

**Physiology: The Reproductive System Worksheet****Directions: Write in and circle best answer on this sheet.**

Answers to questions can be found in chapter 22 and 23 of **OER** Textbook, the lecture notes and other sources online. Use the answers to the questions to complete the multiple choice questions at the end.

1. The reproductive union of the female egg cell with the male sperm cell is called a \_\_\_\_\_.
2. The \_\_\_\_\_ are the primary reproductive structures for males and females. They make the \_\_\_\_\_ (are also called the sex cells), and the \_\_\_\_\_ for males and females.
3. The primary reproductive structures for males are the \_\_\_\_\_. They make the male gamete called \_\_\_\_\_, the most important male sex hormone made is \_\_\_\_\_.
4. Are Gametes (sex cells) Haploid or Diploid? \_\_\_\_\_. In terms of sex chromosomes, Females are \_\_\_\_\_ and Males are \_\_\_\_\_. Are the genes on the X chromosome the same as on the Y? \_\_\_\_\_.
5. Both male and females are affected by follicular stimulating hormone (FSH). **a)** True or **b)** False
6. Only males make testosterone, females do not make any testosterone. **a)** True or **b)** False
7. The exact location for the sperm cell production in the \_\_\_\_\_.
8. The exact location for the production of testosterone is the \_\_\_\_\_.
9. The testes are located in the \_\_\_\_\_, which sits outside of the abdominal cavity.
10. Why are the testes stored there? \_\_\_\_\_.
11. The skin of the scrotum contains subcutaneous \_\_\_\_\_ muscle which gives them their wrinkled appearance. This structure alters the surface area of the scrotum in order to regulate \_\_\_\_\_ of the testes. The temperature of the testes must remain \_\_\_\_\_ that body temperature.
12. The primary reproductive structures for females are the \_\_\_\_\_. They make the female gamete called \_\_\_\_\_, the two most important female sex hormones are \_\_\_\_\_ and \_\_\_\_\_.
13. Hormones that stimulate the **growth** of the **gonads** (the primary reproductive structures) are called \_\_\_\_\_. List **2** specific hormones that have been discussed in class that stimulate both the male and female gonads, but the common name is based on effects on the female reproductive system.
  - 1)
  - 2)
14. The **Fallopian** tube is also called the \_\_\_\_\_ tube, and its role is to transport the female cell to the \_\_\_\_\_. It takes \_\_\_\_\_ days for the egg to travel from the ovary to the \_\_\_\_\_.

15. The female **ovarian cycle** is normally \_\_\_\_\_ days long. Typically ovulation occurs on day \_\_\_\_\_ of this cycle. The female uterine cycle is also \_\_\_\_\_ days long. The menses (menstruation) phase is usually the first \_\_\_\_\_ days of that cycle. This phase involves the shedding of the \_\_\_\_\_ layer of the uterus.

16. The male penis and the female clitoris are both composed of \_\_\_\_\_ tissue, which can become engorged with blood during sexual excitation. The specific name of this tissue is called the \_\_\_\_\_. Blood flow to this tissue is controlled by the \_\_\_\_\_ of the ANS.

17. The structure transporting \_\_\_\_\_ cells from the testes to the vas deferens is the \_\_\_\_\_, its main role is for the maturation of the \_\_\_\_\_. A **vasectomy** involves the cutting and **ligation** (tying) of the \_\_\_\_\_ in order to prevent the transport of sperm cells from the testes into the semen. This is a type of \_\_\_\_\_ control to prevent pregnancy.

18. After ovulation, what structure is then formed from the mature follicle?

- a) fimbriae
- b) corpus albicans
- c) corpus luteum
- d) Graafian follicle
- e) primary follicle

19. The ovaries produce:

- a) estrogen and ova
- b) estrogen and progesterone
- c) progesterone and ova
- d) estrogen, progesterone and ova
- e) estrogen, progesterone, oxytocin and ova

20. A fertilized ovum is called a \_\_\_\_\_.

- a) meiotic cell
- b) Graafian follicle
- c) corpus albicans
- d) zygote
- e) gamete

21. The hormone that stimulates **uterine contractions** during childbirth is

- a) oxytocin
- b) estrogen
- c) granular cell carcinoma
- d) progesterone
- e) prolactin

22. Why are the testes located in the **scrotal sacs** outside of the body?

- a) for protection of the testes
- b) because it is too cold within the body
- c) the abdominal cavity within the body is too warm
- d) because it is too wet inside the body

23. Where does **spermatogenesis** (production of spermatozoa) occur?

- a) epididymis
- b) seminal vesicles
- c) prostate gland
- d) vas deferens
- e) seminiferous tubules

24. Where in the male reproductive system do sperm cells **mature** the most?

- a) epididymides
- b) seminal vesicles
- c) seminiferous tubules
- d) vas deferens
- e) testes

25. Identify the cells within the testes that produce **testosterone**.

- a) cells in the seminiferous tubules
- b) Interstitial cells
- c) spermatogonia
- d) spermatozoa cells
- e) cells in the prostate gland

26. Sperm are most viable in a \_\_\_\_\_ solution.

- a) slightly acidic
- b) slightly basic
- c) neutral

27. Which of the following male glands is **not** paired?

- a) prostate gland
- b) bulbourethral gland
- c) seminal vesicle

28. The layer of the **uterine wall** that is responsible for uterine **contraction** is the:  
 a) endometrium   b) myometrium   c) perimetrium   d) stratum basale   e) stratum functionalis

29. Of all of these methods of contraception, which one is most effective?  
 a) birth control pill   b) withdrawal   c) abstinence   d) douching   e) IUD

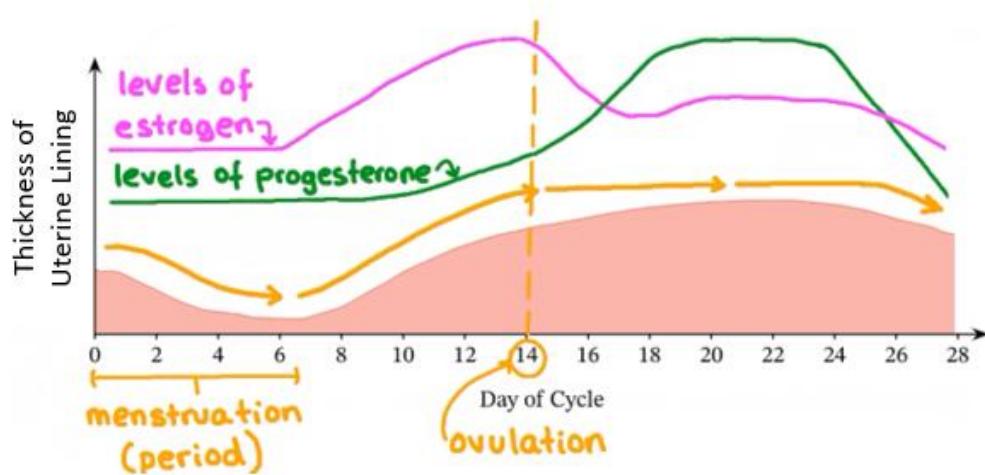
30. Which of these hormones listed below stimulates **spermatogenesis**?  
 a) Inhibin   b) Growth hormone (GH)   c) Gonadotropin-releasing hormone (GnRH)  
 d) Prolactin (PRL)   e) Follicle stimulating hormone (FSH)

31. Which hormones are responsible for the **ovulation** of the mature ova (egg cell) in females?

1. Inhibin   2. Luteinizing hormone (LH)   3. Follicle stimulating hormone (FSH)  
 4. Gonadotropin-releasing hormone (GnRH)   5. Prolactin (PRL)   6. Estrogen  
 a) 2 and 3   b) 2, 3 and 4   c) 6 only   d) 3 and 4   e) 1, 4 and 5

32. Look at the **uterine cycle** graph below and suggest what the increase in **estrogen** is responsible for.

a) The development of a follicle.   b) The formation of the corpus luteum.  
 c) The release of the egg cell at ovulation.   d) The thickening of the endometrium.



33. Comparing typical males to typical females, males have:

a) a lower metabolic rate   b) lower levels of androgens than females   c) greater skeletal muscle mass  
 d) higher levels of LDL's than females   e) higher pitched voices than females

34. The most common type of **ectopic pregnancy** (when the fertilized egg implants in some place other than the uterus) is tubal pregnancy, where the zygote implants in the fallopian tube.

What % do tubal pregnancies account for?

a) 50%   b) 90 to 95%   c) 60% to 70%   d) 70%   e) 80%

35. Which of the following is not a cause of low sperm count in males?

a) overheating the testes   b) tight clothing   c) smoking  
 d) anabolic steroids   e) all of the above can cause low sperm count in males