

## 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

