

Chapter 38

Reproduction and Development

Reinforcement and Study Guide

Section 38.1 Human Reproductive Systems

In your textbook, read about human male anatomy and hormonal control.

Answer the following questions.

- 1.** What are the primary functions of the male reproductive system?

- 2.** How does the location of the scrotum affect sperm?

- 3.** How many sperm can the average mature male produce in one day?

Order the steps in the formation and transportation of sperm from 1 to 6.

- _____ **4.** Mature sperm enter the vas deferens.
- _____ **5.** Newly formed haploid sperm cells pass through a series of coiled ducts to the epididymis.
- _____ **6.** Sperm leave the body via the urethra.
- _____ **7.** Sperm mature in the epididymis.
- _____ **8.** Cells lining tubules in the testes undergo meiosis.
- _____ **9.** Sperm travel along the ejaculatory ducts and into the urethra.

Complete each sentence.

- 10.** When a young man's voice "changes," he is probably entering _____, a time when he will develop other secondary _____.
- 11.** A hormone released by the _____ stimulates the _____ gland to release _____ - _____ and _____ hormones.
- 12.** FSH regulates _____ production, while LH controls the production of the steroid hormone _____ by the testes.

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 Development, *continued***
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**Section 38.1 Human Reproductive Systems,
*continued***

In your textbook, read about human female anatomy and puberty in females.

Determine if each statement is true. If it is not, rewrite the italicized part to make it true.

- 13.** When an egg cell is released from an ovary, it moves down the oviduct by *gravity*.
- _____

- 14.** As is the case in human males, a woman's *hypothalamus* produces FSH and LH.
- _____

- 15.** *FSH* stimulates follicle development and the release of estrogen from the ovary.
- _____

- 16.** In females, *luteinizing hormone (LH)* is responsible for the development of the secondary sex characteristics.
- _____

- 17.** Long before a woman is born, cells in her ovaries that are destined to become future eggs undergo several *mitotic divisions*.
- _____

In your textbook, read about the menstrual cycle.

Complete the table by checking the correct column for each event.

Event	Phase of Menstrual Cycle		
	Flow	Follicular	Luteal
18. LH stimulates the corpus luteum to develop from a ruptured follicle.			
19. Estrogen levels are at their peak.			
20. A cell inside a follicle resumes meiotic divisions.			
21. Progesterone levels are at their peak.			
22. The uterine lining is shed.			
23. LH levels rise abruptly.			
24. Ovulation occurs.			
25. The uterine lining becomes engorged with blood, fat, and tissue fluid.			
26. FSH begins to rise.			