*Biology for a Changing World 2e,* Chapter 30 Test Bank

1. Ovaries produce \_\_\_\_\_\_\_\_.

1. estrogen
2. hormones
3. eggs
4. progesterone
5. All of the above.

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, ovaries, hormones

2. Eggs are produced in the \_\_\_\_\_\_\_\_.

1. cervix
2. uterus
3. oviducts
4. ovaries
5. vagina

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, ovaries

3. A fetus develops in the \_\_\_\_\_\_\_\_.

1. cervix
2. uterus
3. oviducts
4. ovaries
5. vagina

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract

4. Sperm enters the female reproductive system at the \_\_\_\_\_\_\_\_.

1. cervix
2. uterus
3. oviducts
4. ovaries
5. vagina

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, cervix, vagina

5. Most females have \_\_\_\_\_\_\_\_ ovaries.

1. 0
2. 1
3. 2
4. 4
5. 3

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, paired organs

6. The uterus is lined with a tissue called the \_\_\_\_\_\_\_\_.

1. endocardium
2. mezometrium
3. ureter
4. endometrium
5. paremetrium

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, progesterone, endometrium, uterus

7. Progesterone is produced by the \_\_\_\_\_\_\_\_\_ (specific region of cells), which forms from the follicle after release of the egg.

*Answer:* corpus luteum

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, ovulation, ovaries, follicle

8. Describe the journey of a sperm from entering the female reproductive system to finding an egg.

*Answer:* Sperm enters the female reproductive system at the vagina. From there, it passes through the cervix and then through the uterus and into the oviducts, where fertilization most commonly occurs.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: female reproductive tract, vagina, cervix, uterus, oviduct, ovaries, ovulation

Use the diagram to answer Questions 9–19.



9. This is the cervix.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: cervix, vagina, uterus, female reproductive tract

10. This is the oviduct.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: 1

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: ovaries, oviduct, uterus, female reproductive tract

11. This is the uterus.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract

12. This is the ovary.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract

13. This is the vagina.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract

14. The hormones estrogen and progesterone are produced here.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, ovaries

15. If this structure were blocked, eggs would be unable to reach the uterus.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, oviducts

16. This is also known as the birth canal.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, vagina, cervix

17. Eggs are produced here.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, ovaries

18. Fetuses develop here.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, uterus

19. Sperm pass through this structure to reach the uterus.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, cervix

20. Embryos implant into the \_\_\_\_\_\_\_\_, a specialized tissue that lines the \_\_\_\_\_\_\_\_.

1. uterus; female reproductive system
2. cervical lining; cervix
3. endometrium; vagina
4. endometrium; uterus
5. cervical lining; female reproductive system

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, endometrium

21. Fertilization normally occurs in the \_\_\_\_\_\_\_\_\_.

1. uterus
2. cervix
3. oviduct
4. ovary
5. vagina

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract

22. The \_\_\_\_\_\_\_\_ connects the urethra and the testes.

1. prostate gland
2. vas deferens
3. ureter
4. penis
5. seminiferous tubules

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

23. The vas deferens connects the \_\_\_\_\_\_\_\_ and the testes.

1. prostate gland
2. ureter
3. urethra
4. penis
5. seminiferous vesicles

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

24. Most males have \_\_\_\_\_\_\_\_ testes.

1. 0
2. 1
3. 2
4. 4
5. 3

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, paired organs

25. Sperm are produced by the \_\_\_\_\_\_\_\_.

1. prostate gland
2. vas deferens
3. ureter
4. epididymis
5. seminiferous tubules

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

26. Most of the testes are filled with the \_\_\_\_\_\_\_\_.

1. prostate gland
2. vas deferens
3. ureter
4. epididymis
5. seminiferous tubules

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis

27. Sperm mature in the \_\_\_\_\_\_\_\_.

1. prostate gland
2. vas deferens
3. ureter
4. epididymis
5. seminiferous tubules

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis

28. Sperm are stored in the \_\_\_\_\_\_\_\_ prior to ejaculation.

1. prostate gland
2. vas deferens
3. ureter
4. epididymis
5. seminal vesicles

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis

29. Sperm are stored in the \_\_\_\_\_\_\_\_ prior to ejaculation.

*Answer:* epididymis

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis

30. Testes are located in a sac called the \_\_\_\_\_\_\_\_.

*Answer:* scrotum

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis, scrotum

31. Sperm are produced by the structures inside the testes called the \_\_\_\_\_\_\_\_.

*Answer:* seminiferous tubules

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

32. Males sex hormones like testosterone are collectively called \_\_\_\_\_\_\_\_.

*Answer:* androgens

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, hormones, endocrine cells

33. How is semen different from sperm?

*Answer:* Sperm is just one component of semen. Semen also includes other fluids added by the male reproductive system to increase the likelihood that some sperm can survive the harsh environment of the female reproductive system.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: male reproductive tract, sperm energy source, sperm cells, vagina pH

34. Describe the journey of a sperm from its production to ejaculation.

*Answer:* Sperm are produced in the seminiferous tubules inside the testes. From there, they move to the epididymis, where they mature. They are stored there until ejaculation is imminent, then they pass into the vas deferens and into the urethra, where they pass down and exit the penis.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: male reproductive tract, seminiferous tubules, epididymis, vas deferens, urethra, semen, prostate

Use the diagram below to answer Questions 35–45.



35. This is the urethra.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know it

Difficulty: Easy

Important Words/Concepts: male reproductive tract, ejaculation

36. This is the vas deferens.

* 1. 1
	2. 2
	3. 3
	4. 5
	5. 7

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

37. This is the scrotum.

1. 2
2. 3
3. 4
4. 5
5. 6

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, location of testes/seminiferous tubules

38. This is the epididymis.

1. 3
2. 4
3. 5
4. 6
5. 7

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, sperm storage

39. This is the penis.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract

40. This is the testis.

1. 3
2. 4
3. 5
4. 6
5. 7

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, seminiferous tubules

41. This is a seminiferous tubule.

1. 3
2. 4
3. 5
4. 6
5. 7

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, sperm development, testes, scrotum

42. Testosterone is produced here.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: male reproductive tract, androgens, testes

43. Sperm mature and are stored here.

1. 3
2. 4
3. 5
4. 6
5. 7

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: male reproductive tract, epididymis, sperm maturation

44. Sperm leave the body through this tube.

1. 2
2. 3
3. 4
4. 5
5. 6

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: male reproductive tract, urethra, penis

45. Sperm develop here.

1. 1
2. 3
3. 5
4. 6
5. 7

Answer: E

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: male reproductive tract, testes, seminiferous tubules

46. The suffix “-ectomy” comes from Greek and means to “cut out.” Use this information and what you know about the structure and function of the male reproductive system to explain why a vasectomy is a form of contraception for males.

*Answer:* Sperm are transported from the testes to the urethra via the vas deferens. If the vas deferens are cut, sperm can’t leave the male’s body to fertilize an egg.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: contraception, male reproductive tract, vas deferens

47. The correct order of the path that sperm take out of a man's body is \_\_\_\_\_\_\_\_.

1. seminiferous tubules, epididymis, vas deferens, urethra
2. urethra, vas deferens, epididymis, seminiferous tubules
3. epididymis, seminiferous tubules, vas deferens, urethra
4. urethra, seminiferous tubules, epididymis, vas deferens
5. urethra, epididymis, vas deferens, seminiferous tubules

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: male reproductive tract, ejaculation

48. The human structure that is most similar to a bird's cloaca is the \_\_\_\_\_\_\_\_\_.

1. oviduct
2. vas deferens
3. female urethra
4. male urethra
5. cervix

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: cloaca, sexual reproduction, internal fertilization

49. Testis is to ovary as vas deferens is to \_\_\_\_\_\_\_\_\_.

1. uterus
2. follicle
3. corpus luteum
4. oviduct
5. cervix

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: female vs. male reproductive tract, oviduct, vas deferens

50. Fertilization normally occurs in the \_\_\_\_\_\_\_\_.

1. cervix
2. uterus
3. oviduct
4. ovaries
5. vagina

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, fertilization, oviduct

51. A fertilized egg is called a(n) \_\_\_\_\_\_\_\_.

1. embryo
2. zygote
3. trophoblast
4. blastocyst
5. fetus

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: sperm, egg, fertilization, oviduct

52. The maximum number of sperm that can successfully fertilize an egg is \_\_\_\_\_\_\_\_.

1. 1
2. 2
3. 3
4. 4
5. 10

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: fertilization, sperm, egg, oviduct

53. A woman gave birth to fraternal twins, one daughter and one son. A minimum of how many sperm successfully fertilized an egg(s) to initiate her pregnancy?

1. 1
2. 2
3. 3
4. 4
5. 10

Answer: B

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: fertilization

54. A fertilized egg is called a \_\_\_\_\_\_\_\_.

*Answer:* zygote

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Easy

Important Words/Concepts: sperm, egg, fertilization

56. Which of the following correctly lists the structures through which sperm must pass from entry into the female reproductive tract to the site of fertilization?

1. cervix, vagina, uterus, oviduct
2. vagina, uterus, cervix, oviduct
3. vagina, cervix, uterus, oviduct
4. vagina, uterus, oviduct, ovary
5. vagina, cervix, uterus, oviduct, ovary

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: female reproductive tract

57. Normally, fertilization occurs in the \_\_\_\_\_\_\_\_\_, and implantation occurs in the \_\_\_\_\_\_\_\_.

1. ovaries; uterus
2. uterus; cervix
3. follicle; oviduct
4. oviduct; uterus
5. follicle; uterus

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract

58. One general cause of infertility in men is the inability of sperm to move from the testes into the urethra. Which of the following can cause this problem?

* 1. erectile dysfunction
	2. testicular varicose veins
	3. low testosterone
	4. A and B
	5. B and C

Answer: D

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Medium

Important Words/Concepts: male reproductive tract

59. Tissue scarring, cancer, and infection can cause tissue blockages and infertility in \_\_\_\_\_\_\_\_.

* 1. men
	2. women
	3. both men and women
	4. both men and women, but primarily women
	5. both men and women, but primarily men

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: female reproductive tract, male reproductive tract

60. Which of the following statements is TRUE?

1. Semen contains sperm.
2. The scrotum contains ovaries.
3. The uterus contains the urethra.
4. The ovaries contain oviducts.
5. The epididymis contains eggs.

Answer: A

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: male reproductive tract, female reproductive tract

61. All of the following are potential causes of human male infertility, EXCEPT \_\_\_\_\_\_\_\_.

1. low testosterone
2. abnormal sperm
3. meiosis
4. varicose veins
5. erectile dysfunction

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: male reproductive tract

62. Precursor sperm cells have \_\_\_\_\_\_\_ of every chromosome, and sperm have \_\_\_\_\_\_\_ of every chromosome.

1. 1 copy; 1 copy
2. 1 copy; 2 copies
3. 2 copies; 1 copy
4. 2 copies; 2 copies
5. 2 copies; 3 copies

Answer: C

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: mitosis, meiosis, male reproductive tract, seminiferous tubules, haploid, diploid

63. Sperm and egg cells are produced by \_\_\_\_\_\_\_\_ cell division.

*Answer:* meiotic

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: gametes, meiosis, ovaries, seminiferous tubules, haploid

64. Prior to ejaculation, sperm are mixed with fluids from accessory glands such as the prostate to create semen. What are the functions of this accessory gland fluid?

*Answer:* The fluid from the accessory glands contains fructose to nourish the sperm cells, and it is alkaline to neutralize the acidity of the female reproductive tract, which would otherwise kill the sperm. Finally, the fluid serves as a medium through which the sperm can swim.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Know It

Difficulty: Medium

Important Words/Concepts: semen, male reproductive tract, vagina pH, sperm

65. How can an enlarged prostate interfere with reproduction?

*Answer:* The enlarged prostate may interfere with the passage of sperm. The prostate is also responsible for contributing to the fluid portion of semen, and if functioning improperly, the sperm within the semen may be unable to survive.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: male reproductive tract, vas deferens, semen, prostate

66. Ectopic pregnancies occur when a fertilized egg implants itself into the wall of the oviduct instead of the uterus. A common cause is scar tissue in the oviduct, which reduces its diameter. If the egg can’t pass through the oviduct, how can it be fertilized?

*Answer:* Sperm are much smaller than eggs, so a blockage that prevents eggs from passing down the oviduct could still allow sperm through to fertilize the egg.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: female reproductive tract, sperm, egg, fertilization

67. Compare and contrast sexual reproduction in humans, birds, and salmon.

*Answer:* Humans and birds have internal fertilization; salmon have external fertilization. Humans have a penis to insert semen into the vagina; birds transmit sperm from cloaca to cloaca.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: internal fertilization, cloacal kiss, external fertilization

68. Compare and contrast costs and benefits of internal fertilization, such as in mammals, and external fertilization, such as in fish.

*Answer:* External fertilization allows many eggs to be fertilized simultaneously, but this is usually associated with little resource contribution and parental care from the mother. Juveniles of species that use external fertilization have high mortality rates. Internal fertilization is associated with fewer offspring being produced, but the greater amount of maternal resources provided greatly improves juvenile mortality rates.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: sexual reproduction, internal fertilization, external fertilization, embryo number, female resources/investment

69. Follicle-stimulating hormone \_\_\_\_\_\_\_\_.

1. is responsible for male pattern baldness
2. causes the follicle to transform into the corpus luteum
3. is responsible for the production of body hair at the onset of puberty
4. causes a thickening of the endometrium
5. causes maturation of an egg at the beginning of a menstrual cycle

Answer: E

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: female reproductive tract, hormones

70. Release of an egg is triggered by \_\_\_\_\_\_\_\_.

1. auxin
2. estrogen
3. luteinizing hormone
4. human chorionic gonadotropin
5. androgen

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, hormones, follicle-stimulating hormone vs. luteinizing hormone, ovulation

71. The shedding of the endometrium is called \_\_\_\_\_\_\_\_.

1. menstruation
2. ovulation
3. amortization
4. endometriation
5. ejaculation

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Easy

Important Words/Concepts: female reproductive tract, menstrual cycle

72. Luteinizing hormone is produced by the \_\_\_\_\_\_\_\_.

1. thalamus
2. anterior pituitary gland
3. hypothalamus
4. ovaries
5. corpus luteum

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: hormones, female reproductive tract, pituitary gland, ovulation

73. The \_\_\_\_\_\_\_ becomes the corpus luteum.

1. follicle
2. ovule
3. egg
4. ovary
5. zygote

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Easy

Important Words/Concepts: ovulation, follicle, luteinizing hormone, progesterone

74. Estrogen levels peak during days \_\_\_\_\_\_\_ of the menstrual cycle.

1. 1–4
2. 5–9
3. 10–14
4. 15–19
5. 20–24

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

75. Estrogen levels rise and reach their maximum level.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

76. Follicle-stimulating hormone (FSH) is released.

1. 1
2. 2
3. 3
4. 4
5. 5

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

77. Progesterone levels are at their highest.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 3 and 4

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

78. Luteinizing hormone (LH) is released.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

79. A reduction in estrogen and progesterone levels triggers the process of menstruation.

* 1. 1
	2. 2
	3. 3
	4. 4
	5. 5

Answer: E

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

80. Hormones are released from the anterior pituitary gland.

* 1. 1 and 2
	2. 1 and 3
	3. 2 and 3
	4. 2 and 4
	5. 4 and 5

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

81. Hormones are secreted from within the ovaries.

* 1. 1 and 2
	2. 1 and 3
	3. 2 and 3
	4. 2 and 4
	5. 4 and 5

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: menstrual cycle

82. The anterior pituitary gland secretes \_\_\_\_\_\_\_\_.

* 1. estrogen
	2. progesterone
	3. follicle-stimulating hormone
	4. A and B
	5. B and C

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: menstrual cycle, female hormones, follicle-stimulating hormone vs. luteinizing hormone

83. The developing follicle secretes \_\_\_\_\_\_\_\_.

* 1. estrogen
	2. progesterone
	3. follicle stimulating hormone
	4. A and B
	5. B and C

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: menstrual cycle, hormones

84. The corpus luteum secretes \_\_\_\_\_\_\_\_.

* 1. estrogen
	2. progesterone
	3. luteinizing hormone
	4. A and B
	5. B and C

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: hormones, menstrual cycle, ovulation

85. Prior to development of the placenta, the \_\_\_\_\_\_\_ produces estrogen and progesterone to support pregnancy.

1. ovaries
2. oviducts
3. corpus luteum
4. uterus
5. embryo

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: follicle, ovulation, hormones

86. Which of the following BEST distinguishes between zygotes and embryos?

* 1. Zygotes are fertilized eggs within the oviduct; embryos are fertilized eggs in the uterus.
	2. Fertilized eggs are called zygotes until they implant in the uterine lining and embryos after that.
	3. Fertilized eggs are zygotes until they begin to divide, at which time they are called embryos.
	4. Zygotes are eggs that haven’t been fertilized; embryos are fertilized eggs.
	5. Embryos are eggs fertilized in the oviducts; zygotes are eggs fertilized in the uterus.

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: fertilization, zygote, embryo, pregnancy

87. Human chorionic gonadotropin (hCG) is produced by \_\_\_\_\_\_\_\_.

1. the follicle
2. the corpus luteum
3. the embryo prior to implantation
4. the embryo after implantation
5. the placenta

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know it

Difficulty: Medium

Important Words/Concepts: hormones, pregnancy, embryo implantation

88. How does human chorionic gonadotropin (hCG) support pregnancy?

* 1. It directs the anterior pituitary gland to continue secreting luteinizing hormone, which keeps the follicles healthy until the placenta develops.
	2. It directs the follicles to continue to secrete follicle-stimulating hormone, which keeps estrogen and progesterone levels high until the placenta develops.
	3. It directs the placenta to start producing estrogen and progesterone as the corpus luteum degenerates.
	4. It directs the corpus luteum to continue estrogen and progesterone production while the placenta develops.
	5. It directs the anterior pituitary to continue to secrete estrogen and progesterone until the placenta develops sufficiently.

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: hormones, pregnancy, embryo implantation

89. Explain how the combination birth control pill (containing both estrogen and progesterone) uses a negative feedback loop to prevent conception.

*Answer:* Eggs develop within follicles when estrogen and progesterone levels are low. Taking birth-control pills raises the levels of hormones, which then “turns off” egg maturation. This is a classic negative feedback loop.

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: contraception, hormones, ovulation

90. Maturation of eggs is directly triggered by \_\_\_\_\_\_\_\_, and ovulation is directly triggered by \_\_\_\_\_\_\_\_\_.

1. follicle-stimulating hormone; luteinizing hormone
2. estrogen; progesterone
3. follicle-stimulating hormone; progesterone
4. luteinizing hormone; estrogen
5. luteinizing hormone; follicle-stimulating hormone

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: menstrual cycle, hormones, ovulation

91. If the onset of menstruation marks the beginning of a monthly period, then ovulation occurs around the \_\_\_\_\_\_\_\_ day.

1. 3rd
2. 7th
3. 14th
4. 21st
5. 28th

Answer: C

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: menstrual cycle

92. The ovaries produce \_\_\_\_\_\_\_\_\_ but not \_\_\_\_\_\_\_\_\_.

1. progesterone; luteinizing hormone
2. luteinizing hormone; follicle-stimulating hormone
3. follicle-stimulating hormone; luteinizing hormone
4. estrogen; progesterone
5. progesterone; estrogen

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: hormones, female reproductive system

93. Of the following contraception methods, \_\_\_\_\_\_\_\_ work(s) by increasing cervical mucus, preventing implantation of the embryo, or both.

1. surgery
2. hormonal methods
3. intrauterine devices (IUDs)
4. A and B
5. B and C

Answer: E

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: contraception

94. Luteinizing hormone is produced by the \_\_\_\_\_\_\_\_; its main function is to \_\_\_\_\_\_\_\_\_.

1. corpus luteum; stimulate egg maturation
2. pituitary; stimulate ovulation
3. ovary; stimulate endometrium thickening
4. embryo; sustain the corpus luteum
5. hypothalamus; stimulate the ovary to produce more estrogen

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: hormones, menstrual cycle, ovulation

95. Follicle-stimulating hormone is to estrogen as estrogen is to \_\_\_\_\_\_\_\_\_\_.

1. luteinizing hormone
2. human chorionic gonadotropin
3. progesterone
4. testosterone
5. B and C

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: menstrual cycle, hormones, follicle-stimulating hormone vs. luteinizing hormone

96. Nearly all hormonal contraception treatments contain \_\_\_\_\_\_\_\_\_\_\_.

1. progesterone
2. estrogen
3. FSH
4. LH
5. hCG

Answer: A

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: menstrual cycle, contraception, hormones

97. Which of the following statements is FALSE?

1. The natural occurrence of triplets is about 1 in every 6,000 births.
2. Somehow, the ovaries of most women take turns, releasing one egg per month.
3. The placenta produces estrogen and progesterone.
4. A woman cannot become pregnant from intercourse that happens before ovulation.
5. Both IVF and IUI typically begin with the woman taking fertility drugs.

Answer: D

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: sperm survival, ovulation, hormones, contraception

98. If an embryo implants in the endometrium, \_\_\_\_\_\_\_\_\_\_.

1. human chorionic gonadotropin will cause the pituitary to release FSH
2. sustained estrogen levels will prevent the pituitary from releasing FSH
3. decreased estrogen and progesterone levels will prevent the pituitary from releasing FSH
4. a spike in luteinizing hormone levels will cause maturation of an egg within a follicle
5. the corpus luteum will start producing human chorionic gonadotropin

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: pregnancy, hormones, human chorionic gonadotropin

99. The rhythm method is a contraception technique in which a couple abstains from intercourse based on the time during which the woman is ovulating. On which days should a couple practicing the rhythm method avoid having sex to maximize its effectiveness? How could this method fail?

*Answer:* Ovulation occurs around the middle of the 28-day menstrual cycle. The egg is only viable for about 1 day, but sperm remain viable for 3 to 7 days, so the safest bet would be to avoid sex during the middle 2 weeks of the cycle, or at least 3 days before and after the predicted date of ovulation. Hormonal fluctuations or miscalculations could lead to inaccurate prediction of ovulation date.

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: contraception, ovulation, sperm survival

100. What are some of the reasons that ovaries may fail to produce eggs?

*Answer:* hormonal imbalances, certain medications, stress, poor nutrition, genetic abnormalities, undeveloped ovarian tissues, endometriosis and cancer

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: menstrual cycle, female reproductive tract, hormones

101. Predict the effect that having a defective gene for FSH would have on a woman's fertility.

*Answer:* Without FSH, the follicle would not develop properly and the egg would not mature for ovulation. This woman would probably be sterile because she could not properly produce eggs.

DQ: What hormones are involved in reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: hormones, menstrual cycle, follicle-stimulating hormone

102. Sperm form when \_\_\_\_\_\_\_\_ stimulates \_\_\_\_\_\_\_\_ cells to \_\_\_\_\_\_\_\_ into sperm.

* 1. testosterone; seminiferous; divide
	2. testosterone; precursor; divide and differentiate
	3. androgen; precursor; divide and replicate
	4. androgen; seminiferous; divide and differentiate
	5. progesterone; precursor; divide

Answer: B

DQ: What hormones are involved in reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: hormones, gametes, meiosis, androgens

103. A vasectomy is a surgical procedure in which each vas deferens is cut or clamped shut above the testis. Explain why this procedure renders a man sterile. Does it also reduce a man's testosterone level or the amount of semen he produces during ejaculation? Why?

*Answer:* The vas deferens carries sperm from a testis to the urethra for ejaculation. If this path is severed, then sperm will not be released to fertilize the egg. Testosterone is carried in the blood, so as long as there is still a healthy blood supply to the testes, testosterone levels should not be affected by a vasectomy. The fluid that makes up semen is added to sperm by glands like the prostate that secrete the fluid into the urethra. Since a vasectomy cuts the vas deferens, the amount of semen should not change.

DQ: What is the anatomy of the male and female reproductive tracts?

Type: Use It

Difficulty: Hard

Important Words/Concepts: contraception, male reproductive tract

104. What is the first step of in vitro fertilization?

*Answer:* the use of fertility drugs to stimulate multiple eggs to mature at once

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: assisted reproduction, in vitro fertilization, hormones

105. Why is the use of fertility drugs the necessary first step for in vitro fertilization?

*Answer:* In vitro fertilization uses many eggs at a time to increase the odds that at least one will be successful. However, most women only mature a single egg per month. The fertility drugs allow doctors to harvest many eggs at a time instead of just one egg.

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: assisted reproduction, in vitro fertilization, hormones

106. A woman preparing for in vitro fertilization (IVF) takes fertility drugs to

1. stimulate egg production.
2. prepare the uterine lining for implantation.
3. block the oviducts to prevent additional embryos from being produced.
4. A and B
5. A, B, and C

Answer: D

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: assisted reproduction, in vitro fertilization, hormones

107. Which of the following correctly distinguish(es) between IVF and natural fertilization?

A. In IVF, multiple eggs are fertilized; in natural fertilization, only one is normally fertilized.

B. In IVF, multiple embryos are introduced into the uterus; natural fertilization usually results in a single embryo in the uterus.

C. In IVF, fertilization occurs outside the woman’s body; natural fertilization takes place in the vagina.

D. A and B

E. A, B, and C

Answer: D

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: assisted reproduction, in vitro fertilization

108. Compare and contrast IVF with IUI. Be sure to discuss procedures, chance for multiples, risks to mothers, risks to children, and cost.

*Answer:* Both procedures involve giving the potential mother hormones to cause multiple ovulations. IUI is less expensive than IVF but more likely to result in multiples because it is hard to control the number of fertilizations since they occur inside the body. In both procedures, multiples put mothers at risk of developing high blood pressure, diabetes, and vitamin deficiencies, while the babies themselves are at a high risk for being born prematurely, often with underdeveloped lungs and other systems, and possibly birth defects. These problems frequently come with long and expensive hospital stays.

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: assisted reproduction, in vitro fertilization vs. intrauterine insemination

109. A total of \_\_\_\_\_ of in vitro fertilization births are twins.

1. 10%
2. 24%
3. 34%
4. 43%
5. 50%

Answer: D

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Know It

Difficulty: Hard

Important Words/Concepts: in vitro fertilization, assisted reproduction

110. Women are given fertility drugs to stimulate ovulation in \_\_\_\_\_\_\_\_.

1. in vitro fertilization (IVF).
2. intrauterine insemination (IUI).
3. IVF and IUI.
4. both IVF and IUI, but more commonly in IUI.
5. both IVF and IUI, but more commonly in IVF.

Answer: C
DQ: What are the different types of assisted reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: assisted reproduction

111. Explain why both in vitro fertilization and intrauterine insemination increase the likelihood of multiple births.

*Answer:* In IUI, fertility drugs increase the likelihood that multiple eggs will be released; the sperm that is injected into the uterus may fertilize more than one egg. In IVF, multiple embryos are implanted into the uterus.

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Medium

Important Words/Concepts: assisted reproduction, in vitro fertilization vs. intrauterine insemination

112. In reaction to high-profile fertility cases (like that of Nadya Suleman, the “Octomom”) attempts have been made to \_\_\_\_\_\_\_\_\_.

1. legally restrict the procedures that fertility doctors can do
2. legally require insurance companies to pay for fertility procedures
3. legally ban in vitro fertilization procedures
4. A and B
5. A and C

Answer: D

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Know It

Difficulty: Medium

Important Words/Concepts: assisted reproduction

113. People reacting to extreme cases of multiple births have suggested either that there should be restrictions put on fertility procedures like IUI and IVF or that insurance should cover the procedures so that eager couples do not feel they have to go to extreme measures to get pregnant from one procedure. Which approach do you think is the best way to handle the multiples issue? Make sure to mention the costs and benefits involved with your answer.

*Answer:* Answers will vary.

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: assisted reproduction, in vitro fertilization vs. intrauterine insemination, multiple births

114. Identical twins have nearly the same genes, whereas fraternal twins do not. In fact, around half of all fraternal twins are male and female siblings. Alternate terms for identical and fraternal twins are monozygotic and dizygotic. Why do you think these terms are used? Explain your answer in terms of what you know about fertilization.

*Answer:* Identical twins occur when one embryo splits into two. In other words, they come from one zygote. Fraternal twins occur when two eggs are released and are fertilized creating two zygotes that develop into two genetically distinct children.

DQ: What are the different types of assisted reproduction, and how do they work?

Type: Use It

Difficulty: Hard

Important Words/Concepts: pregnancy, fertilization, ovulation