

Name: _____ Block: _____ Date: _____

Biology 12 - The Reproductive System!

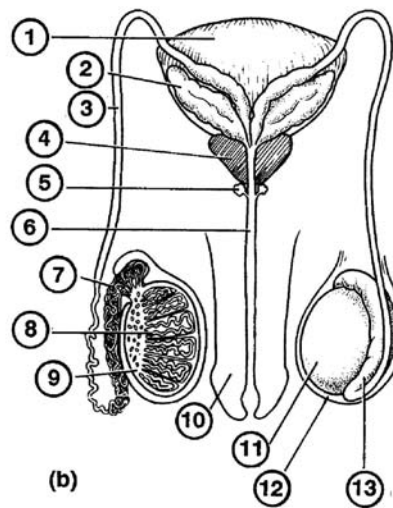
• **Part A:** Definitions: Please define or explain the following terms, in your **OWN WORDS**, in as few words as **clarity allows**.

a)	testes	
b)	scrotum	
c)	seminiferous tubules	
d)	epididymis	
e)	sperm	
f)	vas deferens	
g)	acrosome	
h)	spermatogenesis	
i)	penis	
j)	Interstitial cells	
k)	Sertoli cells	
l)	Semen	
m)	seminal fluid	
n)	seminal vesicles	
o)	prostate gland	
p)	Cowper's glands	
q)	urethra	
r)	testosterone	
s)	FSH (in males)	
t)	LH (in males)	
u)	ovaries	
v)	oviducts	
w)	uterus	
x)	cervix	
y)	vagina	
z)	follicles	
aa)	oocyte	
bb)	zona pellucida	
cc)	ovulation	
dd)	corpus luteum	
ee)	clitoris	
ff)	hypothalamus	
gg)	FSH	

Part B: Fill In The Blanks

- The part of the male reproductive system that creates an antacid secretion is called the _____.
- Semen is composed of _____, which is made in the _____ tubules, and secretions from the _____ gland, _____ glands, and _____ vesicles.
- The seminal vesicles secrete a fluid that is rich in the monosaccharide _____, which serves as _____ for the sperm.
- Cowper's glands secrete a fluid that acts as a _____.
- The _____ cells in the testes produce testosterone in response to the hormone **LH**.
- The hormone _____ promotes spermatogenesis.
- The male hormone testosterone is a _____ hormone, meaning that it is _____-soluble. Like all steroid hormones, it is derived from the steroid hormone _____.
- _____ is made inside the seminiferous tubules and sent from there to the _____ for storage.
- Label the diagram of the male reproductive system.

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	



- List the structures through which sperm passes in order, from the following list: epididymis, seminiferous tubules, urethra, penis, vas deferens. _____
- Label the parts of the diagram of the sperm cell and list a function for each part:

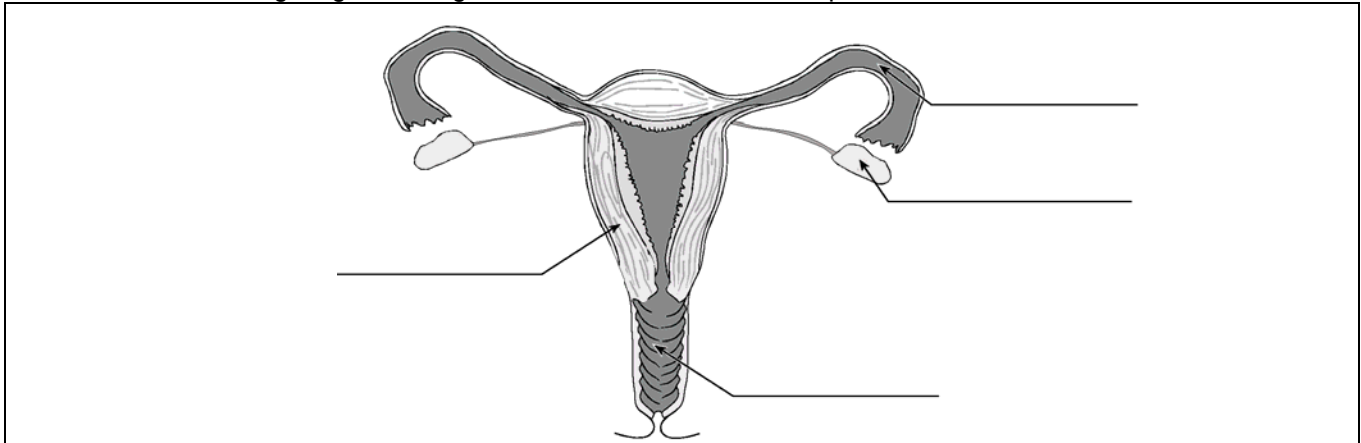
	Name	Function
W		
X		
Y		
Z		

- List 3 function of testosterone

A	
B	
C	

- The _____ produces the hormone GnRH when testosterone and _____ levels are _____.
- This causes the _____ pituitary gland to release _____ and _____.
- LH causes _____ cells in the testes to release more _____.

16. FSH causes the seminiferous tubules to absorb more _____, which in turn causes them to produce more _____. As it makes more sperm, it also releases more of the hormone _____. High levels of this hormone feedback to the _____ and _____, causing them to release less of their hormones.
17. Label the following diagram and give a function for each labeled part.



	Name	Function

18. List 3 functions of estrogen:

A	
B	
C	

19. The entrance to the uterus is called the _____.
20. The female erectile organ containing many sensory nerve receptors is called the _____.
21. the menstrual cycle lasts on average _____ days. **Day 1** is the first day that _____ starts, and usually finishes by day 5.
22. During menstruation, levels of female _____ are low.
23. In the follicular phase (days 1 – 14), low levels of hormones are detected by the hypothalamus, which releases _____. This is sent to the pituitary gland, which releases _____ and _____.
24. FSH causes several immature _____, along with their surrounding _____ cells, in the ovaries to begin to develop. The developing follicle cells release increasing amounts of _____.
25. This hormone is responsible for the _____ phase of the uterine cycle. In the uterus, _____ vessels and _____ proliferate.
26. Rising levels of estrogen cause the release of a large amount of **LH** on about day 13 which causes _____.
27. Ovulation normally occurs on day _____. In ovulation, the _____ is released from the ovary, leaving behind the _____ cells, which go on to form the _____. This structure continues to release the hormones estrogen and progesterone. Of these two hormones, _____ is most important for the luteal phase of the ovarian cycle. This hormone cause the _____ phase of the uterine cycle. The uterine glands mature and release a thick mucus, and the endometrium _____ in thickness.
28. High levels of _____ cause _____ feedback to the anterior pituitary, shutting down the release of _____. Lower levels of LH cause the _____ to disintegrate. Since it is breaking down, it can no longer release estrogen and progesterone.
29. Low levels of female _____ by day 28 will cause the uterine _____ to be shed, and the cycle will start anew.
30. However, if fertilization happens, the _____ cycle will be interrupted. Fertilization usually occurs in the upper _____. The fertilized egg is first called a **ZYGOTE** and then an _____ as it divides through mitosis.

31. The embryo, upon reaching the **UTERUS**, will embed itself into the endometrium. This is called _____.
32. A shared set of membranes called the placenta forms around the embryo. This will begin to secrete the hormone HCG, which temporarily maintains the corpus luteum.
33. As the placenta develops and matures, it makes its own _____ and _____. This will maintain the uterine lining so that _____ does not occur during pregnancy.
34. After 9 months, the fetus is ready to be born. The pressure of the baby's head against the cervix causes a nerve impulse to be sent to the hypothalamus. This causes the hypothalamus to release the hormone _____ to the pituitary, which releases it into the blood. This hormone causes _____ to release _____. It operates on a _____ feedback loop. The hormone causes the uterine muscles to _____ with ever greater intensity until the baby is pushed out of the uterus through the _____, which serves as the birth canal.
- 35.

COLUMN A	COLUMN B
prostate gland	
ovary	a) location for spermatogenesis _____
epididymis	b) has enzymes used to penetrate egg _____
seminiferous tubule	c) sperm mature here _____
uterus	d) secretes progesterone _____
fallopian tube	e) location of the developing fetus _____
ductus (vas) deferens	f) provides nutrients for sperm _____
acrosome	

COLUMN A	COLUMN B
acrosome	
corpus luteum	a) stimulates secretions from the corpus luteum _____
luteinizing hormone	b) causes the endometrium to thicken _____
estrogen	c) an organ of copulation _____
vagina	d) contains enzymes necessary to penetrate egg _____
urethra	e) area for maturation of sperm _____
epididymis	f) secretes testosterone _____
interstitial cell	