Two Paths, Different Jobs

Compare reproductive structures by following what they make and where it goes.

HAP.8.1 "Compare and contrast the structure and function of the male and female reproductive systems."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the two organs that produce reproductive cells, circle each named passage those cells travel through, and write 1 and 2 beside two sentences that contrast the systems' structures or functions.

Following the Cells

1. Imagine tracing two reproductive cells from where they form. In the male system, testes inside the scrotum produce sperm and the hormone testosterone. The scrotum sits outside the body, helping keep the testes cooler than body temperature, which supports sperm production. In the female system, ovaries inside the pelvis contain immature egg cells, usually release one oocyte during a menstrual cycle, and produce estrogen and progesterone. Both systems have organs that make reproductive cells and hormones, but the locations and timing differ. Testes make sperm continuously after puberty, while ovaries typically release an oocyte about once per cycle.

2. Sperm leave the testes and travel through the epididymis, where they mature and are stored. During ejaculation, sperm pass into the vas deferens, then join fluids from glands including the seminal vesicles and prostate. This mixture, called semen, moves through the urethra in the penis and out of the body. An oocyte released from an ovary enters a nearby uterine tube and travels toward the uterus. Unlike the male pathway, this route does not carry the oocyte out through the urethra. Fertilization, if it occurs, usually happens in a uterine tube.

3. The uterus has a muscular wall and a lining that thickens during each menstrual cycle. If an embryo forms, it may implant in that lining; if pregnancy does not occur, much of the lining is shed during menstruation. The cervix is the narrow lower part of the uterus that opens into the vagina. The vagina can receive semen and also serves as a passage for menstrual flow and childbirth. By contrast, the male urethra carries semen out during ejaculation and urine at a different time. In the female system, the urethra carries urine, while the vagina is a separate passage.

2 ANSWER WITH EVIDENCE

Use the passage

1. How are the testes and ovaries alike in function, and how do their locations and timing of cell production or release differ?

2. Compare the route sperm take after leaving the testes with the route an oocyte takes after leaving an ovary. What happens in the epididymis?

3. How do the seminal vesicles and prostate support a different reproductive job from the lining of the uterus?

4. Compare what passes through the male urethra, female urethra, and vagina.

3 YOUR TURN

Your own words

A classmate says, “Both systems make reproductive cells, so each has the same route and the same place for an embryo.” Write five sentences correcting this claim. Compare at least two pairs of structures, describe the cells’ paths, and identify where an embryo can implant.

ANSWER KEY

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PART 1 · READ AND MARK

Underline the two organs that produce reproductive cells, circle each named passage those cells travel through, and write 1 and 2 beside two sentences that contrast the systems' structures or functions. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How are the testes and ovaries alike in function, and how do their locations and timing of cell production or release differ?	**Both produce reproductive cells and hormones. Testes are in the scrotum outside the body and make sperm continuously after puberty; ovaries are in the pelvis and typically release one oocyte about once per cycle.**
2	Compare the route sperm take after leaving the testes with the route an oocyte takes after leaving an ovary. What happens in the epididymis?	**Sperm travel through the epididymis, where they mature and are stored, then through the vas deferens and male urethra to leave the body. An oocyte enters a uterine tube and travels toward the uterus; it does not leave through the urethra.**
3	How do the seminal vesicles and prostate support a different reproductive job from the lining of the uterus?	**The seminal vesicles and prostate add fluid to sperm to form semen. The uterine lining can provide a place for an embryo to implant.**
4	Compare what passes through the male urethra, female urethra, and vagina.	**The male urethra carries semen during ejaculation and urine at a different time. The female urethra carries urine, while the separate vagina can receive semen and carries menstrual flow and a baby during childbirth.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Testes and ovaries both produce reproductive cells, but they are in different parts of the body. Sperm travel through the epididymis and vas deferens before leaving through the male urethra. An oocyte travels through a uterine tube toward the uterus instead of leaving through a urethra. The male urethra carries semen, while the female urethra carries urine and is separate from the vagina. Only the female system has a uterus with a lining where an embryo can implant.

Accept equivalent comparisons that distinguish sperm production from oocyte release and correctly trace both routes. Responses should not imply that fertilization or implantation occurs in the male system.