

NAME _____

HR _____



Human Reproduction Outline

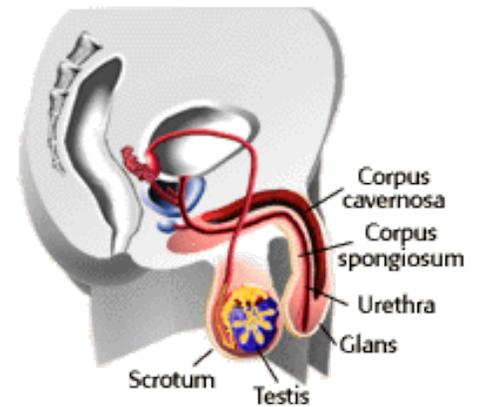
Puberty

- Human reproduction is controlled by _____ secreted by the _____ (_____ and _____).
- **Puberty**
 - The time when hormones produce physical changes in the human body that enable the body to produce _____.
 - These changes are called _____.
 - Males usually reach puberty at about _____.
 - Females usually reach puberty between the ages of _____.

Secondary Sex Characteristics

- **Female**
 - Development of _____ (mammary glands)
 - Changes in body _____
 - Growth of body _____
- **Male**
 - Growth of beard and other body _____
 - Changes in body _____
 - Lowered _____ pitch

Male reproductive system



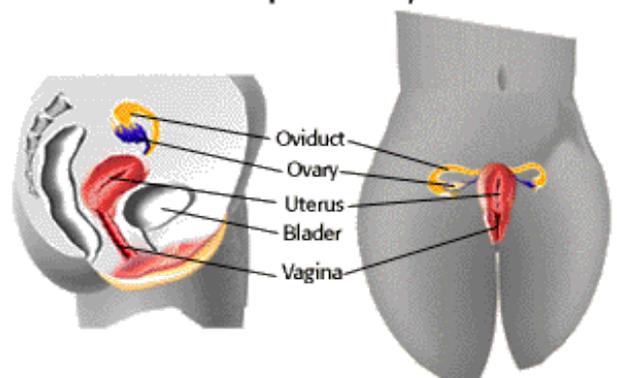
Male Reproductive System

- Two major functions:
 - Production of _____
 - _____ of sperm _____ the female reproductive tract.
- The production of sperm takes place in a pair of male gonads called the _____.
 - The _____ are held in a sac called the _____.
 - The _____ keeps the temperature of the testes one or two degrees (C) _____ than normal body temperature.
- This lower temperature is necessary for sperm _____ and _____.
- Sperm leave the _____ and pass through tubes (_____) to the _____.
- As the sperm passes through the tubes to the _____, _____ are secreted into the tubes by _____.
 - The _____ provide the sperm with the proper _____, supply _____ for _____ and provide a _____ environment in which the sperm can _____.
 - The mixture of fluid and sperm is called _____.
 - The process by which sperm pass out of the body is known as _____.

Female Reproductive System

- The Female Reproductive System produces _____ (_____) and is the site of _____ and embryonic _____.
- The production of eggs takes place in paired _____ called _____.
- The ovary produces eggs in structures called _____.
 - Follicles are tiny _____ surrounded by cells.

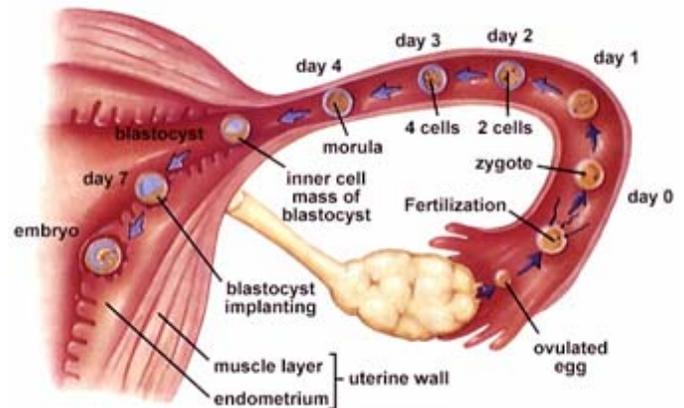
Female reproductive system



- The release of a mature egg from a follicle is called _____.
- Following ovulation, the egg passes through an _____ (_____).
- Then the egg moves to the _____.
- The _____, or womb, is shaped like a pear and has thick walls.
 - The embryo develops in the _____.
- The lower end of the uterus, the _____, opens into a muscular tube called the _____.
- The _____ is a muscular tube that leads from the uterus to the outside.

Fertilization

- During sexual intercourse the _____ becomes erect for the transfer of sperm into the _____.
- After intercourse, the _____ cells swim through the female reproductive tract and enter the _____.
- If they meet with an egg in the oviduct, the egg and sperm cell may _____.
- The fusion of a sperm cell nucleus and an egg cell nucleus is known as _____.
- A fertilized egg is known as a _____.
- Fertilization generally occurs when the egg is in the upper portion of the _____.
- If the egg is not fertilized within about _____ after _____, it breaks down and disappears.
- _____ of the fertilized egg begins while the egg is still in the _____.
- Six to ten days later, the resulting embryo may become _____ (attached) in the lining of the _____.



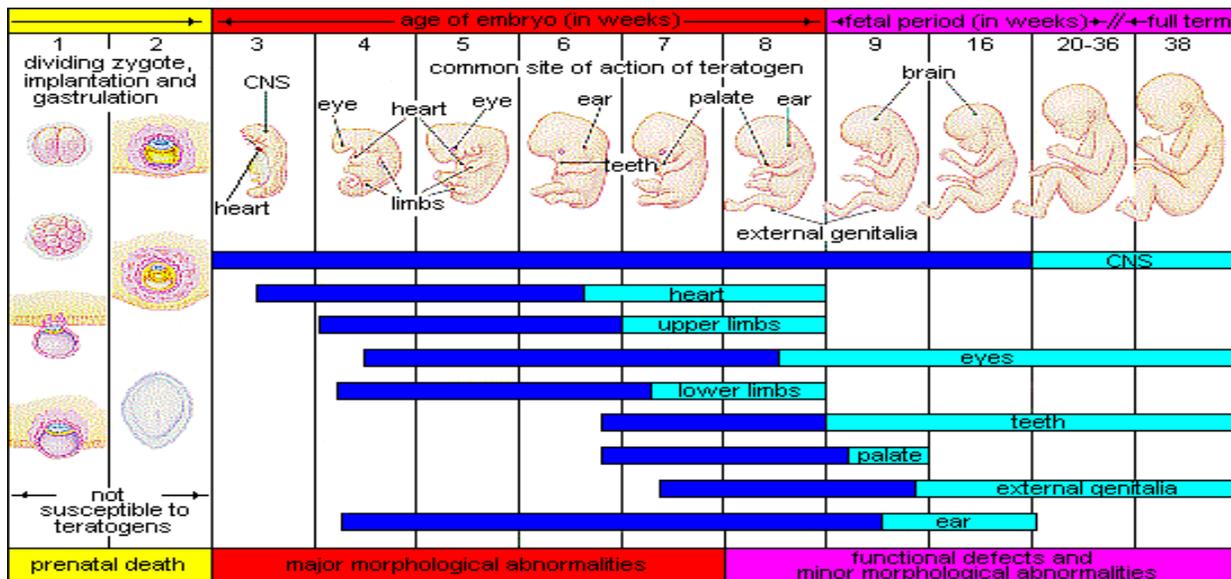
Fertilization

- If more than one _____ is released and _____ at the same time, multiple births may occur.
- _____ **twins** develop when _____ eggs are released at one time and each egg is fertilized by a different _____.
- _____ **twins** develop from __ zygote that separates in ___ early in cleavage.
- It is now possible for fertilization to take place _____ the human body (_____). The fertilized egg is then implanted in the _____ so that development can occur.

Prenatal Development

- When the fertilized egg arrives in the _____, it implants itself in the thickened, spongy _____ wall.
- The _____ forms, _____ of cells and _____ occurs.
- The developing embryonic _____ become part of the _____ and _____.
- After eight weeks of _____ the embryo is called the _____.
- The period of time between the fertilization of the egg and the birth of the offspring is called _____
 - In humans the gestation period is _____ months or approximately 266 days.

Summary of Human Development



Prenatal Development

- During this time, it is essential that the expectant mother provide good prenatal care by eating nutritious _____, avoiding _____, _____, and _____, and receiving proper _____ attention regularly.
- Using tobacco, alcohol and drugs may cause _____ birth rates, _____ births, _____ as well as other birth _____.

Postnatal Development

- Following birth, the _____ is discarded from the mother's body and the mother begins producing _____ from mammary glands located in the _____.
- The mother's breast milk is normally the _____ natural food for a newborn baby.

The Menstrual Cycle

- Usually begins in females between the ages of _____ and _____.
- It is repeated approximately every _____ days.
- _____ control the changes that occur in the _____ and _____.
- The **menstrual cycle** involves the release of a mature _____ from a _____ and the preparation of the _____ for _____.
- The duration of each cycle may vary considerably, and may be interrupted by _____ and other factors.
- The cycle stops during _____.
- The menstrual cycle has four stages:
 - follicle stage
 - ovulation
 - corpus luteum stage
 - menstruation.
- The cycle starts at _____ and ends at _____.

Follicle Stage

- This stage lasts 10-14 days
- FSH from the pituitary gland stimulates maturation of egg in follicle.
- Estrogen from follicle stimulates thickening of uterine lining.

Ovulation

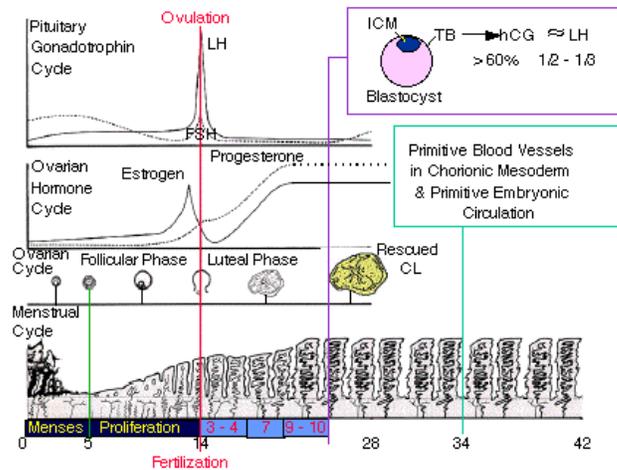
- Mature egg released from follicle.
- FSH production inhibited by estrogen, which stimulates release of LH by the pituitary gland.

Corpus Luteum Stage

- This stage lasts 10-12 days
- Burst follicle develops into corpus luteum, which produces progesterone.
- Progesterone stimulates further thickening of uterine lining.

Menstruation

- If the egg is not _____, progesterone secretion decrease, and uterine lining _____.
- _____ and _____ are discharged from body.



Human Reproductive Disorders

- Sexually transmitted diseases may be transmitted by both _____ and _____ and may cause _____ or _____ if not treated by a competent physician.
- Some sexually transmitted diseases in humans are syphilis, gonorrhoea, genital herpes, and AIDS.
- Prostate enlargement and _____ are other disorders associated with the human reproductive tract.
- Prostate enlargement is most common in males over 40 years of age.
- Breast cancer is a major cause of _____ of women who are 25-45 years of age.

Bacterial STDs

- Chlamydia
- Gonorrhoea
- Syphilis

Viral STDs

- Human Papillomavirus (HPV)
- Human Immunodeficiency Virus (HIV)
- Genital Herpes