

CORNELL NOTES

Directions: You must create a minimum of 5 questions in this column per page (average). Use these to study your notes and prepare for tests and quizzes. Notes will be stamped after each assigned sections (if completed) and turned in to your teacher at the end of the Unit for scoring.

UNIT 6: PHYSIOLOGY

Chapter 34: Reproduction and Development

I. Reproductive Anatomy (34.1)

A. Reproductive system

1. Collection of specialized **organs, glands, and hormones** that help to produce a new human being
2. Males and females reach sexual maturity after puberty
 - a. _____ - marks time when hypothalamus and pituitary glands release hormones
 - b. _____ begin process of developing your sexual characteristics and reproductive systems

B. Female reproductive system

1. Main function is to produce _____ (egg cell) and provide place where fertilized egg can develop
2. Egg cells produced in _____ (paired organs located on either side of **uterus**)
3. Uterus also called the _____
4. **Ovaries** stimulated to release _____
 - a. Controls development of female _____ characteristics
 - b. Needed for egg cells to develop
 - c. Helps to prepare uterus for _____
5. _____ **tube**- organ that ends in uterus. Egg released travels down fallopian tube

C. Male reproductive system

1. Main function to produce _____ cells and to deliver them to female reproductive system
2. Males do not produce **sperm cells** until _____
3. Sperm produced in _____ (paired organs)
4. Stimulated to release male _____ testosterone

a. Stimulates production of _____

b. Controls development of male sexual characteristics.

5. Testes enclosed in pouch called the _____

a. Hangs below pelvis outside the body to keep testes 2 to 3 degrees _____ than core temperature

b. Sperm will not develop if temperature is too _____

6. Mature sperm travel to long coiled tube called the _____

7. During sexual stimulation, sperm travel through long duct called _____

8. Secondary sex glands mix other fluids into the vas deferens to produce _____ (nourish and protect sperm cells)

9. Smooth muscles propel the semen along the _____ and eject it from the _____

II. Reproductive Process (34.2)

A. Eggs mature and are released according to **hormonal cycles**

1. During month hormone levels rise and fall in well-timed _____ **loops**

2. Every _____ **days** hormone cycles begins second stage of egg production (meiosis)

3. _____ - release of egg from ovary

4. Over next 5 to 7 days egg moves through **fallopian tube** where it can be _____

B. Menstrual Cycle

1. Series of _____ changes in reproductive system (averages 28 days)

2. Three main phases regulated by specific _____

3. Menstrual cycle continues through reproductive years

(about age 50) Stops when levels of hormones
_____ (called **menopause**)

C. _____ occurs when a sperm cell joins an egg cell

1. Fertilized egg called a _____

2. **Fraternal twins** develop from two separate eggs (genetically _____)

3. **Identical twins** develop from a single egg that splits into two zygotes (genetically _____)

4. _____ - refers to any condition that makes reproduction difficult or impossible

D. **Sexually transmitted diseases** affect fertility and overall health

1. _____ - diseases passed from one person to another during sexual contact

2. _____ **STD's** include: chlamydia, syphilis, and gonorrhea.

3. _____ **STD's** include hepatitis B, genital herpes, human papillomavirus (HPV), and human immunodeficiency virus (HIV) which causes AIDS

