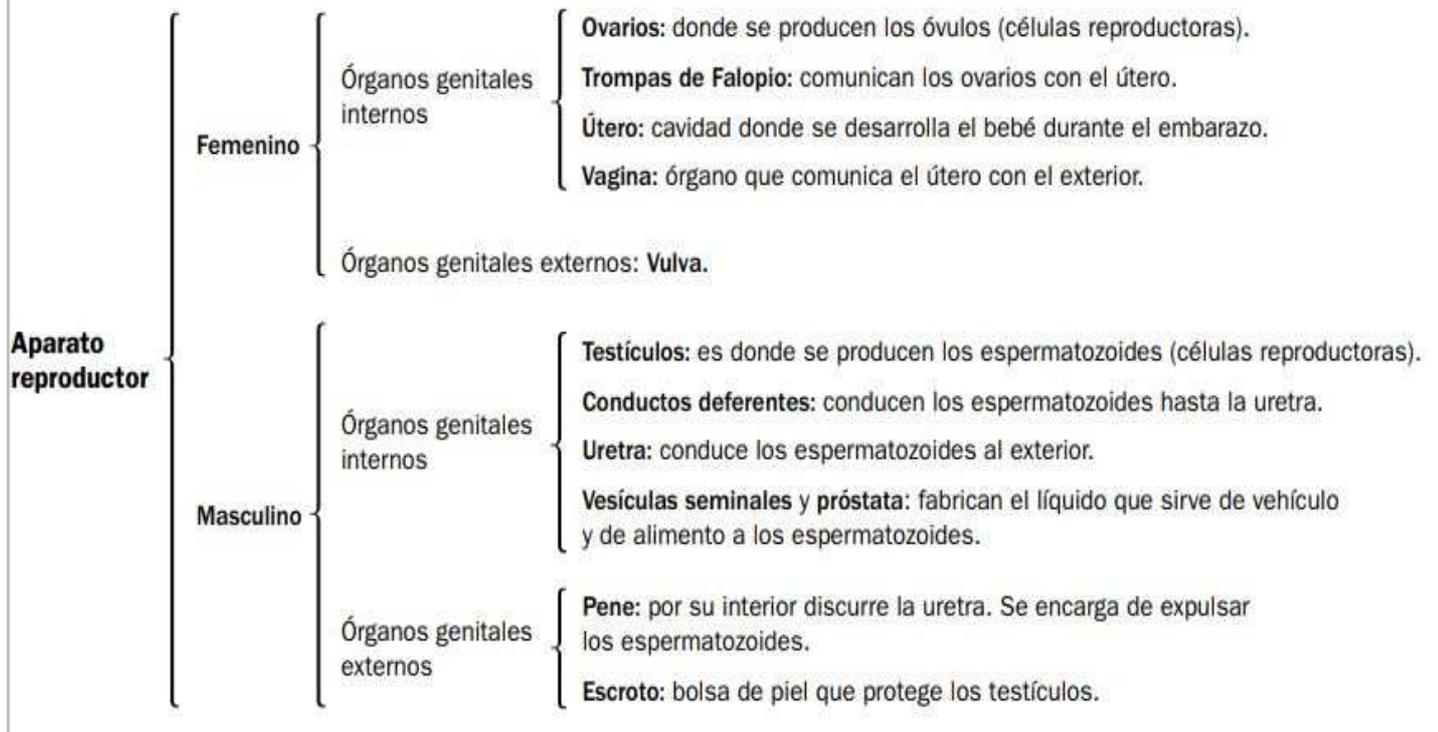


SCIENCE. LEVEL 6TH UNIT: 3 REPRODUCTION.

Función de reproducción

La función de **reproducción** permite a los seres humanos tener descendientes. La reproducción humana es **sexual** porque en ella las células sexuales de dos individuos de distinto sexo (macho y hembra) se unen para formar un nuevo individuo. Los **aparatos reproductores** de la **mujer** y del **hombre** permiten que esto sea posible.



1. Sexual characteristics and the reproductive system.

Sexual characteristics are the physical differences that exist between men and women.

Sexual characteristics are classified into:

Primary sexual characteristics. These are the reproductive organs, also known as the genital organs. We are born with these characteristics.

Secondary sexual characteristics. These refer to other physical differences between men and women.

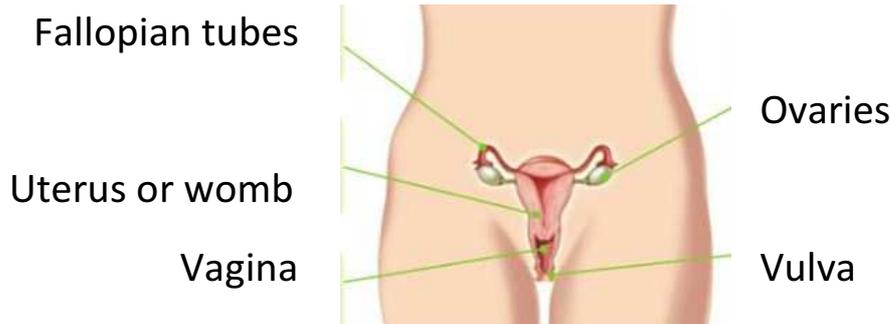
For example: **Men** develop facial, pubic hair, a deeper voice, and more developed muscles. **Women** develop breasts and wider hips, and as well as pubic and armpit hair.

Puberty is the stage of life when people reach sexual maturity and are able to reproduce. The reproductive organs become functional and secondary sexual characteristics develop.



The female reproductive system.

The female reproductive system consists of several organs:



The ovaries contain the female sex cells, known as egg cells or ova.

The Fallopian tubes connect the ovaries to the uterus.

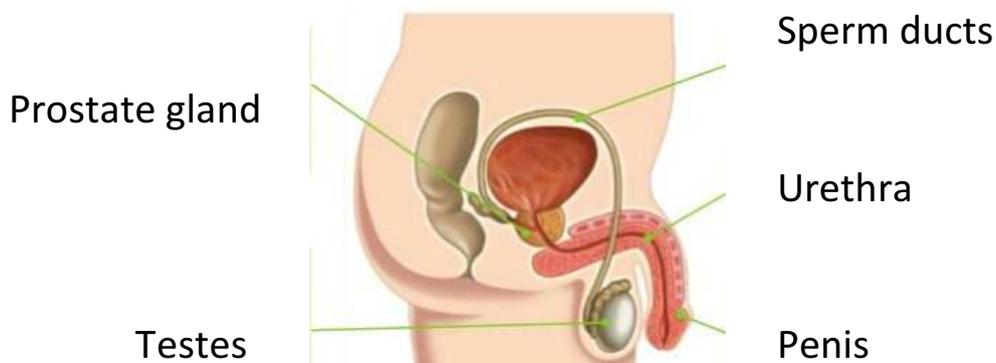
The uterus or womb is a hollow organ with a muscular wall. The baby develops here during pregnancy.

The vagina is a muscular tube between the uterus and the outside of the body.

The vulva is the external part of the female reproductive system. It is formed by folds of skin called labia.

The male reproductive system.

The male reproductive system consists of the following organs:



The testes produce sperm, which contains the male sex cells, known as sperm cells or spermatozoa.

The sperm ducts are fine tubes that connect the testes to the urethra.

The prostate gland produces liquids which help to transport spermatozoa and provide them with nutrients. The mixture of these liquids and sperm is called **semen**.

The urethra is a tube that transports semen to the outside of the body. The urethra also expels urine.

The penis is the organ that contains the urethra.

2. Sex cells.

Sex cells are an essential part of reproduction. They are produced in the reproductive system and are different in men and women.

Female sex cells.

Female sex cells are called **ova**.

These are their main characteristics:



They are found in the ovaries from birth. They are large, round cells that can be seen with the naked eye. They contain all the nutrients required for the development of an embryo. They mature during puberty.

Male sex cells

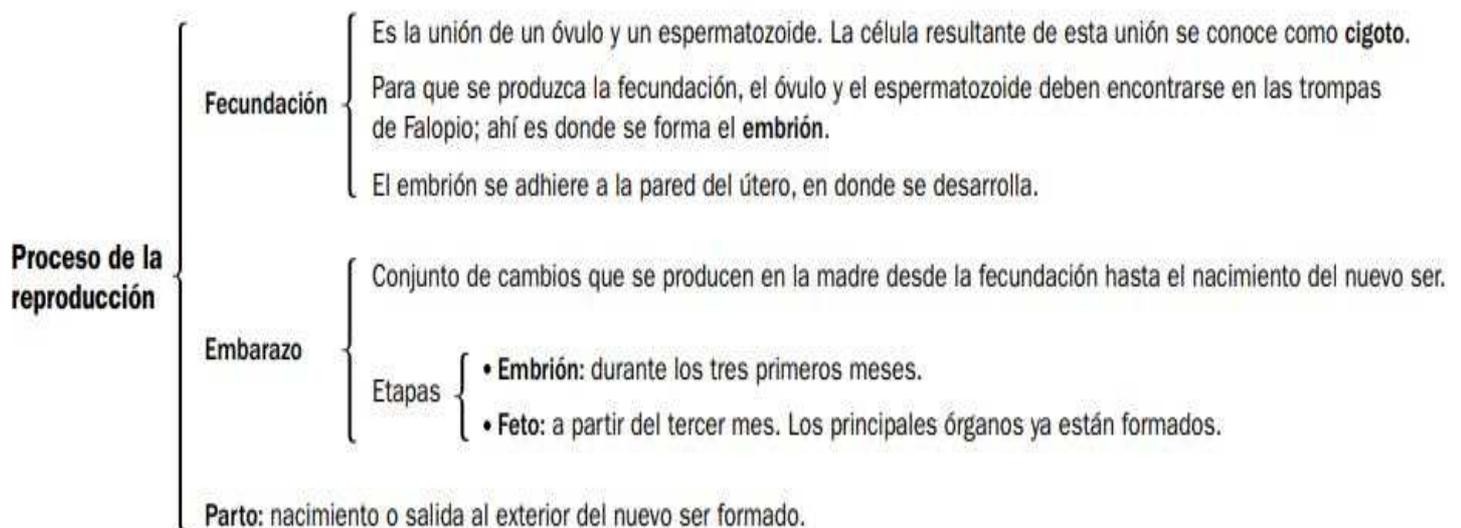
Male sex cells are called **spermatozoa**.

These are their main characteristics:



They are produced in the testes, starting at puberty. They are very small and can only be seen under a microscope. They have a small head and a long tail which they use to move.

Proceso de la reproducción.

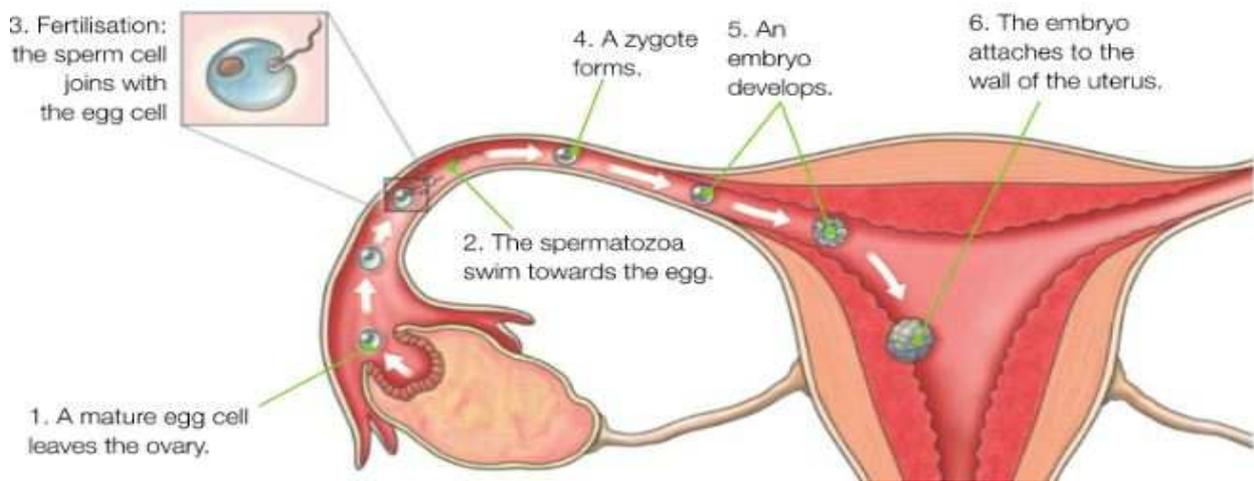


3. Fertilization

Fertilization occurs when a sperm cell joins with an egg cell.

As a result of fertilization, a new cell, called a **zygote**, is formed.

The zygote divides repeatedly into more cells, and all these new cells form an **embryo**. The embryo travels through the Fallopian tube to the uterus, where it attaches itself to the wall and continues to grow.



4. Pregnancy

Pregnancy is the period from the moment of fertilization until the birth of a baby. It lasts about nine months.

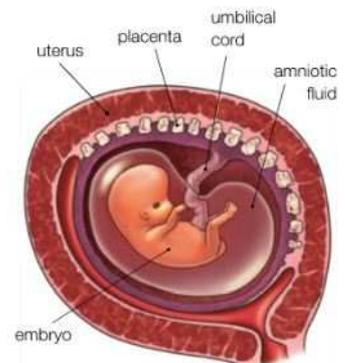
Development of the embryo and the foetus.

The embryo continues to grow. From about three months, it becomes a **foetus**.

Once the embryo attaches itself to the uterus, two main changes happen:

- The embryo is surrounded by a sac called filled with a liquid called **amniotic fluid**.
- A new organ, called **the placenta**, forms inside the uterus. It provides nutrients and oxygen from the mother to the embryo. It also eliminates waste products produced by the embryo.

The embryo and the placenta are connected by **the umbilical cord**.



5. Childbirth

Childbirth happens at the end of the pregnancy, when the baby comes out of the mother's body.

The process of giving birth is called **labour**.



6. Lactation

Lactation is the period when the mother's breasts produce milk.

It happens after giving birth.

Breastfeeding consists of the baby feeding on its mother's milk. This is the best way to feed a baby, but babies can also be fed artificial milk, called **formula milk**.

