

Name: _____ Date: _____

1. Explain the sequence from fertilization to implantation.
2. Explain the three core principles of prenatal development, giving examples of each.
3. Compared to many other mammals, humans spend an incredibly long time in the womb. In one sentence, explain the main reason why this is so.
4. You are a developmentalist lecturing to nurse midwives about the emotional quality of pregnancy. Discuss some forces that predict patients' having a joyous or unhappy pregnancy experience.
5. List some basic teratogenic principles.
6. Discuss the research on the impact of excessive drinking during pregnancy. How does alcohol affect the fetus? Which women are at risk for drinking during pregnancy? What role do cultural norms play in the tendency to use alcohol when pregnant?
7. Discuss the teratogenic impact of stress during pregnancy. What specific effects might stress have on the fetus? Which are the main considerations, issues, and findings in this area?
8. A couple, both carriers of the cystic fibrosis gene, visit a genetic counselor for advice. What should the counselor say?
9. Xenia carries the gene for hemophilia and asks a doctor for information about her risks should she decide to have children. What should the doctor let Xenia know?
10. Define assisted reproductive technologies (ART), discuss its variations, and explore the concerns, issues, and problems facing couples who choose to undergo these procedures.
11. Give a brief account of the history of birth in the developed world.

12. Briefly discuss social policy birth issues in the developed world and the main birth issue in the developing world.
13. The structure housing the eggs is/are the _____.
14. The union of the sperm and egg is called _____.
15. The stage of prenatal development in which all the major organs are formed is called the _____ stage.
16. The single-cell fertilized ovum is called the _____.
17. During the first 2 weeks of prenatal development, the germinal stage, the developing mass of cells prepare for _____.
18. The cylindrical structure called the _____ eventually develops into the brain and spinal cord.
19. The three guiding principles related to prenatal development are the cephalocaudal, proximodistal, and _____ sequences.
20. During the final phase of prenatal development, called the fetal stage, the vital structure that is developing is the _____.
21. The risk of miscarriage is highest during the _____ trimester of pregnancy.
22. A pregnant woman's sense of connection to her baby often intensifies during the second trimester when the landmark event called _____ occurs.
23. Major organ damage may result if a baby is exposed to teratogens during the embryonic stage, while the main teratogenic problem may be developmental disorders during the _____ stage.

24. Smoking during pregnancy can produce a _____ baby.
25. The field of research that studies how intense stress during pregnancy affects the baby's lifelong development is called _____.
26. _____ is the birth condition caused by having an extra chromosome on pair 21.
27. With dominant single-gene disorders, the odds that a baby will have that condition are _____.
28. During the first trimester of pregnancy, _____ typically is used to diagnose fetal genetic disorders.
29. During the second trimester of pregnancy, _____ typically is used to diagnose fetal genetic disorders.
30. Infertility is defined as the inability to conceive or carry a baby to term after _____ of unprotected intercourse.
31. _____ is the name for any infertility treatment in which the egg is fertilized outside of the womb.
32. During the _____ stage of childbirth, called birth, the baby emerges from the womb.
33. In the third stage of labor and birth, the _____ is expelled.
34. _____ is the term for giving birth without medical interventions.
35. When the doctor makes incisions in the abdominal wall in order to extract the baby, the procedure is called a _____.
36. A very-low-birth-weight (VLBW) baby is defined as weighing less than _____.

37. According to the text, pregnancy is often a time of:
- A) incredible excitement and fear.
 - B) unusual inner calm.
 - C) intense anger.
 - D) pure happiness.
38. The pipelike _____ serves as a conduit to the uterus.
- A) fallopian tube
 - B) cervix
 - C) vesicles
 - D) ovary
39. The cervix
- A) expands dramatically to allow the baby to emerge during birth.
 - B) is the upper section of the uterus.
 - C) is an inflexible muscle.
 - D) houses the developing baby in a woman's abdomen.
40. Sperm is to ovum as testis is to:
- A) fallopian tube.
 - B) ovary.
 - C) uterus.
 - D) cervix.
41. Danielle asks, "Are new sperm continually produced?" Which reply is correct?
- A) "Yes. Sperm are manufactured continuously."
 - B) "No. All sperm are formed early in life."
 - C) "Yes and no. Some sperm are present early in life. Others are continually manufactured."
 - D) "Scientists have no data relating to this question."
42. Maru asks, "To get pregnant, when is the best time to have intercourse?" Which reply is correct?
- A) "right around the time of ovulation"
 - B) "a week before ovulation"
 - C) "just before menstruation"
 - D) "there is no ideal time"

43. When a sperm penetrates the nucleus of the ovum, the two merge into one cell. That event is called _____.
A) fertilization
B) ovulation
C) genesis
D) zygoty
44. Phillip asks, "How many chromosomes do humans have?" Which reply is correct?
A) 11.5
B) 23
C) 46
D) 92
45. Genes:
A) function as templates for producing proteins.
B) produce human chromosomes.
C) produce human DNA.
D) produce mainly waste material.
46. Jack and Diane desperately want a son. What are their odds of getting this wish?
A) It's a coin toss; there is a 50 percent chance of having a male.
B) Because the Y chromosomes carrying sperm are lighter and faster, the odds favor having a male.
C) Because the X chromosomes carrying sperm are larger and faster, the odds favor having a female.
D) Even though more males are conceived, the odds favor having a female.
47. More males are conceived and _____ males die in utero and during each stage of life.
A) more
B) fewer
C) 1 in 0.5
D) 1 in 2
48. Which is the correct sequence of events during the germinal stage?
A) fertilization, blastocyst, implantation
B) blastocyst, fertilization, implantation
C) implantation, fertilization, blastocyst
D) fertilization, implantation, blastocyst

49. Link the correct terms about prenatal development to the following descriptions: (1) union of sperm and egg; (2) first cell; (3) first phase of prenatal development; (4) structure that implants in the uterine wall.
- A) (1) fertilization; (2) zygote; (3) germinal period; (4) blastocyst
 - B) (1) germinal period; (2) zygote; (3) blastocyst; (4) zygote
 - C) (1) blastocyst; (2) zygote; (3) germinal period; (4) fertilization
 - D) (1) zygote; (2) blastocyst; (3) fertilization; (4) germinal period
50. Which is the correct sequence?
- A) ovulation, fertilization, zygote, blastocyst, implantation
 - B) fertilization, ovulation, blastocyst, implantation, zygote
 - C) zygote, ovulation, fertilization, implantation, blastocyst
 - D) fertilization, ovulation, blastocyst, implantation
51. During the germinal stage, the:
- A) ovum is released from the ovaries.
 - B) blastocyst begins to embed into the uterine wall.
 - C) heart begins to form.
 - D) placenta begins to form.
52. Darwa asks Ethan, "What is the main function of the placenta?" Ethan should answer that the placenta:
- A) "removes waste from the mother."
 - B) "provides nutrients to the fetus."
 - C) "keeps the fetus from sliding out of the uterus."
 - D) "supports the pregnant woman's health."
53. Development during the embryonic stage is fast-paced, while development during the fetal stage occurs:
- A) more slowly.
 - B) at a faster pace.
 - C) at the same pace.
 - D) halts.
54. The earliest structure to form during the embryonic stage is the _____.
- A) heart
 - B) hands
 - C) legs
 - D) fingers

55. Which is/are formed during the embryonic stage?
- A) major body organs
 - B) digestive system alone
 - C) circulatory system alone
 - D) brain alone
56. During the embryonic period, _____ is/are formed.
- A) the neural tube alone
 - B) the arms and legs alone
 - C) the circulatory system alone
 - D) every major body structure
57. Which of the following is true of the neural tube?
- A) It appears during the early germinal stage.
 - B) It will eventually form the sympathetic nervous system.
 - C) It contains almost all the neurons people have throughout life.
 - D) It is formed during the fetal stage.
58. Jaime asks Olga, "When do the vast majority of human neurons form?" Olga should answer:
- A) "in the womb—that is, well before birth."
 - B) "during the first year of life."
 - C) "during childhood."
 - D) "it's a trick question—neurons steadily form throughout life."
59. Link each statement to the correct principle of prenatal development: (1) the arms form before the hands; (2) the head forms before the feet; (3) the fingers form before the fingernails.
- A) (1) proximodistal; (2) cephalocaudal; (3) mass-to-specific
 - B) (1) cephalocaudal; (2) proximodistal; (3) mass-to-specific
 - C) (1) mass-to-specific; (2) cephalocaudal; (3) proximodistal
 - D) (1) cephalocaudal; (2) mass-to-specific; (3) proximodistal
60. Match each prenatal stage to the appropriate description: (1) first 2 weeks after fertilization; (2) all major body organs form; (3) final stage lasting roughly 7 months.
- A) (1) embryonic; (2) germinal; (3) fetal
 - B) (1) fetal; (2) germinal; (3) embryonic
 - C) (1) germinal; (2) embryonic; (3) fetal
 - D) (1) germinal; (2) fetal; (3) embryonic

61. Match each process to the appropriate prenatal stage: (1) brain development; (2) implantation; (3) neural tube forms.
- A) (1) fetal stage; (2) germinal stage; (3) embryonic stage
 - B) (1) embryonic stage; (2) germinal stage; (3) fetal stage
 - C) (1) fetal stage; (2) fetal stage; (3) embryonic stage
 - D) (1) embryonic stage; (2) fetal stage; (3) fetal stage
62. The brain forms during:
- A) the germinal phase.
 - B) the embryonic stage.
 - C) the fetal stage.
 - D) every stage of prenatal development.
63. Which is the correct sequence of events in prenatal brain development?
- A) neural tube forms; brain cells migrate upward; cells lengthen and form branches
 - B) brain cells migrate upward; neural tube forms; cells lengthen and form branches
 - C) cells lengthen and form branches; neural tube forms; brain cells migrate upward
 - D) brain cells migrate upward; cells lengthen and form branches; neural tube forms
64. Which important structure develops mainly during the embryonic stage?
- A) heart
 - B) brain
 - C) fingernails
 - D) placenta
65. When do humans first begin to be able to hear and see?
- A) during the embryonic stage
 - B) during the later fetal stage
 - C) at birth
 - D) after birth
66. If Martha goes into premature labor, when is the earliest date she can possibly give birth to a live baby?
- A) the twelfth to fourteenth week of pregnancy
 - B) the twenty-second to twenty-third week of pregnancy
 - C) the twenty-eighth to twenty-ninth week of pregnancy
 - D) Predictions are impossible.

67. If a woman has given birth in week 25 of her pregnancy, the baby will:
- A) have more than a 50 percent chance of surviving, with good medical care.
 - B) not be able to survive.
 - C) almost surely survive.
 - D) initially survive, but almost certainly die a few weeks after birth.
68. Who experiences the early pregnancy symptom called couvade?
- A) males
 - B) females
 - C) could be either gender
 - D) both genders
69. Professor Misra is an evolutionary psychologist. To explain morning sickness, what statement would he make?
- A) "Morning sickness evolved to protect the embryo from poisonous foods."
 - B) "Morning sickness is all in the mind. Women who expect to get sick, do."
 - C) "A woman who has morning sickness is unconsciously rejecting her fetus."
 - D) "Women who have morning sickness are at high risk for miscarrying."
70. Mabel is likely to experience all of the following symptoms during her first trimester of pregnancy EXCEPT:
- A) morning sickness.
 - B) breast tenderness.
 - C) looking visibly pregnant.
 - D) feeling tired and faint.
71. Women may feel incredibly tired and experience morning sickness during the _____ trimester(s).
- A) first
 - B) second
 - C) second and third
 - D) third
72. Pregnant women are MOST apt to feel physically uncomfortable during _____.
- A) their first and third trimesters
 - B) their second and third trimesters
 - C) their first and second trimesters
 - D) every trimester

73. Quickening refers to the first:
- A) time the mother hears the baby's heartbeat.
 - B) time the mother feels the baby move.
 - C) time the baby moves.
 - D) signs of labor.
74. A mother becomes intensely bonded to her child. According to the text, this feeling is MOST likely to occur after what event?
- A) fertilization
 - B) quickening
 - C) labor
 - D) morning sickness
75. Flavia tells Francesca, "I feel incredibly attached to my child now!" Flavia is MOST apt to make this statement during the:
- A) first trimester.
 - B) second trimester.
 - C) third trimester.
 - D) embryonic phase.
76. To predict the emotional experience of a pregnant patient, a nurse practitioner might ask which question:
- A) "Are you engaged to your partner?"
 - B) "Are you cohabiting with your partner?"
 - C) "Are you married?"
 - D) "Do you feel loved by your partner?"
77. Carla just learned she is pregnant. Which factor should BEST predict her having a joyous experience?
- A) not gaining too much weight
 - B) being happily married and feeling her partner wants this baby too
 - C) being married
 - D) being over 35
78. Nadya wants to continue working full time as a bank executive after she has her baby. The text implies that her employer may:
- A) discriminate against her at work or pass her over for a promotion.
 - B) give her a promotion.
 - C) fire her from her job.
 - D) offer her a year of family leave.

79. What is family-work conflict?
- A) choosing work over family responsibilities
 - B) being pulled between the demands of parenthood and career
 - C) waiting to have children to focus on a career path
 - D) trying to balance marriage and graduate school
80. Which of the following is MOST likely to be given a raise after the birth of a child?
- A) Jennifer, who is an executive
 - B) Kaya, who is African American
 - C) Jonathon, who is a businessman
 - D) Rebecca, who works in retail
81. Janice is coming up for promotion but she is also 6 months pregnant. She is concerned that she will be denied promotion because of her pregnancy. She is experiencing:
- A) family-work conflict.
 - B) quickening.
 - C) gestation.
 - D) fetal development.
82. Fathers-to-be:
- A) are less bonded to the fetus than are their wives.
 - B) are pampered by society today.
 - C) can feel that their emotions are marginalized.
 - D) may withdraw emotionally from their families.
83. The text's main message with regard to "pregnant fathers" is that society needs to focus:
- A) more on the mother's experience, not the father's.
 - B) more on the father's experience, as pregnancy is a critical life event for men, too.
 - C) on making sure that men are working in order to support the mother and the baby.
 - D) on not paying so much attention to men.
84. A teratogen:
- A) is a gene that causes a birth defect.
 - B) develops during the third trimester of pregnancy.
 - C) enters the ovum with the sperm.
 - D) is a poisonous substance that crosses the placenta, harming the fetus.

85. The toxic effect of a teratogen is MOST likely to occur during the _____ of development—that is, when a specific system or organ is forming most rapidly.
- A) early stage
 - B) sensitive period
 - C) consolidation
 - D) germinal stage
86. Flora's baby has developmental disabilities, which the doctor has tied to Flora's excessive alcohol use during her pregnancy. This neural damage MOST likely occurred during:
- A) the first trimester.
 - B) the second and third trimesters.
 - C) the third trimester alone.
 - D) at birth.
87. If Tien drinks heavily throughout her pregnancy, her baby's problem MOST likely will be a(n):
- A) malformation of a major body structure.
 - B) developmental disorder.
 - C) ability to take in nourishment.
 - D) failure to cry.
88. An obstetrician is giving a talk about teratogens. The doctor would state that damage from a given teratogen:
- A) is most likely to occur during the third trimester.
 - B) is identical for every woman.
 - C) is most likely to occur at high levels of exposure.
 - D) always shows up soon after birth.
89. If a woman smokes during pregnancy, she risks giving birth to a(n):
- A) excessively large child.
 - B) smaller-than-normal child.
 - C) child with severe brain damage.
 - D) child with severe physical impairments.
90. _____ women smoke during pregnancy.
- A) Very few
 - B) Almost all
 - C) Around 33 percent of
 - D) Half of all

91. Kalisha is pregnant and addicted to nicotine. She asks her doctor to convince her that smoking will harm the baby. The doctor will MOST likely tell Kalisha that she risks:
- A) having a less-healthy baby.
 - B) having an obese child.
 - C) giving birth to a severely impaired baby.
 - D) having a miscarriage in the first trimester.
92. A student is writing a paper on the effects of prenatal drinking on the baby. The student should state that the exposed baby may have which of the following problems?
- A) learning difficulties and impaired mental health
 - B) antisocial behaviors
 - C) no arms and short legs
 - D) less behavior regulation
93. A woman smokes during pregnancy and has a baby with learning problems. Which assumption would a developmentalist MOST likely make?
- A) The problem may or may not be due to smoking as this woman could have put her baby's health at risk in other ways.
 - B) Smoking definitely caused these problems.
 - C) An experiment can easily be done to show if smoking was the cause of this baby's difficulties.
 - D) A correlational study will give answers as to whether smoking was the cause of this baby's learning problems.
94. In summarizing the research related to prenatal stress and the fetus, which comment should Sandra make?
- A) Maternal stress always has a marked negative impact on the developing child.
 - B) Excessive stress may raise the risk of premature labor.
 - C) Excessive stress has little impact on the fetus.
 - D) Intense stress during the third trimester is worst for the baby.
95. The BEST conclusion relating to the impact of maternal stress on fetal development is that:
- A) stress during pregnancy can have a long-lasting impact on the developing fetus.
 - B) stress during pregnancy has few long-term effects on the fetus.
 - C) stress always has an impact on the fetus.
 - D) stress has no impact on the fetus.

96. Jing is devising a questionnaire to explore whether maternal stress will affect a fetus. Which of the following would be a legitimate question to include?
- A) "How old is the father?"
 - B) "How many children does the mother already have?"
 - C) "Did this woman experience stress during the first trimester?"
 - D) "Does this woman have a husband?"
97. A hormone often measured in saliva by researchers as a biological marker of stress is called:
- A) cortisol.
 - B) epinephrine.
 - C) testosterone.
 - D) estrogen.
98. Catherine is pregnant with her third child and is a single mother. She works a low-paying job and is increasingly concerned and stressed about adding another mouth to feed. Which hormone is she likely to have increased levels of?
- A) cortisol
 - B) epinephrine
 - C) testosterone
 - D) estrogen
99. Fetal programming research explores how:
- A) drinking and smoking during pregnancy affects the baby.
 - B) disasters and severe life stress during pregnancy affect a baby's lifelong health.
 - C) love during pregnancy affects the baby.
 - D) playing classical music affects the baby in utero.
100. According to fetal programming research, if a woman experiences intense stress while pregnant, the impact on the baby _____.
- A) is confined to early childhood
 - B) may be lifelong
 - C) occurs mainly during adolescence
 - D) shows up only in old age

101. The bottom-line message of fetal programming research is that intense stress in the womb:
- A) can impair lifelong health.
 - B) sets babies up to be thin throughout adult life.
 - C) mainly affects babies at birth.
 - D) has little impact on later development.
102. A child with Down syndrome has which of the following attributes?
- A) an extra chromosome (or piece) on pair 21
 - B) little chance of living past age 18
 - C) uncontrollable jerky movements
 - D) uncontrollable joint bleeding and pain
103. Which is a statement that is true of a child with Down syndrome?
- A) The risk of giving birth to this baby is highest among women over 40.
 - B) These children have a lengthened life expectancy.
 - C) These children are almost always severely mentally impaired.
 - D) These children can never have happy, fulfilling lives.
104. A social worker who counsels Down syndrome teens asks a researcher what will happen to her clients in their forties and fifties. Which reply should this expert give?
- A) "Unfortunately, almost all of your clients will be dead by this age."
 - B) "Unfortunately, your clients will be at high risk of getting Alzheimer's disease."
 - C) "Fortunately, your clients will be aging very well."
 - D) "Fortunately, your clients will improve dramatically in their cognitive abilities."
105. A single-gene disorder that shows up when a baby has one copy of an abnormal gene is called _____.
- A) trisomy
 - B) recessive
 - C) dominant
 - D) sex-linked
106. Bonnie and Clyde just found out they both carry the recessive gene for sickle cell anemia. Maria and Manuel are first-time parents in their forties. Which couple should be MOST worried about having a baby with a genetic or chromosomal problem?
- A) Bonnie and Clyde
 - B) Maria and Manuel
 - C) Both couples are at equally high risk.
 - D) Both couples are at equally low risk.

107. A sex-linked single-gene disorder is usually transmitted from:
- A) father to son.
 - B) mother to daughter.
 - C) mother to son.
 - D) father to daughter.
108. Annysa has a child with cystic fibrosis (CF) and has just gotten pregnant again. What are her odds of having a second CF child?
- A) She has a 1 in 4 chance.
 - B) She has a 50 percent chance.
 - C) She already has one child with the disorder, so the risk is low.
 - D) There is no way of assessing her odds.
109. Huntington's disease, the fatal dominant single-gene disorder, is still in the population because this illness:
- A) strikes in adulthood, after people have had children.
 - B) cannot be detected through genetic testing.
 - C) occurs in groups that forbid contraception.
 - D) tends to enhance fertility.
110. _____ is a sex-linked disorder.
- A) Cystic fibrosis (CF)
 - B) Hemophilia
 - C) Sickle cell anemia
 - D) Huntington's disease
111. Which serious single-gene disease shows its first symptoms during adulthood?
- A) sickle cell anemia
 - B) hemophilia
 - C) Huntington's disease
 - D) Tay-Sachs disease
112. Gerard is a genetic counselor. Which statement should he make to a couple that has a child with cystic fibrosis and is considering another pregnancy?
- A) "The odds of your next child having the disease are 1 in 4."
 - B) "The odds of your next child having the disease are 1 in 2."
 - C) "With your family history, you should definitely terminate this pregnancy."
 - D) "Don't worry about your odds. Today cystic fibrosis is easily controlled with medication."

113. If Mary is going for an ultrasound during her pregnancy, she will be able to:
- A) clearly see the baby's face and body.
 - B) find out if the baby has a genetic disease.
 - C) find out who the baby's father is.
 - D) find out if the baby will look like her.
114. Amniocentesis is performed:
- A) during the second trimester.
 - B) before conception.
 - C) during the first trimester.
 - D) after birth.
115. Which prenatal procedure is most dangerous?
- A) the ultrasound
 - B) chorionic villus sampling (CVS)
 - C) amniocentesis
 - D) a doctor's examination
116. A patient tells her doctor she is pregnant. The doctor would urge the woman to undergo chorionic villus sampling (CVS) if she:
- A) previously had a baby with Tay Sachs disease.
 - B) is 40 years old.
 - C) has no risk factors for problems but wants to ensure her child is born healthy.
 - D) has a bleeding disorder.
117. Link the appropriate prenatal procedure with each of the following descriptions: (1) a more risky prenatal diagnostic test taken during the first trimester; (2) a safer prenatal diagnostic test taken during the second trimester.
- A) (1) amniocentesis; (2) chorionic villus sampling (CVS)
 - B) (1) chorionic villus sampling (CVS); (2) amniocentesis
 - C) (1) ultrasound; (2) amniocentesis
 - D) (1) amniocentesis; (2) ultrasound
118. Which prenatal test samples the fluid that surrounds the fetus?
- A) ultrasound
 - B) amniocentesis
 - C) chorionic villus sampling (CVS)
 - D) measurement of gestational age

119. Based on the text discussion, which statement is true about infertility?
- A) This issue puts stress on women only.
 - B) It may disturb men more than women.
 - C) This condition is usually caused by "female" physical problems.
 - D) It is most apt to strike older couples who try to conceive.
120. Elena is coping with infertility. In determining her stress level, what is the most important question to ask?
- A) "Do you have a supportive partner?"
 - B) "How old are you?"
 - C) "Do you have a good job?"
 - D) "Are you middle class?"
121. Moriah and her husband Mesud are having fertility problems. According to statistics, the person responsible for these problems is:
- A) Mesud.
 - B) Moriah.
 - C) equally Mesud or Moriah.
 - D) the doctor.
122. Assisted reproductive technologies (ART):
- A) can be very expensive and stressful.
 - B) have a high success rate.
 - C) are easy procedures to carry out.
 - D) rarely result in live births.
123. Which of the following occurs only with assisted reproductive technologies (ART)?
- A) inserting a syringe into a woman's uterus
 - B) using a sperm donor
 - C) being a surrogate mother
 - D) taking fertility drugs
124. Which woman will only be able to conceive using in vitro fertilization?
- A) Latasha, who is having trouble ovulating
 - B) Karen, whose fallopian tubes are *permanently* blocked (or missing)
 - C) Rai, who is having trouble carrying a child to term
 - D) Ruth, who is over the age of 40

125. Abby is considering in vitro fertilization. Which of the following is a caution related to this treatment?
- A) It requires a lot of commitment by the man.
 - B) It is very expensive.
 - C) It practically never works.
 - D) It has a high success rate.
126. With regard to birth, "efface" means to:
- A) open up.
 - B) thin out.
 - C) see the top of the baby's head.
 - D) contract.
127. Which is the correct order of events during labor?
- A) birth; dilation and effacement; expulsion of placenta
 - B) dilation and effacement; birth; expulsion of placenta
 - C) expulsion of placenta; birth; dilation and effacement
 - D) dilation and effacement; expulsion of placenta; birth
128. Which woman is just entering "stage two" of labor?
- A) Winnie is thrilled to see the top of her baby's head emerge.
 - B) Yolanda's contractions are 5 minutes apart.
 - C) Zara's placenta is coming out.
 - D) Vanya's cervix has dilated.
129. During the third stage of labor and birth:
- A) a woman feels intense, painful contractions.
 - B) the baby's head emerges.
 - C) the placenta is expelled.
 - D) the cervix dilates and effaces.
130. Which statement is a threat to a safe, healthy birth?
- A) The placenta is attached to the upper part of the uterus.
 - B) Labor begins too early.
 - C) The baby is positioned head-first.
 - D) The cervix fully dilates.

131. Before the twentieth century:
- A) women often gave birth at home because hospitals were full of disease.
 - B) doctors understood the female anatomy.
 - C) only wealthy women could afford hospital births.
 - D) women gave birth using the Lamaze method.
132. Which of the following is a reason why eighteenth- and nineteenth-century doctors were relatively ineffective during labor and birth?
- A) Physicians were familiar with the female anatomy.
 - B) Doctors didn't realize that they needed to wash their hands.
 - C) Medical professionals were largely absent during labor and delivery.
 - D) Doctors charged excessive fees.
133. Which is the correct historical sequence of birth-related "events"?
- A) childbirth becomes medically safe; natural childbirth movement; a variety of birth options
 - B) natural childbirth movement; childbirth becomes medically safe; a variety of birth options
 - C) a variety of birth options; natural childbirth movement; childbirth becomes medically safe
 - D) childbirth becomes medically safe; a variety of birth options; natural childbirth movement
134. Which definition relates to each labor term: (1) doula; (2) epidural; (3) Lamaze?
- A) (1) anesthetic; (2) coach; (3) breathing exercises
 - B) (1) coach; (2) breathing technique; (3) anesthetic
 - C) (1) coach; (2) anesthetic; (3) breathing exercises
 - D) (1) anesthetic; (2) breathing coach; (3) breathing exercises
135. Cesarean section (c-section) rates _____ from 1970 to 2015.
- A) dramatically increased in the developed world.
 - B) dramatically decreased around the world.
 - C) remained stable around the world.
 - D) dramatically increased in the developing world.

136. Which is the MOST important global issue facing pregnant women today?
- A) too many c-sections in the developed world
 - B) no access to high-quality medical interventions in the most impoverished world regions
 - C) few options for giving birth in the developed world
 - D) too many options for giving birth in the developed world
137. If Simba is a poor pregnant woman living in Ghana, her main concern is apt to be:
- A) having an unnecessary c-section.
 - B) surviving childbirth.
 - C) choosing from many possible birth options.
 - D) having a doula.
138. With regard to twenty-first-century birth, which of the following is a major social issue?
- A) low cesarean-section (c-section) rates in the developed world
 - B) reduced rates of infant and maternal mortality in poor regions of the globe
 - C) higher rates of infant mortality among poor women living in affluent nations
 - D) a disturbing lack of birth options among affluent women
139. Which newborn has the highest Apgar score?
- A) Dong, whose body has a healthy color and who is kicking and crying
 - B) Brian, whose hands and feet are a dusky blue color
 - C) Adrian, who lies limp and quiet on the examining table
 - D) Juba, whose heart is beating, but the doctor must give her oxygen to help her breathe
140. Juan weighed 2 pounds at birth and spent months in the infant intensive care unit (ICU). Juan MOST likely:
- A) will have learning problems but only during early childhood.
 - B) could be fine, but also is at high risk of having lingering, lifelong problems.
 - C) will be fine once he leaves the hospital.
 - D) will die during the first year of life.

141. Which message is NOT a bottom-line message of the text's discussion of very-low-birth-weight (VLBW)?
- A) Very-low-birth-weight (VLBW) babies are at higher risk of having lifelong problems.
 - B) Very-low-birth-weight (VLBW) babies are sure to have lifelong problems.
 - C) Doctors are able to save many more very-low-birth-weight (VLBW) babies than in the past.
 - D) There is controversy among doctors as to whether to intervene when a baby is born at "the cusp" of viability.
142. As of 2017, infant mortality in the United States:
- A) is high compared to other developed nations.
 - B) is low compared to other developed nations.
 - C) occurs at the same rate for women at all socioeconomic levels.
 - D) is higher than in the past.
143. A woman's cervix expands to push the baby out of the uterus during birth.
- A) True
 - B) False
144. Sperm can live for several days inside a woman's reproductive tract.
- A) True
 - B) False
145. More male babies than female babies are conceived.
- A) True
 - B) False
146. During implantation, the blastocyst embeds itself in the uterine wall.
- A) True
 - B) False
147. By the end of the embryonic period, the major human body structures and organs are formed (with the exception of the brain).
- A) True
 - B) False

148. By the end of the embryonic period, the neurons have migrated to the top of the neural tube.
A) True
B) False
149. Very few babies born before the twenty-eighth week of pregnancy survive.
A) True
B) False
150. Morning sickness typically occurs during the fetal stage of development.
A) True
B) False
151. Quickening occurs during the third trimester of pregnancy.
A) True
B) False
152. A crucial factor predicting the emotional quality of pregnancy is whether the mother-to-be has a loving partner who wants the child.
A) True
B) False
153. Developmentalists, along with the wider world, tend to pay less attention to the emotions of fathers-to-be than they do to pregnant mothers' emotions.
A) True
B) False
154. Teratogens produce deformities in the major body structures during the first trimester of pregnancy.
A) True
B) False
155. Teratogens tend to affect the developing fetal brain during the second and third trimesters.
A) True
B) False

156. A woman's report that she quit smoking during pregnancy is totally trustworthy.
A) True
B) False
157. Traumatic life events during pregnancy can promote low birth weight and end up programming the baby to “put on pounds” during life.
A) True
B) False
158. A person with a dominant single-gene disorder inherits a faulty gene from each parent.
A) True
B) False
159. Sex-linked single-gene disorders are typically passed down from mothers to sons.
A) True
B) False
160. Unlike amniocentesis, chorionic villus sampling (CVS) takes place during the first trimester of pregnancy.
A) True
B) False
161. To be classified as infertile, a couple must have unprotected sex for 1 year without conceiving.
A) True
B) False
162. The success rate for in vitro fertilization approaches 80 percent.
A) True
B) False
163. In vitro fertilization is typically an expensive procedure.
A) True
B) False

164. It is unusual for a baby's head to appear first during birth.
A) True
B) False
165. The cesarean section (c-section) rate has been declining in the developed world.
A) True
B) False
166. Today, women in developed countries have a variety of birth choices.
A) True
B) False
167. Infant mortality refers to deaths that occur within the first year after birth.
A) True
B) False
168. Adoptive parents are naturally less bonded to their babies than biological parents.
A) True
B) False
169. The almond-shaped organ(s) where the ova reside is/are called the:
A) ovaries.
B) fallopian tubes.
C) cervix.
D) uterus.
170. The process that involves the union of a sperm and an egg is known as:
A) ovulation.
B) hormonal balancing.
C) fertilization.
D) cervical fluid.

171. Which of the following is true of human chromosomes?
- A) Some normally developing humans have fewer or more than 46 chromosomes.
 - B) Each human has an identical number of paired chromosomes, one contributed by the mother and the other contributed by the father.
 - C) The mother contributes most of the chromosomes to the baby.
 - D) Each chromosome pair is a perfect match, including the chromosomes that determine gender.
172. The first 2 weeks of prenatal development, from fertilization to implantation, is called the _____ stage.
- A) fetal
 - B) germinal
 - C) placental
 - D) embryonic
173. A developing baby absorbs nutrients through the _____, which is a structure projecting from the wall of the uterus during pregnancy.
- A) placenta
 - B) cervix
 - C) ovum
 - D) blastocyst
174. The cylindrical structure that will eventually develop into the brain is the:
- A) cephalocaudal tube.
 - B) couvade.
 - C) neural tube.
 - D) blastocyst.
175. Prenatal growth occurs from the most interior parts of the body outward. This prenatal principle is known as the _____ sequence.
- A) mass-to-specificity
 - B) proximodistal
 - C) viability
 - D) cephalocaudal

176. Karen is giving her newborn a bath. She is cleaning the baby's belly button, which is where the _____ was attached to the baby.
- A) neurons
 - B) blastocyst
 - C) amniotic sac
 - D) umbilical cord
177. Arial is 28 weeks pregnant. While she reports feeling “great,” her husband has been complaining of symptoms typical of morning sickness. Her husband may be suffering from:
- A) gestational diabetes.
 - B) teratogen sickness.
 - C) couvade.
 - D) pregnancy.
178. Which of the following characterizes morning sickness?
- A) It only involves queasiness that occurs in the early hours of the day.
 - B) It may be an evolutionary mechanism to keep pregnant women from eating spoiled foods.
 - C) It tends to occur only in the morning.
 - D) It tends to occur only throughout pregnancy.
179. Which is the MOST important force that determines the emotional quality of a pregnancy?
- A) feeling cared about and loved
 - B) getting adequate prenatal care
 - C) being affluent
 - D) having the child's father present
180. Exposure to teratogens can affect the developing brain:
- A) only before a woman knows she is pregnant.
 - B) only during the first trimester.
 - C) only in extremely rare situations; in general, the baby is immune to teratogens that affect the mother.
 - D) throughout pregnancy.

181. The first stage of labor, when the cervix widens enough to allow the baby to emerge, is called:
- A) expulsion.
 - B) crowning.
 - C) dilation and effacement.
 - D) delivery.
182. Rachel was born 1 hour ago. She has already been given:
- A) neonatal intensive care.
 - B) the Apgar scale.
 - C) the PKU (phenylketonuria) scale.
 - D) the viability scale.
183. Infant mortality rates vary depending on the country and geographic region. Which country has the highest infant mortality rate?
- A) United States
 - B) Haiti
 - C) Afghanistan
 - D) Spain
184. The pear-shaped muscular organ in a woman's abdomen that houses a developing baby is the:
- A) cervix.
 - B) uterus.
 - C) fallopian tube.
 - D) ovum.
185. Jeanine has had surgery on the pair of slim, pipelike structures that connect her ovaries with her uterus. Jeanine has had surgery on her:
- A) fallopian tubes.
 - B) ovaries.
 - C) uterus.
 - D) ova.
186. The male structure, known as the _____, is comparable to the ovaries in females.
- A) testes
 - B) sperm
 - C) penis
 - D) hormones

187. At conception, there are 20 percent _____ males than females; at birth, there are 5 percent _____ males than females.
- A) more; more
 - B) fewer; more
 - C) more; fewer
 - D) fewer; fewer
188. Implantation refers to the:
- A) fertilization of the egg.
 - B) time during which all major organs of the fetus are constructed.
 - C) process in which the sperm penetrates the egg lining and burrows into the egg.
 - D) process in which a blastocyst becomes embedded in the uterine wall.
189. The embryonic period of development lasts for about _____ weeks.
- A) 2
 - B) 6
 - C) 15
 - D) 24
190. The proximodistal sequence of development refers to the concept that growth occurs from the:
- A) extremities toward the trunk of the body.
 - B) large structures to the smaller structures.
 - C) most interior parts of the body outward.
 - D) head to the tail (top to bottom).
191. The fluid-filled chamber that provides a “home” for the developing fetus, as well as insulation from infection and harm, is the:
- A) amniotic sac.
 - B) umbilical cord.
 - C) placenta.
 - D) neural tube.
192. Martha is about 18 weeks pregnant and has begun to experience the sensation known as quickening. Martha is feeling:
- A) crowning.
 - B) false labor.
 - C) the fetus moving inside the womb.
 - D) heartburn.

193. Research that explores the long-term effects of pregnancy traumas on the development of babies later in life is known as _____ research.
- A) fetal programming
 - B) intrauterine
 - C) prenatal
 - D) teratogen
194. Exposure to harmful substances is MOST likely to cause major structural damage to a fetus during the _____ stage of development.
- A) embryonic
 - B) fetal
 - C) germinal
 - D) post-partum
195. The most common chromosomal abnormality causes:
- A) sickle cell anemia.
 - B) Huntington's disease.
 - C) Tay-Sachs disease.
 - D) Down syndrome.
196. Jesse's wife is in the second stage of labor, when he notices the scalp of the baby for the first time. Jesse's baby is:
- A) crowning.
 - B) dilating.
 - C) effacing.
 - D) contracting.
197. A preterm baby refers to a baby that has arrived in the world more than _____ early.
- A) two days
 - B) one week
 - C) two weeks
 - D) three weeks
198. Infant mortality refers to deaths that occur within the first _____ of life.
- A) day
 - B) month
 - C) year
 - D) 2 years

Answer Key

1. Answers should include three distinct events in order: (1) the zygote rapidly divides and enters the uterus about 3 days later; (2) the blastocyst forms; and (3) the blastocyst develops projections, and roughly 14 days after fertilization, fully implants into the uterine wall.
2. Examples may vary. Cephalocaudal = (head to tail, or top to bottom) head before legs and feet; proximodistal = (inside to outside) arms before fingers; mass-to-specific = (big structures before details) eyes before eyelashes.
3. It takes a long time to form the human brain.
4. Forces predicting a positive/negative experience: whether the woman has a nurturing partner who is excited about the child; whether there are serious money worries; for women who want to keep working full time, whether the person is worried that pregnancy may cause her boss to demote or fire her.
5. (1) Teratogens exert their effects during the sensitive period for development. (2) Major structural damage can result if exposure occurs during the embryonic stage, while the developing brain can be affected throughout pregnancy. (3) There is often a threshold level required for a teratogen to have an effect, but the risk of damage is unpredictable, as some fetuses and mothers are more or less vulnerable. (4) The damaging effect of a given teratogen may sometimes show up later in development, not just directly after birth.
6. Alcohol crosses the placenta, inhibiting normal neural growth and producing potential learning and behavior problems. Specifically, children born to alcoholic mothers may have a condition called Fetal Alcohol Syndrome (FAS), characterized by small birth weights, impaired brain development, facial abnormalities, and serious developmental disorders. These children may also have a less severe set of conditions called Fetal Alcohol Spectrum Disorders. Binge-drinking or having several drinks throughout pregnancy puts children at highest risk, although the odds vary depending on the resilience of the mother and fetus. Most women stop drinking after learning they are pregnant, or cut down their intake dramatically. Ironically though, in one study in the Netherlands, well-educated women were most likely to continue to drink (but only socially) when pregnant. In general, Europeans are more lax than U.S. women about urging total abstinence from alcohol during pregnancy, because in many European nations, having a glass or two of wine with meals is a “normal” cultural practice.
7. When pregnant women undergo excessive levels of stress, the main risk is going into labor early. Stress hormones transmitted to the fetus via the amniotic fluid might also cause a newborn to have high levels of cortisol during the first months of life. Although the research on the timing of pregnancy stress is not crystal clear, stressful events prior to conception and during the first trimester may be most dangerous.
8. The counselor should tell the couple that each child they conceive will have a 1 in 4 chance of getting cystic fibrosis (CF). Cystic fibrosis (CF) is still an incredibly life-shortening disease, but today some people can live to their thirties with this illness. The counselor also should tell them to be prepared for repeated hospitalizations. They and other family members will experience much stress. There are tests they can take during the first or second trimester of pregnancy to find out if a fetus will have the illness. The counselor should let the couple know that their decision to have a test and to

- go forward with any pregnancy is up to them.
9. Hemophilia is a sex-linked illness, so Xena's sons will have a 50-50 (or 50 percent) chance of having hemophilia, while her daughters will have a 50-50 (or 50 percent) chance of being carriers for the disease. The good news is that while in the past, hemophilia was often fatal at a young age, now it can be controlled by blood transfusions.
 10. Assisted reproductive technologies (ART) refer to any procedure in which fertilization occurs outside of the womb. Today, there are many variations of ART. Doctors may inject the partner's sperm directly into the egg (if the issue is male fertility problems); the woman may use a donor egg or rely on a sperm bank to conceive. If she cannot undergo a full pregnancy, the woman's fertilized egg may be inserted into "a carrier womb" (another woman) to carry the baby to term. If a third party is involved, ART can produce emotional complications. But the main issue for couples considering ART is that this procedure is costly, time consuming, and success rates—especially at older maternal ages—are low. ART babies have a slightly higher risk of birth defects. Also, couples may have to undergo a distressing procedure called "fetal reduction" if too many inserted embryos "take" since there is a higher risk of miscarriage with multiple births. Still, ART can offer an incredible gift to couples who would not otherwise be able to have their own biological child.
 11. Before the twentieth century, birth was dangerous. Physicians knew next to nothing about the female anatomy, their interventions carried the risk of infection (making childbirth more dangerous), and women shunned hospitals because they were full of disease. Then, during the early twentieth century, the field of medicine advanced, maternal mortality plummeted, and birth in a hospital became the norm. In the 1960s, women began to protest the medicalization of birth, and the natural childbirth movement took off. Today, affluent women have many options along a continuum from natural to medical when they give birth.
 12. Social policy birth issues in the developed world: high rates of cesarean sections (c-sections) and clear socioeconomic differences in infant mortality in every affluent nation. For instance, poor women are at higher risk of giving birth to premature babies. The main birth issue in the developing world: unacceptable lack of access to decent prenatal care and routine obstetrical interventions, such as c-sections, in the world's most impoverished nations.
 13. fallopian tube
 14. fertilization
 15. embryonic
 16. zygote
 17. implantation
 18. neural tube
 19. mass-to-specific
 20. brain
 21. first
 22. quickening
 23. fetal
 24. smaller-than-normal (or low-birth-weight [LBW])
 25. fetal programming research

26. Down syndrome
27. 1 in 2; 50 percent
28. chorionic villus sampling; CVS
29. amniocentesis
30. 1 year; one year
31. Assisted reproductive technology; ART
32. second
33. placenta
34. Natural childbirth
35. cesarean section; c-section
36. $3\frac{1}{4}$ pounds; 3.25 pounds; $3\frac{1}{4}$ lbs.; 3.25 lbs.
37. A
38. A
39. A
40. B
41. A
42. A
43. A
44. C
45. A
46. B
47. A
48. A
49. A
50. A
51. B
52. B
53. A
54. A
55. A
56. D
57. C
58. A
59. A
60. C
61. A
62. C
63. A
64. A
65. B
66. B
67. A
68. A
69. A
70. C
71. A

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

- 118. B
- 119. D
- 120. A
- 121. C
- 122. A
- 123. D
- 124. B
- 125. B
- 126. B
- 127. B
- 128. A
- 129. C
- 130. B
- 131. A
- 132. B
- 133. A
- 134. C
- 135. A
- 136. B
- 137. B
- 138. C
- 139. A
- 140. B
- 141. B
- 142. A
- 143. A
- 144. A
- 145. A
- 146. A
- 147. A
- 148. B
- 149. B
- 150. B
- 151. B
- 152. A
- 153. A
- 154. A
- 155. A
- 156. B
- 157. A
- 158. B
- 159. A
- 160. A
- 161. A
- 162. B
- 163. A

- 164. B
- 165. B
- 166. A
- 167. A
- 168. B
- 169. A
- 170. C
- 171. B
- 172. B
- 173. A
- 174. C
- 175. B
- 176. D
- 177. C
- 178. B
- 179. A
- 180. D
- 181. C
- 182. B
- 183. C
- 184. B
- 185. A
- 186. A
- 187. A
- 188. D
- 189. B
- 190. C
- 191. A
- 192. C
- 193. A
- 194. A
- 195. D
- 196. A
- 197. D
- 198. C