 62 Skill: Factual LO 2.13: Summarize the three stages of prenatal development. Bloom's Taxonomy Level: Remember

2-85. Infertility is the inability to conceive after \_\_\_\_\_ months of trying to become pregnant.

a) 15 to 20
b) 18 to 24
c) 6 to 12
d) 12 to 18

Answer: D Difficulty: Medium Page: 63 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-86. Research indicates that some \_\_\_\_\_% of couples suffer from infertility.

a) 25
b) 10
c) 40
d) 15

Answer: D Difficulty: Difficult Page: 63 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember 2-87. Fertility is \_\_\_\_\_ correlated with age.

- a) not
- b) negatively
- c) positively
- d) conditionally

Answer: B Difficulty: Medium Page: 63 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-88. What is the term for the procedure of fertilization in which a man's sperm is placed directly into a woman's vagina by a physician?

- a) in vitro fertilization
- b) intrafallopian transfer
- c) artificial insemination
- d) germinal insemination

Answer: C Difficulty: Medium Page: 63 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-89. What is the term for the procedure in which a woman's ova are removed from her ovaries, and a man's sperm are used to fertilize the ova in a laboratory?

- a) in vitro fertilization
- b) intrafallopian transfer
- c) artificial insemination
- d) germinal insemination

Answer: A Difficulty: Medium Page: 63 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember 2-90. Bebe has been married for five years and wants to have a child. Her husband has a medical condition that prohibits him from producing enough sperm cells. She will attempt a procedure where a fertilized egg will be implanted in her fallopian tubes. The procedure is referred to as

- a) artificial insemination.
- b) embryonic implant.
- c) fertilization.
- d) zygote intrafallopian transfer.

Answer: D Difficulty: Medium Page: 63 Skill: Applied LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Apply

2-91. A spontaneous abortion is also known as

- a) infertility.
- b) insemination.
- c) fertility.
- d) miscarriage.

Answer: D Difficulty: Easy Page: 64 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-92. When a pregnancy ends before the developing child is able to survive outside of the mother's womb, this is called

- a) artificial insemination.
- b) spontaneous abortion.
- c) in vitro fertilization.
- d) surrogate birth.

Answer: B Difficulty: Medium Page: 64 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember 2-93. Researchers believe that some \_\_\_\_\_\_ of all pregnancies end in miscarriage, usually in the first several months of pregnancy.

- a) 10 to 25%
- b) 25 to 50%
- c) 50 to 65%
- d) 15 to 20%

Answer: D Difficulty: Medium Page: 64 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-94. What is the term when the mother voluntarily terminates a pregnancy?

- a) zygote intrafallopian transfer
- b) artificial insemination
- c) miscarriage
- d) abortion

Answer: D Difficulty: Easy Page: 64 Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy. Bloom's Taxonomy Level: Remember

2-95. Women who give birth over the age of \_\_\_\_\_ are at a greater risk for a variety of pregnancy and birth complications.

a) 50
b) 40
c) 30
d) 25

Answer: C Difficulty: Medium Page: 66 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Remember

2-96. Older mothers are considerably more likely to give birth to children with

- a) Tay-Sachs.
- b) Down syndrome.
- c) Huntington's.
- d) Charcot-Marie-Tooth.

Answer: B Difficulty: Medium Page: 66 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-97. About \_\_\_\_\_\_ babies born to mothers over 40 have \_\_\_\_\_.

- a) 5 out of 10; Down syndrome
- b) 1 out of 4; Down syndrome
- c) 1 out of 100; Tay-Sachs
- d) 1 out of 100; Down syndrome

Answer: D Difficulty: Difficult

Page: 66

Skill: Factual

LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Remember

2-98. About \_\_\_\_\_ babies born to mothers over 50 have \_\_\_\_\_.

- a) 1 out of 4; Down syndrome
- b) 1 out of 10; Down syndrome
- c) 1 out of 4; Tay-Sachs
- d) 1 out of 10; Tay-Sachs

Answer: A Difficulty: Difficult Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Remember

2-99. Women who become pregnant during \_\_\_\_\_\_ are more likely to have premature deliveries.

- a) their mid-30s
- b) mid-life
- c) adolescence
- d) illness

Answer: C Difficulty: Medium Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-100. The onset of \_\_\_\_\_ (German measles) in the mother prior to the 11<sup>th</sup> week of pregnancy is likely to cause serious consequences including blindness, deafness, heart defects, or brain damage in the baby.

- a) pox
- b) mumps
- c) gonorrhea
- d) rubella

Answer: D Difficulty: Difficult Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember 2-101. What disease, when contracted by a pregnant woman, increases the possibility that the fetus may develop a birth defect?

- a) asthma
- b) chicken pox
- c) syphilis
- d) mumps

Answer: B Difficulty: Difficult Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-102. What sexually transmitted disease can be transmitted directly to the fetus, who will be born suffering from the disease?

- a) chicken pox
- b) rubella
- c) sickle cell
- d) syphilis

Answer: D Difficulty: Easy Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember 2-103. What illness, when contracted by a pregnant woman, increases the risk of miscarriage?

- a) chicken pox
- b) mumps
- c) syphilis
- d) AIDS

Answer: B Difficulty: Difficult Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-104. What disease may be passed on to the fetus through the blood that reaches the placenta?

- a) mumps
- b) syphilis
- c) AIDS
- d) gonorrhea

Answer: C Difficulty: Medium Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember 2-105. What was frequently prescribed by physicians to pregnant women in the 1970s to prevent miscarriages, but was later found to cause the daughters of the women who took the medication to develop a rare form of vaginal or cervical cancer and to have more difficult pregnancies?

- a) thalidomide
- b) AZT
- c) DES (diethylstilbestrol)
- d) birth control

Answer: C Difficulty: Difficult Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-106. Diane has had difficult pregnancies and also developed a rare form of cervical cancer. Diane's mother may have been prescribed \_\_\_\_\_ before Diane was born to prevent miscarriage.

- a) thalidomide
- b) AZT
- c) amphetamines
- d) DES (diethylstilbestrol)

Answer: D Difficulty: Difficult Page: 67 Skill: Applied LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Apply 2-107. What prescriptions, when taken by women before they were aware they were pregnant, could also cause fetal damage?

- a) birth control
- b) AZT
- c) DES (diethylstilbestrol)
- d) thalidomide

Answer: A Difficulty: Medium Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-108. Increasing evidence suggests that small amounts of alcohol and nicotine

- a) can disrupt the development of the fetus.
- b) pose no danger to the fetus.
- c) can have some benefits for the fetus.
- d) are acceptable for pregnant mothers with few risk factors.

Answer: A

Difficulty: Easy

Page: 68

Skill: Factual

LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Remember

2-109. What is the disorder caused by the pregnant mother consuming substantial quantities of alcohol during pregnancy, potentially resulting in mental retardation and delayed growth in the child?

- a) fetal alcohol effects (FAE)
- b) autoimmune deficiency
- c) fetal alcohol spectrum disorder (FASD)
- d) AIDS (acquired immune deficiency syndrome)

Answer: C **Difficulty:** Easy Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-110. Marta is pregnant and consumes substantial quantities of alcohol. She runs the risk of having a baby born with

- a) fetal alcohol spectrum disorder (FASD).
- b) autoimmune deficiency.
- c) fetal alcohol effects (FAE).
- d) AIDS (acquired immune deficiency syndrome).

Answer: A **Difficulty: Medium** Page: 68 Skill: Applied LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Apply

2-111. Research indicates that approximately 1 out of every \_\_\_\_\_ infants is born with fetal alcohol spectrum disorder (FASD).

a) 750

- b) 500
- c) 1000
- d) 250

Answer: A Difficulty: Difficult Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-112. Mothers who use smaller amounts of alcohol during pregnancy place their children at risk of

- a) fetal alcohol spectrum disorder (FASD).
- b) autoimmune deficiency.
- c) fetal alcohol effects (FAE).
- d) AIDS.

Answer: C Difficulty: Medium Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember 2-113. A child displays some, although not all, of the problems of fetal alcohol spectrum disorder due to the mother's consumption of alcohol during pregnancy. The child was born with

- a) AIDS.
- b) fetal alcohol effects (FAE).
- c) fetal alcohol spectrum disorder (FASD).
- d) autoimmune deficiency.

Answer: B Difficulty: Medium Page: 68 Skill: Applied LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Apply

2-114. Studies have found that maternal consumption of an average of \_\_\_\_\_ alcoholic drink(s) a day during pregnancy is associated with lower intelligence, psychological affects, and negative behavior in their children.

a) 1
b) 5
c) 2
d) 10

Answer: C
Difficulty: Difficult
Page: 68
Skill: Factual
LO 2.15: Analyze threats to the fetal environment, and explain what can be done about

them.

Bloom's Taxonomy Level: Remember

2-115. \_\_\_\_\_\_ reduces the oxygen content and increases the carbon monoxide of the mother's blood. This quickly reduces the oxygen available for the fetus. Further, the respiration rate slows and speeds up its heart. Nicotine and toxins appear in the blood.

- a) Fetal alcohol effects
- b) Smoking cigarettes
- c) AIDS
- d) Using cocaine

Answer: B Difficulty: Medium Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-116. Pregnant women who \_\_\_\_\_\_ are \_\_\_\_\_ times more likely to have babies that are shorter with an abnormally low birthweight.

- a) drink; 5
- b) smoke; 5
- c) smoke; 2
- d) drink; 2

Answer: C Difficulty: Difficult Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

Bloom's Taxonomy Level: Remember

2-117. The birth of a baby usually occurs \_\_\_\_\_ days after conception.

a) 500
b) 365
c) 250
d) 266

Answer: D Difficulty: Difficult Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember 2-118. When the critical hormone \_\_\_\_\_\_ is released in high enough concentration by the mother's pituitary gland, the mother's uterus begins periodic contractions.

- a) oxytocin
- b) corticotropin
- c) cortisol
- d) oxycontin

Answer: A Difficulty: Medium Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-119. The attending nurse tells the expectant mother that her contractions are approximately 5 minutes apart. What hormones are high enough in the mother to cause the uterus to begin periodic contractions?

- a) androgen
- b) progesterone
- c) oxytocin
- d) estrogen

Answer: C Difficulty: Difficult Page: 70 Skill: Applied LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Apply

2-120. What is another term for "false labor," where after the fourth month of pregnancy the uterus occasionally contracts in order to ready itself for eventual delivery?

- a) cervical labor
- b) Braxton-Hicks contractions
- c) episiotomy
- d) transitional labor

Answer: B Difficulty: Medium Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember 2-121. The neck of the uterus that separates it from the vagina is called the

- a) transition.
- b) cervix.
- c) Braxton-Hicks.
- d) episiotomy.

Answer: B Difficulty: Medium Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-122. Labor proceeds in \_\_\_\_\_ stages.

a) 5
b) 4
c) 3
d) 2

Answer: C Difficulty: Easy Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-123. When the uterus contractions occur around every 8 to 10 minutes and last about 30 seconds, this is considered the \_\_\_\_\_\_ stage of labor.

- a) first
- b) second
- c) third
- d) fourth

Answer: A Difficulty: Medium Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember 2-124. During the final part of the first stage of labor, the contractions increase to their greatest intensity; this is known as

- a) birth.
- b) Braxton-Hicks.
- c) transition.
- d) episiotomy.

Answer: C Difficulty: Medium Page: 70 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-125. When the baby has completely left the mother's body, this is still considered the \_\_\_\_\_\_ stage of labor.

- a) first
- b) second
- c) third
- d) final

Answer: B Difficulty: Medium Page: 71 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-126. An incision that is sometimes made to increase the size of the opening of the vagina to allow the baby to pass is called

- a) Braxton-Hicks.
- b) the cervix.
- c) episiotomy.
- d) false labor.

Answer: C Difficulty: Medium Page: 71 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember 2-127. During childbirth, the obstetrician decides that there is a need for an episiotomy. That means

- a) this is a necessary step in the Bradley method.
- b) this is the third stage of childbirth when the placenta and the umbilical cord are expelled from the mother.
- c) the doctor makes an incision to enlarge the size of the vaginal opening, making it easier for the baby's head to emerge.
- d) the doctor decides the mother requires a Cesarean section procedure.

Answer: C Difficulty: Medium Page: 71 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-128. During which stage of childbirth does the umbilical cord (which is still attached to the neonate) and the placenta expel from the mother's body?

- a) transitional
- b) second
- c) final
- d) third

Answer: D Difficulty: Easy Page: 71 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember

2-129. The \_\_\_\_\_\_ stage of birth is the quickest and easiest, and it takes only a few minutes.

- a) third
- b) second
- c) first
- d) perinatal

Answer: A Difficulty: Medium Page: 71 Skill: Factual LO 2.16: Describe the normal process of labor. Bloom's Taxonomy Level: Remember 2-130. What birthing method has achieved widespread popularity in the United States, and involves breathing techniques and relaxation training?

- a) Apgar
- b) Lamaze
- c) Bradley
- d) natural

Answer: B Difficulty: Easy Page: 72 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember

2-131. What is the birthing technique that uses breathing techniques and relaxation, involves a coach, and provides training that allows women to cope with painful contractions by concentrating on their breathing to produce a relaxation response, rather than tensing up which can make pain more acute?

- a) Lamaze
- b) Apgar
- c) Bradley
- d) hypnobirthing

Answer: A Difficulty: Medium Page: 72 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember

2-132. What do mothers and fathers report when asked why they think the Lamaze method of childbirth works?

- a) saves money from going to the hospital
- b) provides mastery and a sense of control
- c) allows childbirth without medication
- d) is safer for the newborn

Answer: B Difficulty: Medium Page: 72 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember 2-133. The accolades parents express after Lamaze births may be due to

- a) their economic status.
- b) medication administered during childbirth.
- c) their initial enthusiasm.
- d) their love for their new child.

Answer: C Difficulty: Easy Page: 72 Skill: Conceptual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Understand

2-134. Which childbirth method is known as "husband-coached childbirth"?

- a) Lamaze
- b) hypnobirthing
- c) Bradley
- d) Apgar

Answer: C Difficulty: Difficult Page: 72 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember

2-135. Which childbirth method is based on the principle that childbirth should be as natural as possible and involve no medication or medical intervention; therefore, parents are urged to take responsibility for childbirth, and the use of physicians is viewed as unnecessary and sometimes dangerous?

- a) Bradley
- b) Lamaze
- c) natural
- d) hypnobirthing

Answer: A Difficulty: Difficult Page: 72 Skill: Conceptual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Understand 2-136. Which childbirth method is quite controversial because it discourages the use of traditional medical interventions?

- a) Lamaze
- b) natural
- c) Bradley
- d) hypnobirthing

Answer: C Difficulty: Difficult Page: 72 Skill: Conceptual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Understand

2-137. Which childbirth method involves a form of self-hypnosis during delivery that produces a sense of peace and calm which reduces pain?

- a) hypnobirthing
- b) Bradley
- c) Lamaze
- d) natural

Answer: A

Difficulty: Easy Page: 72 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember

2-138. A nurse who is a childbirth attendant that stays with the mother throughout labor and delivery is called a(n) \_\_\_\_\_.

- a) birth coach
- b) doula
- c) midwife
- d) obstetrician

Answer: C Difficulty: Medium Page: 73 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember 2-139. Jennifer and Douglas are expecting the birth of their first child. They have hired a(n) \_\_\_\_\_\_, who provides emotional, psychological, and educational support for the two expectant parents. This person is not a licensed nurse, and her job is not to perform medical exams.

- a) midwife
- b) obstetrician
- c) Bradley coach
- d) doula

Answer: D Difficulty: Difficult Page: 73 Skill: Applied LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Apply

2-140. A spinal-epidural, also called a(n) \_\_\_\_\_\_ epidural, is a system of administering continuous doses of anesthetic to a woman who is in labor. It has fewer side effects than traditional anesthesia, and allows for freedom of movement during labor.

- a) walking
- b) independent
- c) ambulatory
- d) motion

Answer: A Difficulty: Easy Page: 73 Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth. Bloom's Taxonomy Level: Remember 2-141. William and Sandy's baby was considered preterm because

- a) the baby was born prior to 38 weeks after conception.
- b) the baby weighed 3,400 grams.
- c) the baby weighed less than 2,500 grams.
- d) the baby was born earlier than normal.

Answer: A Difficulty: Medium Page: 75 Skill: Applied LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Apply

2-142. Preterm infants are at a high risk of illness and death because

- a) they usually have to be born Cesarean section.
- b) they have not had time to develop fully as fetuses.
- c) their mothers have used anesthesia during childbirth.
- d) they have a chromosomal disorder that caused the early birth.

Answer: B

Difficulty: Medium Page: 75

Skill: Conceptual

LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed.

Bloom's Taxonomy Level: Understand

2-143. Infants who weigh less than 2,500 grams (5 1/2 pounds) at birth are called

- a) low birthweight.
- b) preterm.
- c) small for gestational age.
- d) very low birthweight.

Answer: A Difficulty: Difficult Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-144. Although \_\_\_\_\_ of all newborns in the United States fall into the low-birthweight category, they account for \_\_\_\_\_ of newborn deaths.

- a) 15%; all
- b) 7%; the majority
- c) 7%; the minority
- d) 15%; the majority

Answer: B Difficulty: Difficult Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

- 2-145. A baby is considered small for gestational age if
  - a) the baby was born 38 weeks after conception.
  - b) the baby weighs less than 2,500 grams.
  - c) because of fetal growth the baby weighs 90% (or less) of the average weight of other infants the same gestational age.
  - d) the baby weighs less than 1,250 grams.

Answer: C Difficulty: Difficult Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-146. Keeping a neonate in the hospital to gain weight is important to help the baby

- a) recover from being malnourished and prevent risk of infection.
- b) learn to breast feed.
- c) fight infection.
- d) build fat layers to prevent chilling and help the baby regulate body temperature.

Answer: D Difficulty: Medium Page: 75 Skill: Conceptual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Understand

2-147. Newborns who are born prematurely and who have low birthweight may experience respiratory distress syndrome (RDS) and require

- a) blood transfusions.
- b) immersion in warm water.
- c) isolation to ward off infection.
- d) placement in an incubator where oxygen is monitored.

Answer: D Difficulty: Medium Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-148. When a premature infant with low birthweight is placed in an incubator, oxygen is carefully monitored because too \_\_\_\_\_\_ of a concentration of oxygen \_\_\_\_\_.

- a) high; can damage the baby's retinas, leading to permanent blindness
- b) low; can damage the baby's retinas, leading to permanent blindness
- c) low; can prove to be fatal for the baby
- d) high; can prove to be fatal for the baby

Answer: A Difficulty: Difficult Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-149. Research indicates that the following types of care, with the exception of one, appear to be effective in helping preterm infants develop. Identify the exception.

- a) Kangaroo Care
- b) infants are held skin-to-skin against the parents' chests
- c) massage several times a day
- d) almost constant use of an incubator

Answer: D Difficulty: Difficult Page: 75 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-150. Mary's baby was born at 28 weeks, and now part of her medical care includes massage several times a day. All of the following are the benefits of the massage EXCEPT

- a) weight gain.
- b) muscle development.
- c) coping with stress.
- d) increased appetite.

Answer: D Difficulty: Medium Page: 75 Skill: Applied LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Apply

2-151. Infants who weigh less than 1,250 grams or, regardless of weight, have been in the womb less than 30 weeks are called

- a) low birthweight.
- b) very low birthweight.
- c) preterm.
- d) small for gestational age.

Answer: B Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-152. Which is considered the most extreme case of prematurity?

- a) small-for-gestational-age infants
- b) very-low-birthweight infants
- c) preterm infants
- d) low-birthweight infants

Answer: B Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-153. A newborn has been categorized as a very-low-birthweight infant. Which describes the infant's weight best?

- a) 90% (or less) of average infant weight
- b) 2,500 grams (around 5 <sup>1</sup>/<sub>2</sub> pounds)
- c) 3,400 grams (about 7 <sup>1</sup>/<sub>2</sub> pounds)
- d) 1,250 grams (around 2.25 pounds)

Answer: D Difficulty: Medium Page: 76 Skill: Applied LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Apply

2-154. What factor can classify an infant as meeting the criteria of very low birthweight?

- a) an infant who loses weight and remains for an extended stay in the hospital
- b) an infant who weighs 90% or less of a normal infant's weight
- c) regardless of weight, an infant who was in the womb less than 30 weeks
- d) an infant born prior to 38 weeks after conception

Answer: C Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-155. Alisha was born earlier than 25 weeks, and as such would be classified as

- a) small for gestation.
- b) very low birthweight.
- c) postmature.
- d) low birthweight.

Answer: B Difficulty: Difficult Page: 76 Skill: Applied LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Apply

2-156. All are considered features of very-low-birthweight infants EXCEPT which of the following?

- a) skin is a darkened red color despite race
- b) webs are apparent between the infant's fingers and toes
- c) eyes may be fused shut
- d) earlobes may look like flaps of skin on the sides of their heads

Answer: B

Difficulty: Difficult

Page: 76

Skill: Factual

LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed.

Bloom's Taxonomy Level: Remember

2-157. What is the major reason why very-low-birthweight babies are in grave danger from the moment they are born?

- a) exposure to toxic air and other substances
- b) babies are developing outside their mother's womb
- c) immaturity of their organ systems
- d) rejection by the mother

Answer: C Difficulty: Medium Page: 76 Skill: Conceptual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Understand

## 2-158. Which of the following best describes the "age of viability"?

- a) the point at which an infant can survive prematurely, about 22 weeks
- b) the point at which an infant can survive prematurely, approximately 6 months
- c) the point at which an infant can survive prematurely, approximately 3  $^{1\!/_{2}}$  months
- d) when an infant is born earlier than 25 weeks

Answer: A Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-159. A baby born earlier than 25 weeks has only about a \_\_\_\_\_ chance of survival.

- a) 60%
- b) 75%
- c) 50%
- d) 25%

Answer: C Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-160. Ultimately, approximately \_\_\_\_\_ of very-low-birthweight infants die despite massive medical intervention.

- a) 80%
- b) 75%
- c) 50%
- d) 25%

Answer: C Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-161. The average financial costs of medical care for a very-low-birthweight infant during the first three years of life may be between \_\_\_\_\_ and \_\_\_\_\_ times higher than medical costs for a full-term child.

a) 3; 50
b) 50; 100
c) 50; 75
d) 10; 50

Answer: A Difficulty: Difficult Page: 76 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-162. What percentage of preterm and low-birthweight births are unexplained with regard to cause?

- a) 50%
- b) 75%
- c) 100%
- d) 35%

Answer: A Difficulty: Difficult Page: 77 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-163. All of the following may cause preterm births EXCEPT

- a) a mother working during pregnancy.
- b) a father's age.
- c) the immaturity of the mother's reproductive system.
- d) the mother carrying twins.

Answer: A Difficulty: Medium Page: 77 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember

2-164. Which of the following is NOT considered a risk factor relating to prematurity and low birthweight?

- a) poor nutrition
- b) lack of medical care
- c) high level of stress
- d) high level of financial support

Answer: D Difficulty: Medium Page: 77 Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed. Bloom's Taxonomy Level: Remember 2-165. A birth in which the baby is surgically removed from the uterus, rather than traveling through the birth canal, is called

- a) stillbirth.
- b) Bradley method.
- c) Cesarean delivery.
- d) postmaturity.

Answer: C Difficulty: Easy Page: 77 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-166. What is another term for a Cesarean birth?

- a) fetal distress
- b) postmature
- c) stillborn
- d) c-section

Answer: D Difficulty: Easy Page: 77 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-167. Which of the following is NOT a warning sign during delivery that a Cesarean delivery is appropriate?

- a) the fetus shows signs of distress
- b) blood is seen coming from the mother's vagina during labor
- c) the fetus has a sudden change in heart rate
- d) the Lamaze techniques are no longer effective

Answer: D Difficulty: Easy Page: 77 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember 2-168. If a baby is being born feet first, this is called

- a) stillborn.
- b) breech position.
- c) Cesarean section.
- d) transverse position.

Answer: B Difficulty: Medium Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-169. Breech position births occur in approximately \_\_\_\_\_\_ births and place the baby at risk because the umbilical cord may become compressed and deprive the baby of oxygen.

- a) 2 out of 10
- b) 5 out of 10
- c) 1 out of 25
- d) 4 out of 5

Answer: C Difficulty: Difficult Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-170. When the baby lies crosswise in the uterus during delivery, this is called

- a) breech position.
- b) transverse position.
- c) Cesarean section.
- d) fetal distress.

Answer: B Difficulty: Medium Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember 2-171. The use of \_\_\_\_\_ has contributed to a sharp increase in \_\_\_\_\_.

- a) fetal monitoring; Cesarean deliveries
- b) Cesarean deliveries; fetal monitoring
- c) Cesarean deliveries; infant mortality
- d) fetal monitoring; postmature infants

Answer: A Difficulty: Difficult Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-172. Which of the following is NOT a risk involved with a Cesarean delivery?

- a) mother's recovery can be lengthy
- b) endangers the baby's health because it's major surgery
- c) mother has higher risk of infection(s)
- d) Cesarean birth deters the normal release of stress-related hormones into the newborn's bloodstream

Answer: B Difficulty: Medium Page: 78 Skill: Conceptual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Understand

2-173. What is the stress-related hormone that newborns need in their bloodstream to avoid, for example, breathing problems?

- a) estrogen
- b) progesterone
- c) catecholamines
- d) testosterone

Answer: C Difficulty: Difficult Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember 2-174. Because of the rise in Cesarean births in the United States, medical authorities currently recommend \_\_\_\_\_\_ use of fetal monitors.

- a) more
- b) no
- c) less
- d) the same

Answer: C Difficulty: Medium Page: 78 Skill: Factual LO 2.19: Describe the process of Cesarean delivery, and explain why its use is increasing. Bloom's Taxonomy Level: Remember

2-175. What is the term for a delivery of a child who is not alive? This type of birth occurs in less than 1 delivery in 100.

- a) Cesarean
- b) fetal distress
- c) breech position
- d) stillbirth

Answer: D Difficulty: Easy Page: 78 Skill: Factual LO 2.20: Describe infant mortality rates, and explain factors that affect those rates. Bloom's Taxonomy Level: Remember

2-176. What is the term that relates to the death of a child within the first year of life?

- a) stillbirth
- b) infant mortality
- c) fetal distress
- d) very low birthweight

Answer: B Difficulty: Easy Page: 78 Skill: Factual LO 2.20: Describe infant mortality rates, and explain factors that affect those rates. Bloom's Taxonomy Level: Remember 2-177. The overall rate of infant mortality (defined as death within the first year of life) is about

- a) 1 death per 100.
- b) 25 deaths per 10,000.
- c) 70 deaths per 1,000.
- d) 6 deaths per 1,000.

Answer: D Difficulty: Difficult Page: 78 Skill: Factual LO 2.20: Describe infant mortality rates, and explain factors that affect those rates. Bloom's Taxonomy Level: Remember

2-178. Infant mortality has been generally \_\_\_\_\_\_ since the 1960s.

- a) increasing
- b) the same
- c) declining
- d) fluctuating

Answer: C Difficulty: Easy Page: 78 Skill: Factual LO 2.20: Describe infant mortality rates, and explain factors that affect those rates. Bloom's Taxonomy Level: Remember

## TRUE/FALSE

2-179. It is clear that the father's sperm does not determine the sex of the child.

Answer: False Difficulty: Easy Page: 45 Skill: Factual LO 2.3: Describe how the sex of a child is determined. Bloom's Taxonomy Level: Remember 2-180. In the mid-1800s, Austrian monk Gregor Mendel produced a series of simple experiments of cross-pollination of pea plants.

Answer: True Difficulty: Easy Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-181. Mendel's pea plant experiments established the existence of the dominant and recessive trait.

Answer: True Difficulty: Medium Page: 45 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-182. Even though a child's parents both have the recessive gene for PKU, the child only has a 25% chance of inheriting the disorder.

Answer: True Difficulty: Difficult Page: 46 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-183. Relatively few traits are governed by a single pair of genes. Most traits are the result of polygenic inheritance.

Answer: True Difficulty: Medium Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember 2-184. Genes vary in terms of their reaction range, which is the potential degree of variation in the actual expression of a trait due to environmental conditions.

Answer: True Difficulty: Medium Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-185. The blood disorder hemophilia is an example of a disease that is produced by X-linked genes.

Answer: True Difficulty: Medium Page: 47 Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information. Bloom's Taxonomy Level: Remember

2-186. The field of behavioral genetics specializes in the consequences of heredity on behavior.

Answer: True Difficulty: Easy Page: 47 Skill: Factual LO 2.5: Describe the field of behavioral genetics. Bloom's Taxonomy Level: Remember

2-187. The human gene sequence number is thought to be 25,000; thus, humans have many more genes than other far less complex organisms.

Answer: False Difficulty: Medium Page: 47 Skill: Factual LO 2.5: Describe the field of behavioral genetics. Bloom's Taxonomy Level: Remember 2-188. Scientists have discovered that 99.9% of the gene sequence is shared by all humans.

Answer: True Difficulty: Easy Page: 47 Skill: Factual LO 2.5: Describe the field of behavioral genetics. Bloom's Taxonomy Level: Remember

2-189. The field of behavioral genetics studies psychological disorders such as depression, attention deficit hyperactivity disorder, and schizophrenia.

Answer: True Difficulty: Easy Page: 47 Skill: Factual LO 2.5: Describe the field of behavioral genetics. Bloom's Taxonomy Level: Remember

2-190. Sometimes genes, for no known reason, spontaneously change their form, which is a process called spontaneous mutation.

Answer: True Difficulty: Easy Page: 48 Skill: Factual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Remember

2-191. If a disorder has genetic roots, it means that there were no environmental factors that played a role in the manifestation of the disease.

Answer: False Difficulty: Medium Page: 48 Skill: Conceptual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Understand 2-192. Genetic counselors are trained to use a variety of data to help people deal with issues related to inherited disorders due to such reasons as the age of the mother and father.

Answer: True Difficulty: Easy Page: 49 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-193. The newest role of genetic counselors involves testing people to identify whether they are susceptible to future disorders because of inherited genetic abnormalities.

Answer: True Difficulty: Easy Page: 50 Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing. Bloom's Taxonomy Level: Remember

2-194. As developmental research accumulates, it is becoming apparent that to view behavior as due to either genetic or environmental factors is inappropriate.

Answer: True Difficulty: Easy Page: 53 Skill: Conceptual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Understand

2-195. It is the unique interaction of inherited and environmental factors that determines people's patterns of development.

Answer: True Difficulty: Easy Page: 53 Skill: Conceptual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Understand 2-196. If people eat a diet rich in health foods, it is possible for them to grow beyond their genetically imposed limitations in height.

Answer: False Difficulty: Easy Page: 53 Skill: Factual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Remember

2-197. A person's intelligence is the result of some combination of natural mental ability and environmental opportunity.

Answer: True Difficulty: Easy Page: 53 Skill: Factual LO 2.8: Explain how the environment and genetics work together to determine human characteristics. Bloom's Taxonomy Level: Remember

2-198. One drawback to using nonhumans as research subjects is that we cannot be sure how well the obtained findings can be generalized to people.

Answer: True Difficulty: Easy Page: 54 Skill: Factual LO 2.9: Summarize the methods by which researchers study the interaction of genetic and environmental factors in development. Bloom's Taxonomy Level: Remember

2-199. The data sets from studies of identical twins raised in different environments are always without bias.

Answer: False Difficulty: Medium Page: 55 Skill: Conceptual LO 2.9: Summarize the methods by which researchers study the interaction of genetic and environmental factors in development. Bloom's Taxonomy Level: Understand 2-200. The general conclusion among researchers is that virtually all traits, characteristics, and behaviors are the joint result of the combination and interaction of nature and nurture.

Answer: True Difficulty: Easy Page: 55 Skill: Conceptual LO 2.9: Summarize the methods by which researchers study the interaction of genetic and environmental factors in development. Bloom's Taxonomy Level: Understand

2-201. Dizygotic twins are the most extreme example of the fact that the more genetically similar two people are, the more likely they are to share physical characteristics.

Answer: False Difficulty: Medium Page: 55 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-202. Obesity does not have a strong genetic component.

Answer: False Difficulty: Easy Page: 56 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-203. Intelligence is a central human characteristic that differentiates humans from other species, and genetics plays a significant role in intelligence.

Answer: True Difficulty: Easy Page: 56 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember 2-204. The IQ scores of dizygotic twins become increasingly similar over the course of time.

Answer: False Difficulty: Medium Page: 56 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-205. Developmental psychologist Sandra Scarr suggests that society should be asking what can be done to maximize the intellectual potential of every individual.

Answer: True Difficulty: Easy Page: 57 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-206. Humans possess a novelty-seeking gene that affects the production of the brain chemical dopamine, which makes some people more prone to seek out novel situations and to take risks.

Answer: True Difficulty: Easy Page: 57 Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality. Bloom's Taxonomy Level: Remember

2-207. Children tend to actively focus on those aspects of their environment that are most connected with their genetically determined abilities.

Answer: True Difficulty: Medium Page: 58 Skill: Applied LO 2.11: Describe ways in which genes influence the environment. Bloom's Taxonomy Level: Apply 2-208. A mother's use of illegal drugs, but not legal drugs, poses serious risks to the unborn child.

Answer: False Difficulty: Easy Page: 67 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-209. Increasing evidence suggests that even small amounts of alcohol and nicotine by a pregnant mother can disrupt the development of the fetus.

Answer: True Difficulty: Easy Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-210. Research indicates that fetal alcohol spectrum disorder (FASD) is now the primary preventable cause of mental retardation.

Answer: True Difficulty: Easy Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

2-211. A father's use of alcohol and illegal drugs has no significant effect upon the development of the fetus.

Answer: False Difficulty: Easy Page: 69 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

#### ESSAY QUESTIONS

2-212. Briefly explain the contribution of the woman's ovum and the man's sperm in determining the sex of the offspring.

Answer: When the ovum and sperm meet at fertilization, the ovum provides the X chromosome, while the sperm provides either the X or the Y chromosome. If the sperm contributes its X chromosome, the child will have an XX pairing and the offspring will be a girl. If the sperm contributes its Y chromosome, the child will have an XY pairing and the offspring and the offspring will be a boy.

Difficulty: Medium Page: 44 Skill: Factual LO 2.3: Describe how the sex of a child is determined. Bloom's Taxonomy Level: Remember

2-213. Briefly explain the inherited disorder called sickle-cell anemia.

Answer: Sickle-cell anemia is a blood disorder that gets its name from the shape of red blood cells in those who have it. Symptoms include poor appetite, stunted growth, swollen stomach, and yellowish eyes. People afflicted with the disease rarely live beyond childhood. For less severe cases, medical advances have produced significant increases in life expectancy.

Difficulty: Medium Page: 48 Skill: Factual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Remember

2-214. Briefly explain how mutations can damage the fetus.

Answer: Genes may become physically damaged due to wear and tear or chance events during the cell division processes of meiosis and mitosis, or they may spontaneously change their form in a process called spontaneous mutation. When damaged genes are passed on to a fetus, the results can be disastrous.

Difficulty: Medium Page: 48 Skill: Factual LO 2.6: Describe the major inherited disorders. Bloom's Taxonomy Level: Remember 2-215. Briefly explain how the father's behavior may influence prenatal development.

Answer: Fathers should avoid smoking because second-hand smoke may affect the mother's health, and in turn, this affects the unborn child. Fathers' smoking has been linked to lower birthweight in babies. A father's use of alcohol and drugs may impair sperm and may lead to chromosomal damage that may affect the fetus at conception. Use of alcohol and drugs, as well as physical and/or emotional abuse, may increase stress in the mother's, and therefore the fetus's, environment. The father's exposure to environmental toxins, such as lead or mercury, may cause toxins to bind to sperm and cause birth defects.

Difficulty: Difficult Page: 68 Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them. Bloom's Taxonomy Level: Remember

### **REVEL QUIZ QUESTIONS**

#### EOM Quiz Question 2.1.1

The human genetic code, transmitted at the moment of conception and stored in our genes, is composed of specific sequences of \_\_\_\_\_.

- a) cells
- b) membranes
- c) chromosomes
- d) DNA

Answer: D Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment.

#### EOM Quiz Question 2.1.2

A \_\_\_\_\_\_ is the underlying combination of genetic material present (but outwardly invisible) in an organism.

- a) phenotype
- b) dominant trait
- c) recessive trait
- d) genotype

Answer: D Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.4: Explain the mechanisms by which genes transmit information.

The field of \_\_\_\_\_\_ studies the effects of heredity on psychological characteristics, such as personality and habits.

- a) behavioral genetics
- b) child development
- c) genetic counseling
- d) genome sequencing

Answer: A Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.5: Describe the field of behavioral genetics.

# EOM Quiz Question 2.1.4

\_\_\_\_\_ is a disorder produced by the presence of an extra chromosome on the 21st pair.

- a) Down syndrome
- b) Fragile X syndrome
- c) Sickle-cell anemia
- d) Tay-Sachs disease

Answer: A Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.6: Describe the major inherited disorders.

The prenatal procedure by which a sample of fetal cells is drawn from the fluid surrounding the fetus is called \_\_\_\_\_.

- a) a sonogram
- b) chorionic villus sampling
- c) an embryoscopy
- d) amniocentesis

Answer: D Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing.

# EOM Quiz Question 2.2.1

The fact that many human traits are determined by a combination of genetic and environmental factors is referred to as \_\_\_\_\_.

- a) natural selection
- b) multifactorial transmission
- c) joint evolution
- d) binary influence

Answer: B Difficulty: 1 Topic: The Interaction of Heredity and Environment Skill: Factual LO 2.8: Explain how the environment and genetics work together to determine human characteristics.

Because the genetic backgrounds of \_\_\_\_\_\_ twins are identical, researchers can conclude that variations in their behavior must be due to environmental factors.

- a) dizygotic
- b) homozygous
- c) monozygotic
- d) heterozygous

Answer: C Difficulty: 1 Topic: The Interaction of Heredity and Environment Skill: Conceptual LO 2.9: Summarize the methods by which researchers study the interaction of genetic and environmental factors in development.

# EOM Quiz Question 2.2.3

Which of the following can be seen as an indication that intelligence has a strong genetic basis?

- a) Camilla enjoys reading the same sorts of books as her mother.
- b) Alec excels at academics, while his fraternal twin Zack is better at sports.
- c) Though reared in a book-free environment, Jason loves reading and is an excellent student.
- d) Brianna's IQ scores are nearly the same as those of her identical twin Suzanna.

Answer: D Difficulty: 2 Topic: The Interaction of Heredity and Environment Skill: Application LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality.

- a) neuroticism
- b) introversion
- c) friendliness
- d) extroversion

Answer: D Difficulty: 1 Topic: The Interaction of Heredity and Environment Skill: Factual LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality.

## EOM Quiz Question 2.2.5

Theresa has been described as a "natural athlete." Her room at home is full of soccer balls, basketball nets, softball bats, and similar sports items. This is an example of how

\_\_\_\_\_ can influence \_\_\_\_\_\_.

- a) genes; the environment
- b) the phenotype; the genotype
- c) the environment; genetics
- d) nurture; nature

Answer: A Difficulty: 2 Topic: The Interaction of Heredity and Environment Skill: Application LO 2.11: Describe ways in which genes influence the environment.

When sperm enter the vagina, they go through the cervix and into the fallopian tube, where \_\_\_\_\_ may take place.

- a) conception
- b) ovulation
- c) ejaculation
- d) insemination

Answer: A Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.12: Describe the process of fertilization.

## EOM Quiz Question 2.3.2

A(n) \_\_\_\_\_\_ occurs when pregnancy ends before the developing child is able to survive outside the mother's womb.

- a) stillbirth
- b) ectopic pregnancy
- c) miscarriage
- d) premature birth

Answer: C Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy.

Preterm infants, or premature infants, are born prior to \_\_\_\_\_ weeks after conception.

a) 30
b) 33
c) 36
d) 38

Answer: D Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed.

## EOM Quiz Question 2.3.4

In a(n) \_\_\_\_\_\_ delivery, the baby is surgically removed from the uterus rather than traveling through the birth canal.

- a) emergency
- b) uterine
- c) breech
- d) Cesarean

Answer: D Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.19: Describe the process of Cesarean delivery and explain why its use is increasing.

\_\_\_\_\_, defined as death within the first year of life, occurs in 6.17 out of 1,000 live births.

- a) SIDS
- b) Infant mortality
- c) Stillbirth delivery
- d) Premature death

Answer: B Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.20: Describe infant mortality rates and explain factors that affect those rates.

# EOC Quiz Question 2.1

Each human parent contributes \_\_\_\_\_\_ to the developing zygote.

- a) 23 genes
- b) one of each pair of 23 chromosomes
- c) 46 genes
- d) 23 X chromosomes and 23 Y chromosomes

Answer: B Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.1: Describe how genes and chromosomes provide our basic genetic endowment.

## **EOC Quiz Question 2.2**

When a cluster of cells in the ovum splits off within the first two weeks after fertilization and forms two identical zygotes, the result is \_\_\_\_\_.

- a) monozygotic twins
- b) quadruplets
- c) dizygotic twins
- d) premature birth

Answer: A Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.2: Compare monozygotic and dizygotic twins.

The \_\_\_\_\_\_ pair of chromosomes determines the sex of the child.

- first a)
- b) fourth
- twenty-third c)
- d) forty-sixth

Answer: C Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual LO 2.3: Describe how the sex of a child is determined.

## **EOC Quiz Question 2.4**

Most traits are governed by a combination of gene pairs rather than a single pair of genes. This is called \_\_\_\_\_.

- X-linked genes a)
- polygenic inheritance b)
- behavioral genetics c)
- dominant traits d)

Answer: B Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Conceptual LO 2.4: Explain the mechanisms by which genes transmit information.

#### **EOC Quiz Question 2.5**

studies the effects of heredity on behavior and psychological characteristics.

- a) Evolutionary science
- Behavioral psychology b)
- c) Behavioral genetics
- Operant conditioning d)

Answer: C Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Factual

LO 2.5: Describe the field of behavioral genetics.

The presence of an extra X chromosome in male babies produces \_\_\_\_\_\_, a disease characterized by genetic abnormalities.

- a) Tay-Sachs disease
- b) fragile X syndrome
- c) sickle-cell anemia
- d) Klinefelter's syndrome

Answer: D Difficulty: 1 Topic: Earliest Development and the Foundations of Genetics Skill: Conceptual LO 2.6: Describe the major inherited disorders.

## EOC Quiz Question 2.7

The noninvasive prenatal testing procedure that is commonly used to determine the size and shape of the baby and to monitor developmental patterns is called \_\_\_\_\_\_.

- a) ultrasound sonography
- b) chronic villus sampling
- c) an Apgar screen
- d) amniocentesis

Answer: A

Difficulty: 1

Topic: Earliest Development and the Foundations of Genetics

Skill: Factual

LO 2.7: Describe the role of genetic counselors and differentiate between different forms of prenatal testing.

A person's \_\_\_\_\_\_, defined as enduring patterns of arousal and emotionality in an individual, has strong a genetic basis, but it can be influenced by environmental factors such as family traits and behaviors.

- a) reactivity
- b) temperament
- c) sensitivity
- d) character

Answer: B Difficulty: 2 Topic: The Interaction of Heredity and Environment Skill: Conceptual LO 2.8: Explain how the environment and genetics work together to determine human characteristics.

## **EOC Quiz Question 2.9**

The most informative way that researchers can learn about the different effects of nature and nurture on human development is through studies of \_\_\_\_\_.

- a) primates and other animals similar to humans
- b) siblings separated by divorce while still young
- c) nonrelated children raised in the same household
- d) identical twins raised separately

Answer: D Difficulty: 2 Topic: The Interaction of Heredity and Environment Skill: Application LO 2.9: Summarize the methods by which researchers study the interaction of genetic

and environmental factors in development.

Which of the following is an *environmental* factor that may influence the intelligence of a child?

- a) genetic make-up
- b) spatial skills
- c) father's intelligence
- d) friendships with intelligent peers

Answer: D Difficulty: 3 Topic: The Interaction of Heredity and Environment Skill: Analytical LO 2.10: Examine how genetics and the environment jointly influence physical traits, intelligence, and personality.

# EOC Quiz Question 2.11

Noticing that their baby daughter seems to love singing and dancing, her nonmusical parents stream music into the house constantly and purchase a piano and child-sized guitar. This is an example of \_\_\_\_\_\_.

- a) nurture influencing nature
- b) genes influencing the environment
- c) the inheritance of personality traits
- d) the phenotype influencing the genotype

Answer: B Difficulty: 3 Topic: The Interaction of Heredity and Environment Skill: Analytical LO 2.11: Describe ways in which genes influence the environment.

The joining of sperm and ovum to create the single-celled zygote from which life begins is referred to as \_\_\_\_\_.

- a) pregnancy
- b) ejaculation
- c) fertilization
- d) ovulation

Answer: C Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.12: Describe the process of fertilization.

#### **EOC Quiz Question 2.13**

During the \_\_\_\_\_\_ stage of prenatal development, the fertilized egg, or blastocyst, attaches itself to the wall of the uterus.

- a) germinal
- b) embryonic
- c) zygotic
- d) fetal

Answer: A Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Conceptual LO 2.13: Summarize what happens in the three stages of prenatal development.

In the procedure known as \_\_\_\_\_\_, a man's sperm is used to fertilize a woman's ova in a laboratory.

- a) artificial insemination
- b) surrogate motherhood
- c) in vitro fertilization
- d) reproductive intervention

Answer: C Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Conceptual LO 2.14: Describe major physical and ethical challenges that relate to pregnancy.

#### **EOC Quiz Question 2.15**

An environmental agent such as a drug, chemical, virus, or other factor that produces a birth defect is called a(n) \_\_\_\_\_\_.

- a) teratogen
- b) exposure
- c) abnormality
- d) pollutant

Answer: A Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.15: Analyze threats to the fetal environment, and explain what can be done about them.

The use of \_\_\_\_\_\_, which is designed to increase the size of the opening of the vagina, has fallen into disfavor in recent years and is diminishing in frequency.

- a) induced labor
- b) an episiotomy
- c) the Braxton-Hicks contraction
- d) oxytocin

Answer: B Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.16: Describe the normal process of labor.

#### **EOC Quiz Question 2.17**

\_\_\_\_\_\_ is a childbirth technique based on the principle that giving birth should be as natural as possible and should not involve the use of medications or medical interventions.

- a) Water birthing
- b) The Lamaze Method
- c) Hypnobirthing
- d) The Bradley Method

Answer: D Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.17: Describe the process of birth and analyze current approaches to childbirth.

A baby who is still unborn two weeks after the mother's due date is considered a \_\_\_\_\_\_ infant.

- a) preterm
- b) high-birthweight
- c) postmature
- d) small-for-gestational-age

Answer: C Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Factual LO 2.18: Recognize threats and complications that may accompany childbirth, and explain how they can be addressed.

## EOC Quiz Question 2.19

One factor in the increased reliance on Cesarean delivery in the United States is

- a) wider awareness of the health benefits of the procedure for the mother
- b) the greater use of fetal heart monitors
- c) wider awareness of the health benefits of the procedure for the baby
- d) the higher incidence of breech births

Answer: B Difficulty: 1 Topic: Prenatal Growth and Birth Skill: Conceptual LO 2.19: Describe the process of Cesarean delivery and explain why its use is increasing.

In the United States, which of the following is a major reason for the high rate of infant mortality in African American births compared with White births?

- a) higher rates of poverty
- b) more home births
- c) older parents
- d) parents who have a disposition towards genetic diseases

Answer: A Difficulty: 3 Topic: Prenatal Growth and Birth Skill: Analytical LO 2.20: Describe infant mortality rates and explain factors that affect those rates.