

LESSON

26

What are the reproductive organs?

Reproduction is a vital life process. Without it, all living things would die out.

Unlike most of the other body systems, the reproductive system differs in males and females. These differences begin to show up as early as six weeks after a baby begins to develop.

There are two kinds of reproduction—asexual and sexual. In asexual reproduction, only one parent is needed. In sexual reproduction, two parents, one male and one female, are needed.

Humans and many plants and animals reproduce sexually. The method of reproduction varies from one organism to another, but one thing is certain. A male reproductive cell, a **sperm**, must unite with a female reproductive cell, an **egg**. Only then, can development and growth of a new organism begin.

What are the parts of the human male and female reproductive systems? In this lesson, we will study both the male and female reproductive systems, and what makes up each organ system.

THE FEMALE REPRODUCTIVE SYSTEM

The female reproductive system has four main parts. They are the ovaries [OH-vuhr-eez], the oviducts [OH-vuh-dukt], the uterus [YU-tur-us] and the vagina [vuh-JY-nuh]. Look at Figure A and find each organ as its function is explained.

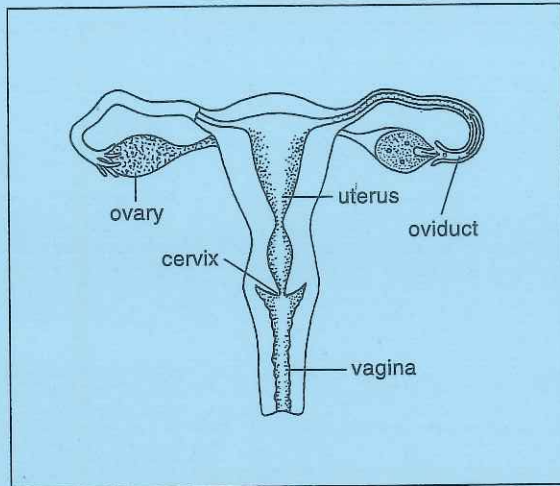


Figure A

The Ovaries

There are two ovaries, one on each side of the uterus. Each ovary is about the size and shape of a flattened, lumpy olive. The ovaries are the main female sex organs. The ovaries contain two kinds of cells. One kind of cell produces eggs. The other kind of cell produces hormones. These hormones are responsible for the development of secondary sex characteristics, (such as the growth of body hair, the growth of breasts) and the onset of puberty—the maturing of the reproductive system.

The Oviduct

There are two oviducts. Each oviduct extends from the uterus to one of the ovaries. The side of the oviduct closest to the ovary has fingerlike projections. Oviducts also are called fallopian [fuh-LOH-pee-un] tubes.

Once a month, an egg released by one of the ovaries, enters the oviduct. The egg moves through the oviduct and enters the uterus. Fertilization, when it takes place, occurs within one of the oviducts.

The Uterus

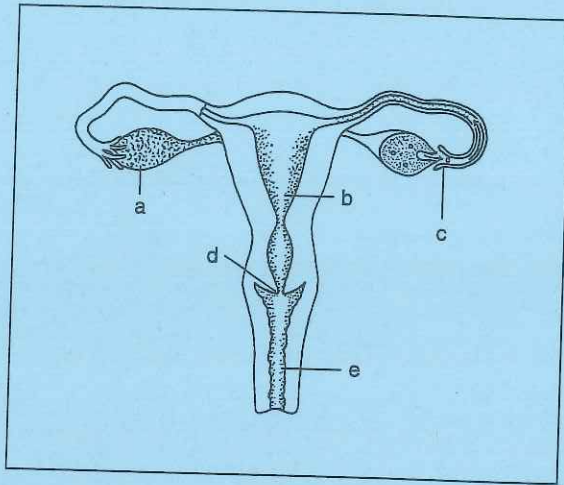
The uterus, or womb, is shaped somewhat like an inverted pear. It is a hollow thick-walled muscular organ. It is within the uterus that an embryo develops. The lower end of the uterus is called the cervix.

The Vagina

The cervix connects the uterus to the vagina. A baby moves through the vagina as it is being born. For this reason, the vagina also is called the birth canal.

UNDERSTANDING THE FEMALE REPRODUCTIVE SYSTEM

Figure B shows the human female reproductive organs. Without looking back to the previous page, see if you can identify them by letter.



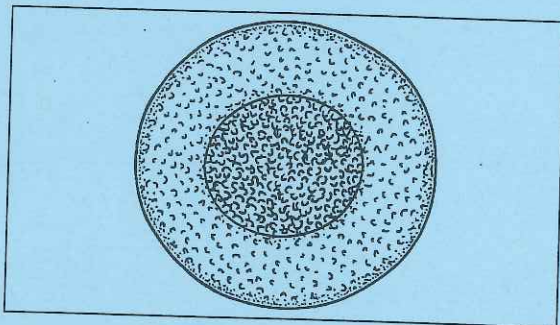
1. uterus _____
2. ovaries _____
3. vagina _____
4. oviduct _____
5. cervix _____

Figure B

Answer the following questions about the female reproductive system.

1. What are the female reproductive cells called? _____
2. Where are the eggs stored? _____
3. Where does an embryo develop? _____
4. Where does fertilization take place? _____
5. How does an egg reach the uterus? _____

MORE ABOUT EGGS



A human egg is also called an ovum. It is about the size of a pinpoint. This is large compared to other cells. In fact, an egg can be seen without a microscope.

Each egg has the potential to develop into an embryo, if it joins with a male sex cell.

Figure C

OVULATION AND MENSTRUATION

At birth, a baby girl has all the egg cells she will have in her lifetime. However, the eggs are not fully mature. Egg cells begin to mature at the onset of puberty [PYOO-bur-tee]. Girls usually reach puberty between the ages of 10 and 14. Puberty is marked by the beginning of **menstruation** [men-stroo-WAY-shun].

The menstrual cycle occurs every 28–32 days. It is started by the release of hormones in the body.

- During the first stage, a hormone causes an egg to mature. The uterine wall begins to thicken with blood vessels.
- During the second stage, the egg is released from the ovary into the oviduct. This is called ovulation [oh-vyuh-LAY-shun].
- During the third stage, the uterine wall continues to thicken. This prepares the uterus for an embryo, if the egg has been fertilized.
- The fourth stage only occurs if the egg has not been fertilized. The tissue, blood, and mucus that were lining the uterine wall, break down and leave the body. This process is called menstruation.

THE MALE REPRODUCTIVE SYSTEM

The male reproductive system also has four main parts. They are the testes [TES-teez], the urethra [yoo-REETH-ruh], the vas deferens [DEF-uh-renz] and the penis. Look at Figure D and find each organ as its function is explained.

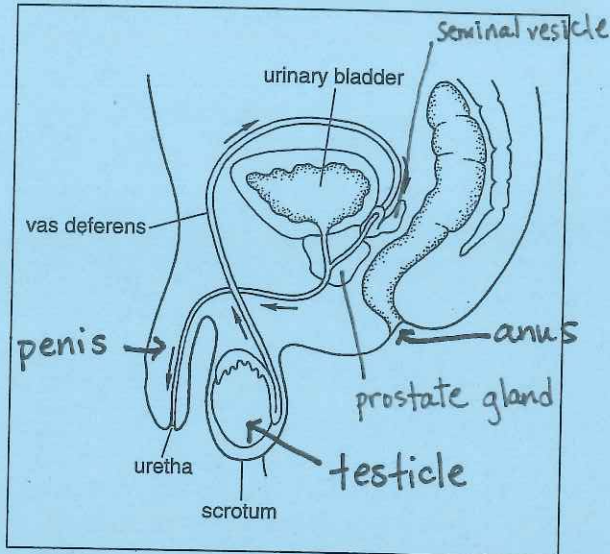


Figure D

The Testes

The testes are the main male reproductive organs. The singular form of testes is testicles. The testes, like the ovaries, contain two kinds of cells. One kind of cell produces sperm. The other kind of cell produces hormones, which are responsible for the development of secondary sex characteristics. The testes are located in a sac called the scrotum [SKROH-tum].

The Vas Deferens

The vas deferens is a tube that leads from each testicle into the urethra. When sperm are released they enter and move through the vas deferens into the urethra.

The Urethra prostate gland and seminal vesicle

The urethra is a tube located inside the penis. As the sperm enter the urethra, several glands secrete fluid. The fluid helps the sperm move easier. The combination of the fluid and sperm is called semen. Semen is released through the penis during ejaculation.

The urethra also is part of the male's excretory system. Urine travels from the bladder out of the body through the urethra.

Answer the following questions about the male reproductive system.

1. What are the male reproductive cells called? _____
2. Where are sperm produced? _____
3. Into which tubes are sperm first released? _____
4. Name the tube through which sperm finally leave the body.

MORE ABOUT SPERM

A sperm has two parts, a head and a tail. Sperm are much smaller than eggs. You need a microscope to see them.

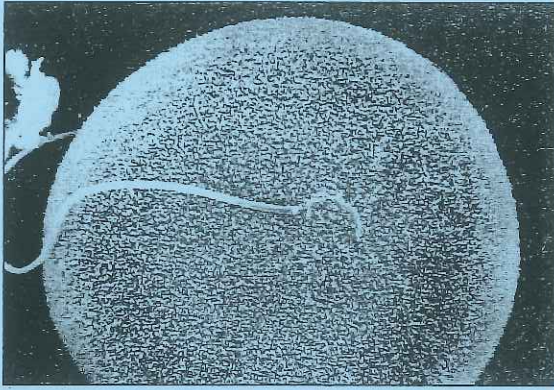


Figure E

Figure E shows a single egg cell and several sperm cells. Notice how much larger the egg is.

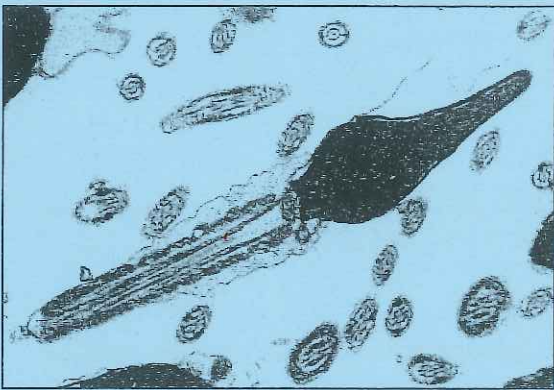


Figure F

Figure F shows a magnified picture of sperm. Notice the head and the tail of the sperm.

1. Of what use do you think the sperm's tail is? _____

2. Does an egg have a tail? _____

MATCHING

Match each term in Column A with its description in Column B. Write the correct letter in the space provided.

	Column A	Column B
_____	1. cervix	a) tube that leads from testes to urethra
_____	2. eggs	b) narrow end of the uterus
_____	3. ovaries	c) pocket of skin that holds the testes
_____	4. oviduct	d) organ in which an embryo develops
_____	5. scrotum	e) tube that carries sperm and urine to the outside of the body
_____	6. sperm	f) long tube between the ovary and the uterus
_____	7. testes	g) main organs of the male reproductive system
_____	8. urethra	h) female sex cells
_____	9. uterus	i) male sex cells
_____	10. vagina	j) organs that produce female sex cells
_____	11. vas deferens	k) birth canal

REACHING OUT

The uterus is very muscular. Why do you think this is important?
