The Reproductive Systems



Review



- <u>Mitosis</u> is the type of cell division that occurs in non-reproductive cells.
 - Produces exact copies of the parent cell
- <u>Meiosis</u> is cell division that occurs in reproductive cells; gametes.
 - Produces egg and sperm cells with half the genetic material of the parent cells.
 - 23 chromosomes are contained in gametes; this is so that when egg and sperm meet, they produce offspring with 46 chromosomes.

Organs of the Male Reproductive System



Male Reproductive System

- Penis
- Urethra
- Vas Deferens
- Scrotum
- Testes
- Bladder*

*Not a part of the reproductive system





Functions:

- 1. Produce sex hormones.
- 2. Produce and store sperms.
- 3. Deliver sperm to the female reproductive system.

Organs of the Female Reproductive System

- Vagina
- Cervix
- Uterus
- Fallopian Tubes
- Ovary



Functions:



- 1. Produces eggs (ova).
- 2. Secretes sex hormones.
- 3. Receives the male spermatozoa.
- 4. Protects and nourishes the fertilized egg until it is fully developed.
- 5. Delivers fetus through birth canal.
- 6. Provides nourishment to the baby through milk secreted by mammary glands in the breast.

The Menstrual Cycle



- The menstrual cycle typically lasts 28 days; approximately 1 month.
 - One cycle is the amount of time from the beginning of one period to the beginning of the next period.
- The beginning of a period is marked by the release of the blood and lining from the inside of the uterus.
 - This flow of blood typically lasts 3-7 days and is called <u>menstruation</u>.



Menstrual Cycle Timeline





The Menstrual Cycle and Fertilization



- If the egg is fertilized by a sperm cell, the egg will implant in the lining of the uterus and begin to develop.
 - <u>Zygote</u>: The first cells of a new organism; the time from fertilization to implantation.
 - <u>Embryo</u>: The zygote is called an embryo from implantation to 8 weeks.
 - <u>Fetus</u>: After 8 weeks of development, the embryo is known as a fetus.

Twins



- Multiple eggs are released or there is more than one ovulation. Both (or more) eggs are fertilized and you have fraternal twins.
- One egg is released but splits in two.
 Identical twins are made. If the egg does not completely split in two, conjoined twins are produced.