

# ORLAND HIGH SCHOOL MEDICAL TERMINOLOGY

In order to provide OHS Medical Terminology students with the best educational opportunities possible during this mandatory school closure, I have provided the following voluntary enrichment items for students. I will provide additional enrichment on April 20<sup>th</sup> if this closure is prolonged.

**Students - just work your way from the top of the list toward the bottom.**

## URINARY SYSTEM:

Complete the Ch. 9 Vocabulary List

Copy the Urinary System Day 1 notes from the OHS Science website

Complete the Urinary System Coloring Worksheet

Copy the Urinary System Day 2 notes from the OHS Science website

Review the Urinary System Handout

Complete the Urinary System Worksheet #1

Complete the Urinary System Worksheet #2

Complete the Urinary System Practice Quiz

\*\*\*\*\*

## **REPRODUCTIVE SYSTEM:**

Complete the Ch. 10 Vocabulary List

Copy the Reproductive System Day 1 notes from the OHS Science website

Review the Reproductive System Handout

Copy the Reproductive System Day 2 notes from the OHS Science website

Copy the Reproductive System Day 3 notes from the OHS Science website

Complete the Reproductive System Coloring Worksheet

Complete the Reproductive System Review Worksheet

Complete the Reproductive System Practice Quiz

MED TERM  
SICKELS

\_\_\_\_\_   
10

NAME \_\_\_\_\_  
DATE \_\_\_\_\_ PER \_\_\_\_\_ NB# \_\_\_\_\_

### CHAPTER 9: URINARY SYSTEM VOCABULARY LIST

VOCAB. TERM	DEFINITION
AFFERENT ARTERIOLE	
ALBUMIN	
BOWMAN'S CAPSULE	
CATHETER	
DISTAL CONVOLUTED TUBULE	
DYSURIA	
EFFERENT ARTERIOLE	
ELECTROLYTES	
EXTERNAL URETHRAL SPHINCTER	
FILTRATION	
GLOMERULUS	
GLYCOSURIA	
HEMATURIA	

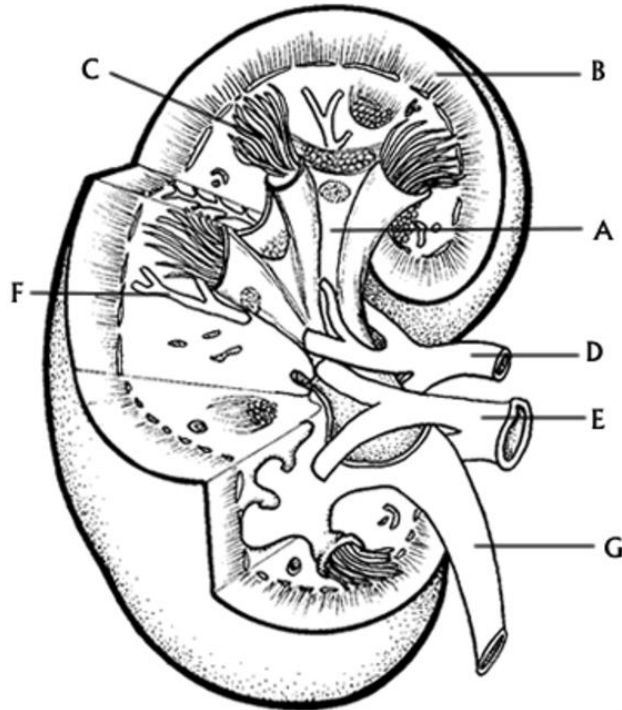
HEMODIALYSIS	
<b>VOCAB. TERM</b>	<b>DEFINITION</b>
HOMEOSTASIS	
INTERNAL URETHRAL SPHINCTER	
KETONURIA	
KIDNEY	
LOOP OF HENLE	
NEPHRON	
NITROGENOUS WASTES	
PERITUBULAR CAPILLARIES	
POLYCYSTIC KIDNEYS	
PROXIMAL CONVOLUTED TUBULE	
PYURIA	
REABSORPTION	
RENAL ARTERY	
RENAL CALYX	
RENAL CORPUSCLE	
RENAL CORTEX	

RENAL HILUM	
<b>VOCAB. TERM</b>	<b>DEFINITION</b>
RENAL MEDULLA	
RENAL PAPILLA	
RENAL PELVIS	
RENAL PYRAMID	
RENAL VEIN	
RETROPERITONEAL	
RUGAE	
SECRETION	
UREMIA	
URETER	
URETHRA	
URINALYSIS	
URINARY BLADDER	
URINARY INCONTINENCE	
URINARY TRACT INFECTION	
URINATION	

URINE	
-------	--

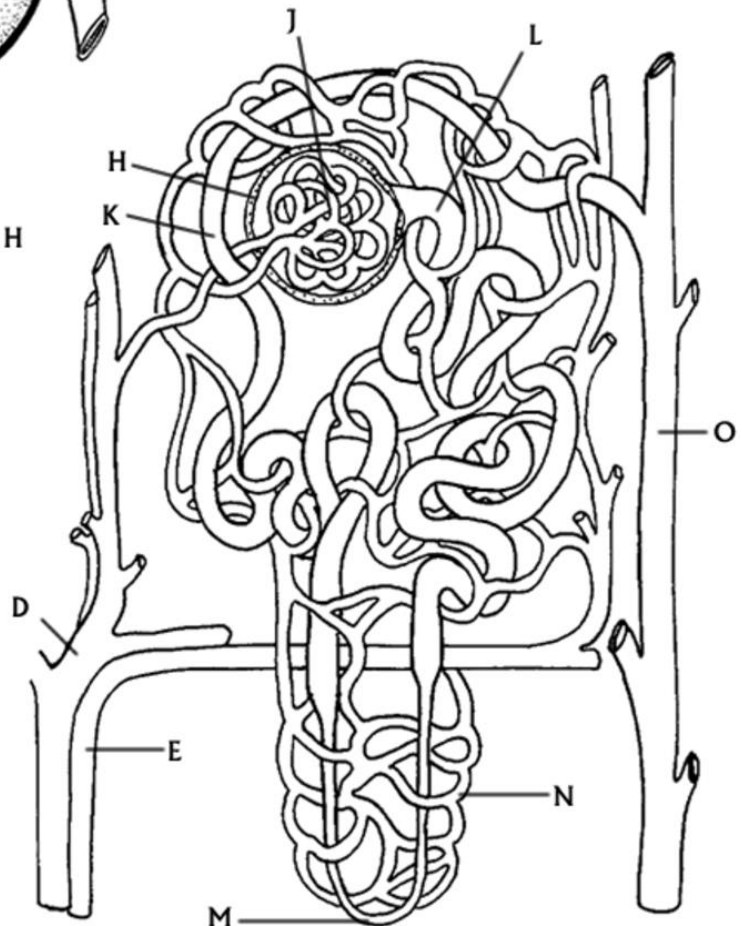
**URINARY SYSTEM COLORING WORKSHEET**

1. Color the terms and the parts of each diagram below.



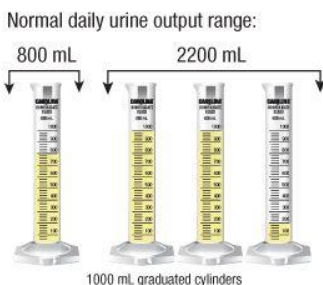
RENAL PELVIS<sub>A</sub>  
CORTEX<sub>B</sub>  
MEDULLA<sub>C</sub>  
RENAL ARTERY<sub>D</sub>  
RENAL VEIN<sub>E</sub>  
NEPHRON<sub>F</sub>  
URETER<sub>G</sub>

BOWMAN'S CAPSULE<sub>H</sub>  
GLOMERULUS,  
DISTAL TUBULE<sub>K</sub>  
PROXIMAL TUBULE<sub>L</sub>  
LOOP OF HENLE<sub>M</sub>  
CAPILLARIES<sub>N</sub>  
COLLECTING DUCT<sub>O</sub>



# Human Body: Urinary System

The urinary system filters extra water and waste products from the blood to help maintain proper fluid balance inside the body. An elaborate system of tubes and tubules intertwines with arteries and veins within the kidneys to allow for maximum excretion of waste products, such as various salts and proteins. The ureters carry this waste to the bladder, where it is stored until excretion.



## Urinary System

**Ureters** are long, thin tubes that carry urine from the kidneys (where it is produced) to the bladder.

The **bladder** is a muscular sac that stores urine.

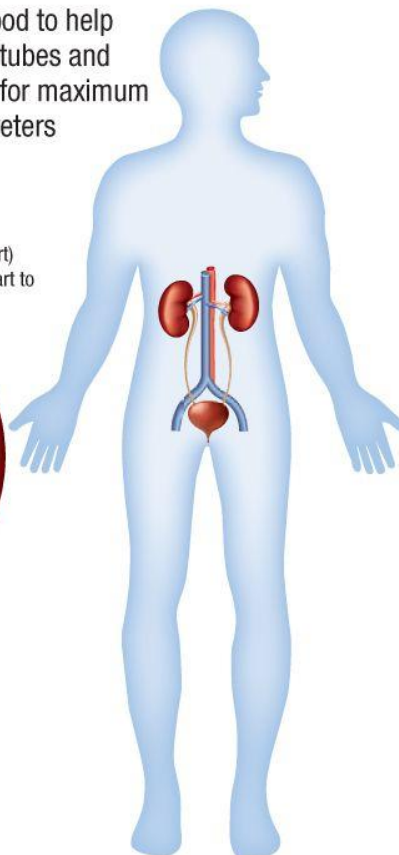
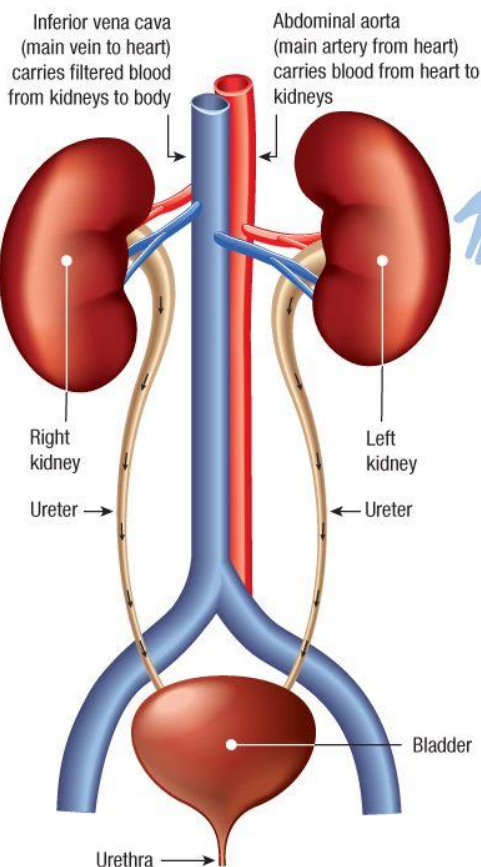
The **urethra** is a narrow tube connected to the bladder that removes urine from the body.

## Kidneys

The kidneys are found in the upper abdomen on each side of the spine. These fist-size organs filter waste products out of the bloodstream and produce urine.

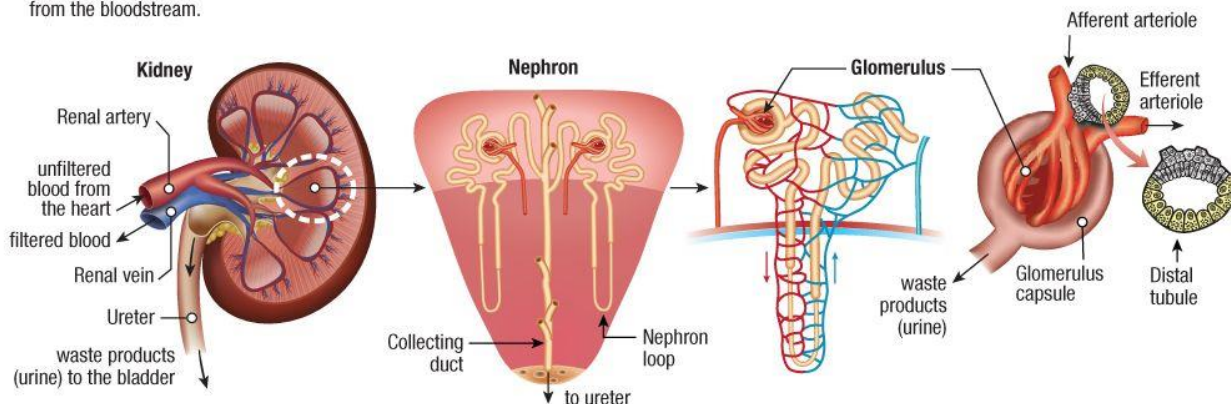
## Nephrons

Nephrons contain a network of tubes, veins, and arteries that intertwine to exchange salts, wastes, and fluids to remove them from the bloodstream.



## Glomerulus

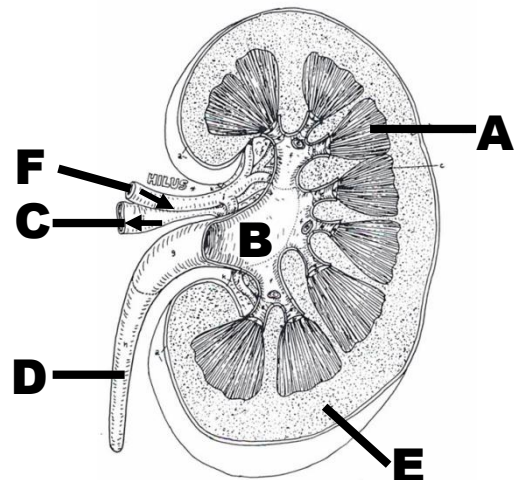
A glomerulus is a small, round pocket within the kidneys that uses concentration gradients to remove nitrogenous waste and salts from the blood vessels that pass through it.



**URINARY SYSTEM WORKSHEET #1**

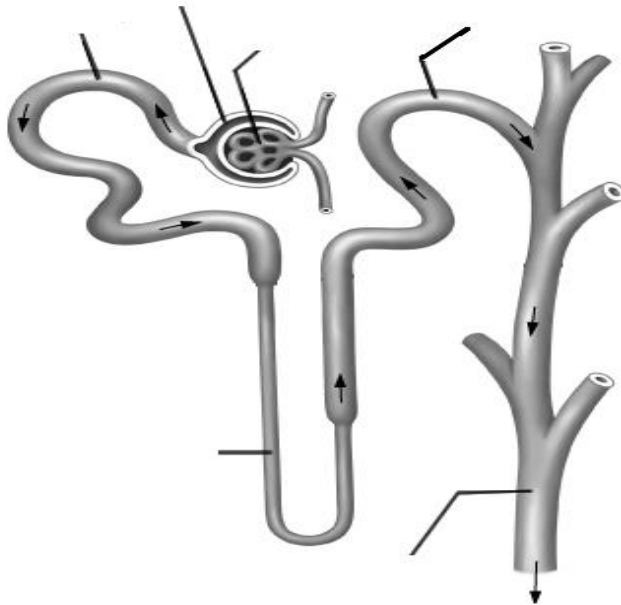
1. What type of blood exits the kidney? \_\_\_\_\_
  
2. The \_\_\_\_\_ is the functional unit of the kidney.
  
3. What are the three functions of the urinary system?
  - a) \_\_\_\_\_
  
  - b) \_\_\_\_\_
  
  - c) \_\_\_\_\_
  
4. The \_\_\_\_\_ carries blood from each kidney to the vena cava whereas the \_\_\_\_\_ carries blood from the aorta to each kidney.
  
5. List the two parts of the renal corpuscle.
  - a) \_\_\_\_\_
  
  - b) \_\_\_\_\_
  
6. The tip of each renal pyramid opens into a \_\_\_\_\_ which empties into the \_\_\_\_\_ which deposit the waste materials into the \_\_\_\_\_.
  
7. Write the name of each labeled structure in the space provided.

- A. \_\_\_\_\_
  
- B. \_\_\_\_\_
  
- C. \_\_\_\_\_
  
- D. \_\_\_\_\_
  
- E. \_\_\_\_\_
  
- F. \_\_\_\_\_





8. Label the diagram of a nephron.



9. The nephron extends into what two regions of the kidney?

- a) \_\_\_\_\_
- b) \_\_\_\_\_

10. What is uremia?

11. The \_\_\_\_\_ is the portion of the kidney that contains the renal pyramids.

12. The \_\_\_\_\_ is the concave portion of a kidney where the blood vessels and the ureter attach.

13. What are the two main regions of the nephron?

- a) \_\_\_\_\_
- b) \_\_\_\_\_

14. What is the other name that the urinary system is known as? \_\_\_\_\_

15. What is the name of the muscular sac that temporarily stores the urine before it is removed from the body?

MED TERM \_\_\_\_\_  
SICKELS \_\_\_\_\_

10

NAME \_\_\_\_\_  
DATE \_\_\_\_\_ PER \_\_\_\_\_ NB# \_\_\_\_\_

## URINARY SYSTEM WORKSHEET #2

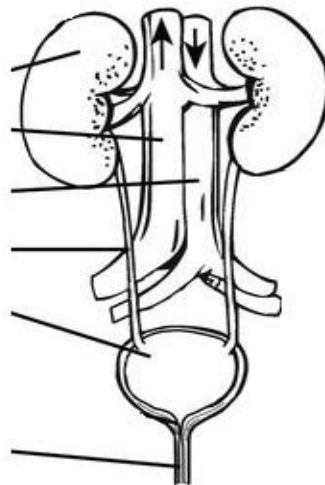
Blood carrying a high concentration of metabolic wastes, salts, and toxins leaves the heart through the largest blood vessel of the body called the \_\_\_\_\_. The \_\_\_\_\_ extend from this blood vessel and carry the “dirty” blood to the left and right kidneys. Each blood vessel enters the kidney at a concave region called the \_\_\_\_\_ and then branches into smaller and smaller blood vessels. These blood vessels carry the blood to the functional unit of the kidney called the \_\_\_\_\_. This structure consists of the renal corpuscle and the \_\_\_\_\_. The blood vessel entering the renal corpuscle is called the \_\_\_\_\_ and has a \_\_\_\_\_ diameter than the \_\_\_\_\_ that exits the renal corpuscle, thus creating a back up of blood and an \_\_\_\_\_ in blood pressure. The blood vessel entering the renal corpuscle branches to form the \_\_\_\_\_ which allow the plasma and wastes in the blood to move out while keeping the cells in the blood vessel. This process is called \_\_\_\_\_. The fluid is then collected by the \_\_\_\_\_ which carries it toward the renal tubule. The \_\_\_\_\_ is the first part of the renal tubule which is then followed by the \_\_\_\_\_ which will carry the wastes upward to the \_\_\_\_\_. While in the renal tubule, two processes occur: \_\_\_\_\_ and \_\_\_\_\_. The waste material remaining in the renal tubule is then deposited into the \_\_\_\_\_ that leads to the \_\_\_\_\_. The urine then leaves the kidneys through a pair of tubes called the \_\_\_\_\_ that lead to a storage area called the \_\_\_\_\_. In order for the urine to leave this storage area, the \_\_\_\_\_ (involuntary control) must open to allow the urine to move into the \_\_\_\_\_. Then the \_\_\_\_\_ must open for the urine to actually leave the body through a process called \_\_\_\_\_.

1. Write the correct medical term for each of the following descriptions/functions.

- a) \_\_\_\_\_ condition where multiple cysts develop within the kidney
- b) \_\_\_\_\_ painful urination
- c) \_\_\_\_\_ urine with a high amount of ketones
- d) \_\_\_\_\_ flexible tube inserted into the urethra to remove urine
- e) \_\_\_\_\_ a protein in the blood
- f) \_\_\_\_\_ the maintaining of balance in the human body
- g) \_\_\_\_\_ the folds of the inner wall of the urinary bladder
- h) \_\_\_\_\_ the accumulation of wastes in the bloodstream
- i) \_\_\_\_\_ location of kidneys since they are not in the peritoneal sac
- j) \_\_\_\_\_ the involuntary release of urine
- k) \_\_\_\_\_ the chemical and microscopic examination of urine
- l) \_\_\_\_\_ use of an artificial kidney machine to filter blood
- m) \_\_\_\_\_ the presence of pus in the urine
- n) \_\_\_\_\_ important salts for the body such as  $K^+$  and  $Na^+$

2. The material removed from the glomerulus is called \_\_\_\_\_ and is primarily composed of plasma and nitrogenous wastes.

3. Label the structures indicated on the diagram below.



## **CHAPTER 9 – URINARY SYSTEM PRACTICE QUIZ**

- \_\_\_\_\_ 1. The specific region of the nephron where filtration occurs.
- \_\_\_\_\_ 2. A flexible tube that is inserted through the urethra to release urine.
- \_\_\_\_\_ 3. The condition in which blood is present in the urine.
- \_\_\_\_\_ 4. The third phase of urine production.
- \_\_\_\_\_ 5. This is located between the renal calyces and the ureter.
- \_\_\_\_\_ 6. The term used to describe the position of the kidney in the abdomen.
- \_\_\_\_\_ 7. The renal blood vessels attach to the kidney at this location.
- \_\_\_\_\_ 8. Voluntarily controls the release of urine from the body.
- \_\_\_\_\_ 9. Carries clean blood between the kidney and the inferior vena cava.
- \_\_\_\_\_ 10. Small blood vessels that surround the renal tubule.
- \_\_\_\_\_ 11. The renal papilla and renal pyramids are found in this region of the kidney.
- \_\_\_\_\_ 12. The functional unit of the kidney.
- \_\_\_\_\_ 13. The folds within the urinary bladder.
- \_\_\_\_\_ 14. The location where secretion takes place.
- \_\_\_\_\_ 15. The steady state or balance within the body.
- \_\_\_\_\_ 16. Transports filtered blood away from the renal corpuscle.
- \_\_\_\_\_ 17. The portion of the renal tubule that is completely within the renal medulla.
- \_\_\_\_\_ 18. The material removed from the glomerulus is called \_\_\_\_\_.
- \_\_\_\_\_ 19. The presence of pus in the urine.
- \_\_\_\_\_ 20. The use of an artificial kidney machine that filters the blood to remove wastes.

MED TERM  
SICKELS

\_\_\_\_\_   
10

NAME \_\_\_\_\_  
DATE \_\_\_\_\_ PER \_\_\_\_\_ NB# \_\_\_\_\_

## CHAPTER 10: REPRODUCTIVE SYSTEM VOCABULARY LIST

VOCAB. TERM	DEFINITION
AMNION	
AMNIOTIC FLUID	
ANTEFLEXION	
AREOLA	
BARTHOLIN'S GLANDS	
BULBOURETHRAL GLANDS*	
CERVIX	
CHORION	
CIRCUMCISION	
CLITORIS	
CONCEPTION	
COWPER'S GLAND	
EFFACEMENT	
EJACULATION	
EMBRYO	

VOCAB. TERM	DEFINITION
ENDOMETRIOSIS	
ENDOMETRIUM	
EPIDIDYMIS	
ERECTILE TISSUE	
ESTROGEN	
FALLOPIAN TUBES	
FERTILIZATION	
FETUS	
FIMBRIAE	
FOLLICLE STIMULATING HORMONE	
GENITALIA	
GESTATION	
GLANS PENIS	
HYMEN	
LABIA MAJORA	
LABIA MINORA	
LACTATION	

VOCAB. TERM	DEFINITION
LUTEINIZING HORMONE	
MAMMARY GLANDS	
MAMMOGRAM	
MENARCHE	
MENOPAUSE	
MENSTRUATION	
MYOMETRIUM	
OVA	
OVARIES	
OVIDUCTS	
OVULATION	
PAP SMEAR	
PELVIC INFLAMMATORY DISEASE (PID)	
PERIMETRIUM	
PERINEUM	
PLACENTA	
PREGNANCY	

PREPUCE	
<b>VOCAB. TERM</b>	<b>DEFINITION</b>
PROGESTERONE	
PROSTATE GLAND*	
PUBERTY	
SCROTUM	
SEMEN	
SEMINAL VESICLES*	
SEMINIFEROUS TUBULES	
SPERMATOGENESIS	
TESTES	
TESTOSTERONE	
UMBILICAL CORD	
URINARY MEATUS	
UTERINE TUBES	
UTERUS	
VAGINA	
VAGINAL ORIFICE	
VAS DEFERENS	

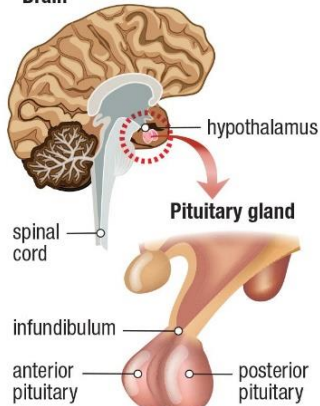


VULVA	
-------	--

# Human Body: Reproductive System

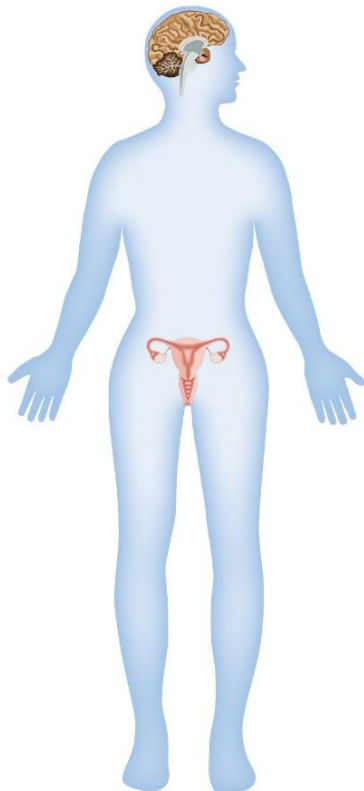
The male and female reproductive systems are controlled by hormones produced by the pituitary gland in the brain, and the reproductive organs themselves.

## Brain



## Pituitary Gland

The pituitary gland secretes hormones that control the reproductive organs. It signals the production of sex hormones and controls ovulation and the menstrual cycle in women.

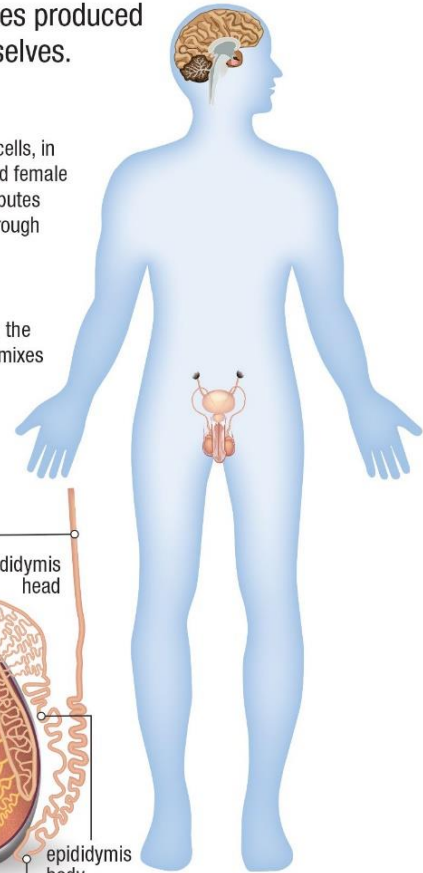
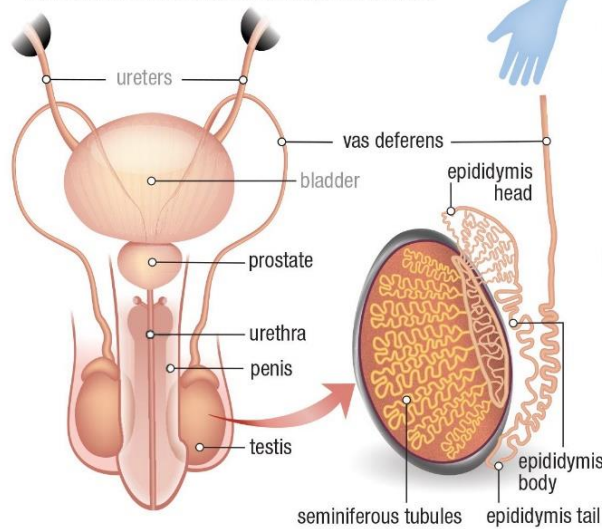


## The Reproductive Organs

These organs make, mature, and store gametes, or sex cells, in the human body. The male gametes are called sperm and female gametes are called ova or egg cells. Each gamete contributes half of an offspring's DNA, providing genetic variation through sexual reproduction.

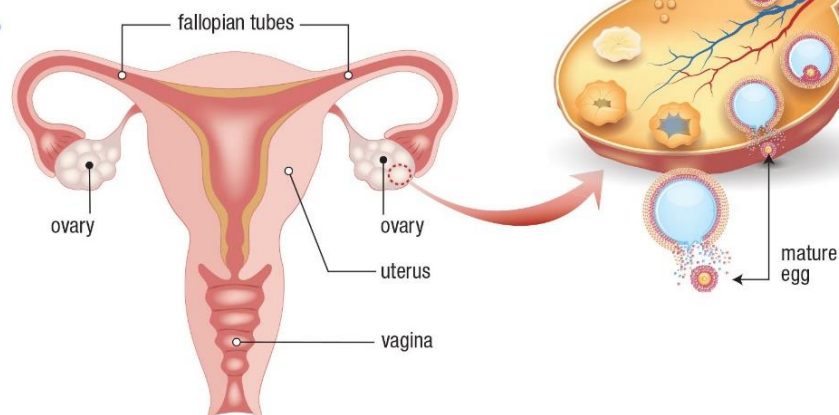
### Male reproductive system

Sperm is made in the seminiferous tubules and stored in the epididymis. It travels through the vas deferens, where it mixes with seminal fluids and passes through the urethra.

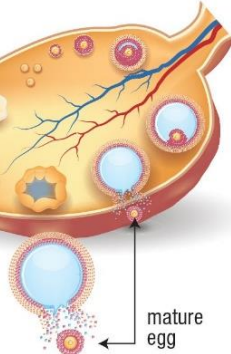


### Female reproductive system

Immature eggs are found in the ovaries where they mature and are released into the fallopian tubes. An egg travels down the tube to the uterus, where it either implants and develops into an embryo or is shed with the lining of the uterus at the end of a menstrual cycle.



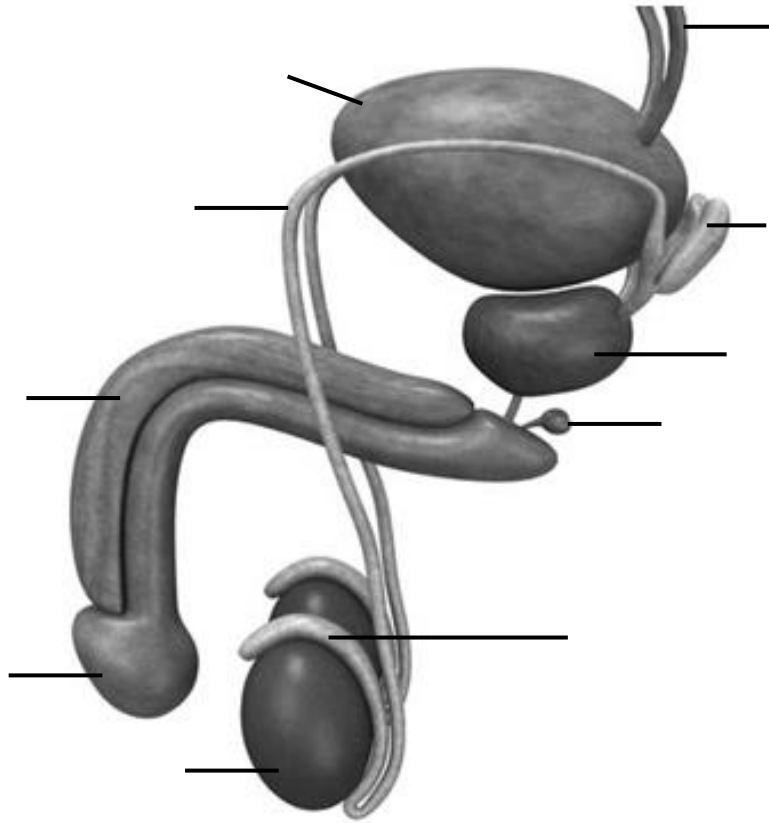
### Developing Ovarian Follicle



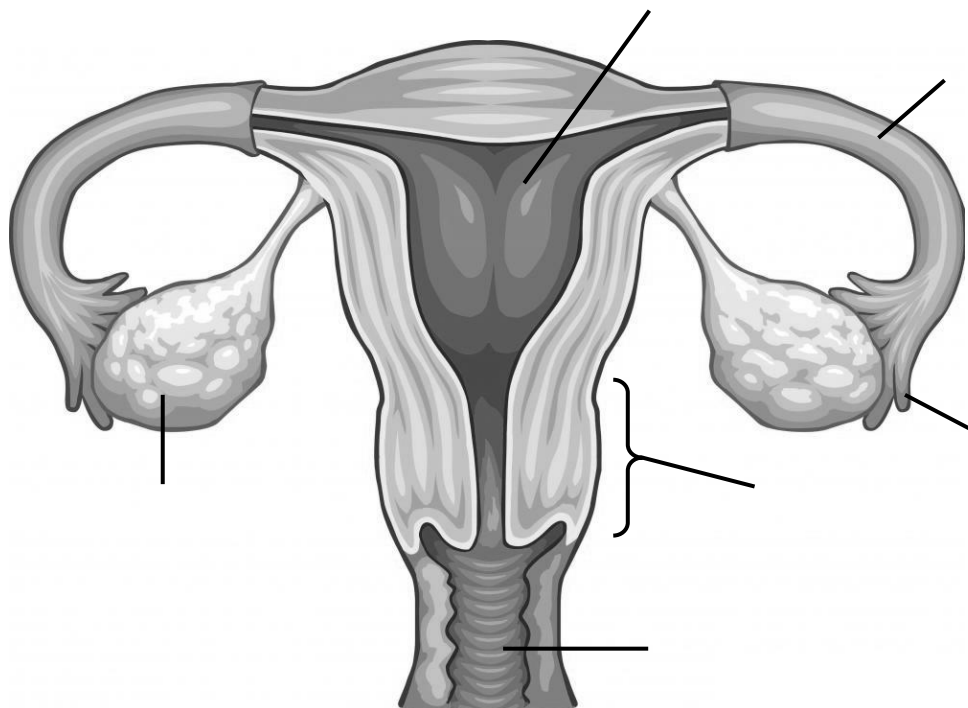
MED TERM  
SICKELS

NAME \_\_\_\_\_  
DATE \_\_\_\_\_ PER \_\_\_\_\_ NB# \_\_\_\_\_

**MALE REPRODUCTIVE SYSTEM:**

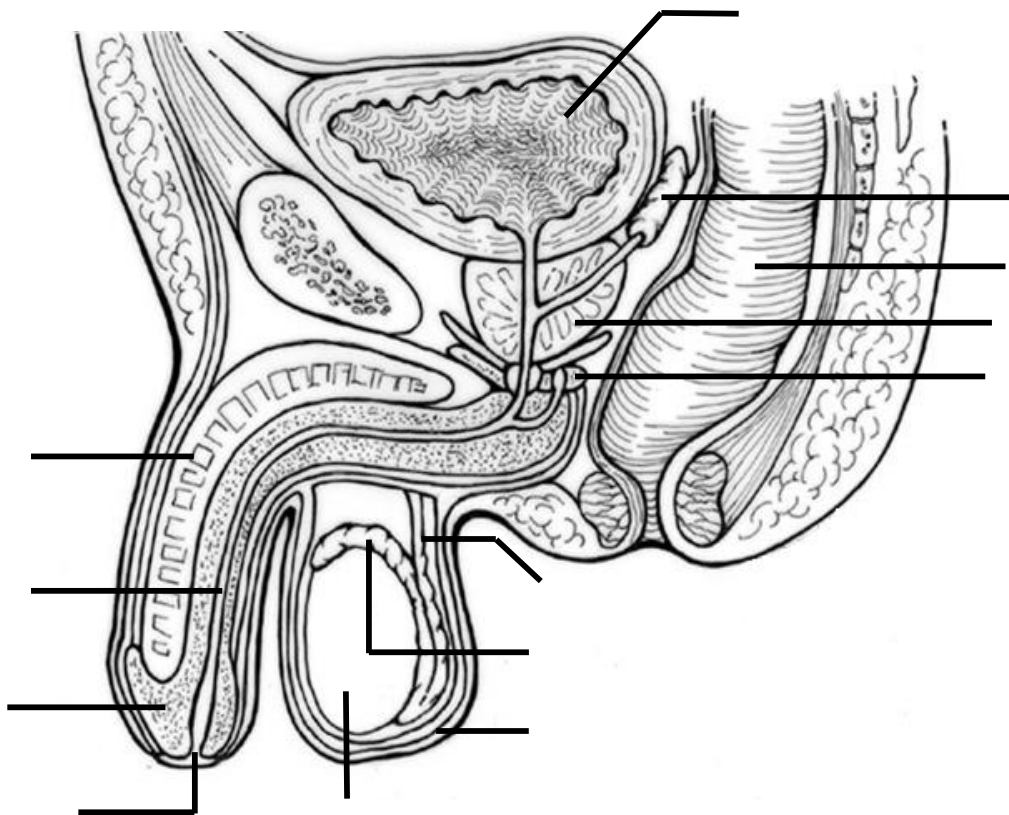
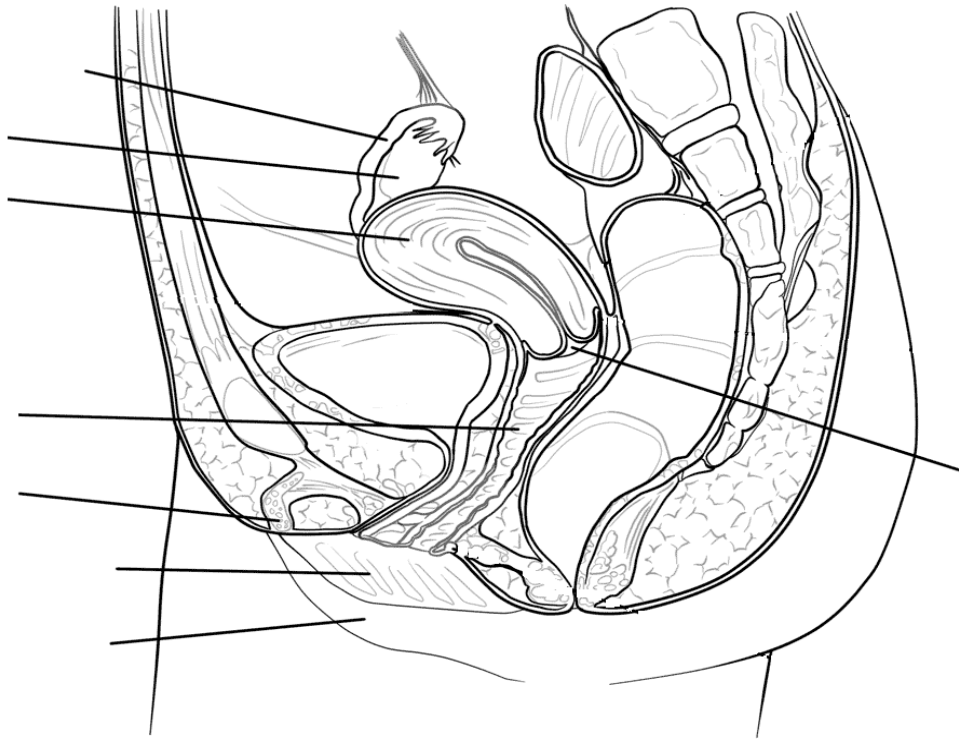


**FEMALE REPRODUCTIVE SYSTEM:**



### REPRODUCTIVE SYSTEM COLORING WORKSHEET

**DIRECTIONS:** Label and color the structures of both the male and female reproductive systems.



MED TERM \_\_\_\_\_  
SICKELS \_\_\_\_\_

10

NAME \_\_\_\_\_  
DATE \_\_\_\_\_ PER \_\_\_\_\_ NB# \_\_\_\_\_

## REPRODUCTIVE SYSTEM REVIEW WORKSHEET

**DIRECTIONS:** Write the correct medical term(s) in the blank spaces to best complete the following summary of the reproductive system.

The male reproductive system is composed of several organs that are involved in the production of offspring. The process begins within the \_\_\_\_\_ located in each testis where the male gamete called \_\_\_\_\_ is produced by a process called \_\_\_\_\_. These immature gametes then move to a temporary storage area called the \_\_\_\_\_ where they grow and mature until they are removed from the body during \_\_\_\_\_. Due to the high body temperature, the testes are suspended outside of the body within a skin pouch called the \_\_\_\_\_ in order to maintain a cooler temperature and reduce the chance of sperm deformities. The male's sperm is deposited into the female's vagina by a muscular organ called the \_\_\_\_\_. In an unaltered male, the soft tip of this organ is called the \_\_\_\_\_ and is covered by a protective layer of skin called the \_\_\_\_\_. Sometimes, this foreskin will be removed soon after birth by a procedure called \_\_\_\_\_. During sexual arousal, blood flow is diverted to the \_\_\_\_\_ within the penis, causing it to elongate and become erect. When the male reaches orgasm, muscle contractions force the sperm out of each epididymis and into a narrow tube called the \_\_\_\_\_. These two tubes will then connect to a single tube called the \_\_\_\_\_ that will carry both sperm and urine (not at the same time) out of the body. Along this single tube, there are three organs that add material to the sperm, creating a fluid called \_\_\_\_\_. This fluid will then exit the penis through an opening called the \_\_\_\_\_ into the female's vagina.

The female reproductive system is also composed of several organs that are involved in producing offspring. The process begins when the two \_\_\_\_\_ produce the female gametes called \_\_\_\_\_. The growth of these gametes is controlled by a hormone called \_\_\_\_\_. Each month, a hormone called \_\_\_\_\_ stimulates the release of one egg by a process called \_\_\_\_\_. This egg is swept into the \_\_\_\_\_ with the help of finger-like projections called \_\_\_\_\_. The egg then travels through this passageway

and if sperm is not present, the egg will continue on to a muscular sac called the \_\_\_\_\_. It will then pass through the final 1/3 of this organ called the \_\_\_\_\_ and then move through a muscular tube called the \_\_\_\_\_ that leads to an opening called the \_\_\_\_\_ that leads to the outside of the body. This opening is covered by two protective flaps of skin. The innermost layer is called the \_\_\_\_\_ and the outermost layer is called the \_\_\_\_\_ which is covered with pubic hair. Because no pregnancy has taken place, the hormones \_\_\_\_\_ and \_\_\_\_\_ cause the lining of the uterus to slough off and leave the body by a process called \_\_\_\_\_.

If sperm is present in the fallopian tube, the egg & sperm may join together to form a \_\_\_\_\_ by a process called \_\_\_\_\_. This diploid cell then travels to the uterus where it attaches to the blood-rich inner lining called the \_\_\_\_\_. The zygote goes through mitosis to form an \_\_\_\_\_ and after week eight, it is now called a \_\_\_\_\_. During this entire time, the baby is surrounded by an inner membranous sac called the \_\_\_\_\_ and is suspended in a liquid called \_\_\_\_\_. Additionally, there is a second, more superficial layer surrounding the baby called the \_\_\_\_\_ which protects the developing baby and also helps to form the \_\_\_\_\_ which is a flattened, circular organ that provided nourishment to the baby through the \_\_\_\_\_ during the pregnancy. Once the \_\_\_\_\_ period of 40 weeks is complete, the female's cervix will begin to expand to approximately 10 cm during the \_\_\_\_\_ stage. Next, the muscular layer of the uterus called the \_\_\_\_\_ will begin to contract to push the fetus out of the uterus and through the vaginal canal during the \_\_\_\_\_ stage. After the fetus is expelled from the female's body, the contractions of the uterine wall continue to remove the placenta from the body during the \_\_\_\_\_ stage. Once the baby is delivered, cleaned, and has rested, it will often be hungry. At this point it will attach to the female's nipple on her \_\_\_\_\_ which is surrounded by a pigmented region called the \_\_\_\_\_. Within the breast are specialized structures called \_\_\_\_\_ which produce nourishing milk by a process called \_\_\_\_\_.

1. What are the two functions of testosterone?

- a)
- b)

2. What is the term used to describe the forward tilt of the uterus? \_\_\_\_\_
3. What four organs contribute to semen? Describe what material each produces to form the semen.
  - a)
  - b)
  - c)
  - d)
4. What are the three layers of the uterine wall from inside to outside?
  - a)
  - b)
  - c)
5. What are the two functions of the solution produced by the prostate gland?
  - a)
  - b)
6. \_\_\_\_\_ is the period of time that the baby develops in the mother's uterus.
7. List the three sections/regions of the uterus. Describe each.
  - a)
  - b)
  - c)
8. What is the function of Bartholin's gland?
9. The thin membrane that initially covers the vaginal orifice is called the \_\_\_\_\_.

## REPRODUCTIVE SYSTEM PRACTICE QUIZ

- \_\_\_\_\_ 1. The thinning of the cervix during the dilation phase of labor.
- \_\_\_\_\_ 2. Produces a material that neutralizes the female's mucus.
- \_\_\_\_\_ 3. The protective layer of skin that covers the glans penis.
- \_\_\_\_\_ 4. The opening of the penis to the outside environment.
- \_\_\_\_\_ 5. Stage in the birthing process where the myometrium contracts.
- \_\_\_\_\_ 6. The process of producing sperm within the testes.
- \_\_\_\_\_ 7. The process caused by luteinizing hormone.
- \_\_\_\_\_ 8. The ending of menstrual activity occurring between ages 40 & 55.
- \_\_\_\_\_ 9. These structures produce milk for nourishing the newborn.
- \_\_\_\_\_ 10. In both males & females, this tissue has many nerves for stimulation.
- \_\_\_\_\_ 11. The muscular layer of the uterus.
- \_\_\_\_\_ 12. The removal of the foreskin surrounding the male's glans penis.
- \_\_\_\_\_ 13. This hormone causes ova to mature within the ovaries.
- \_\_\_\_\_ 14. Finger-like projections that move the egg into the fallopian tube.
- \_\_\_\_\_ 15. During gestation this is the term for the infant after week eight.
- \_\_\_\_\_ 16. This is located between the testis and the vas deferens.
- \_\_\_\_\_ 17. The main portion of the uterus where the embryo develops.
- \_\_\_\_\_ 18. The thin membrane covering the vaginal orifice.
- \_\_\_\_\_ 19. The membrane surrounding the fetus and is filled with fluid.
- \_\_\_\_\_ 20. This is the exact location where sperm are formed.