

Name: _____

Date: _____

Reproduction & Menstrual Cycle

Use the image as well as textbook pages 143-148 to help you answer the following questions:

1. How long does the menstrual cycle in the illustration last?

28 days

2. On a 28 day cycle, which day does ovulation occur?

Day 14

3. If the cycle were to last 33 days, when would ovulation occur?

16-17th day

4. A) What is the follicle's function?

Contains cells which will help mature the oocyte and protect it.

- B) What is estrogen's function?

Increase in estrogen will increase LH which will trigger ovulation, also thickens the uterine lining.

- C) What is the relationship between the size of the follicle and the amount of estrogen?

As the follicle begins to mature it secretes estrogen, the larger the follicle gets, the more estrogen is secreted.

- D) What causes the follicle to grow? The secretion of FSH

5. What is the relationship between the thickness of the uterine lining and the amount of estrogen? Increased levels of estrogen begins to thicken the lining of the uterus to prepare for implantation

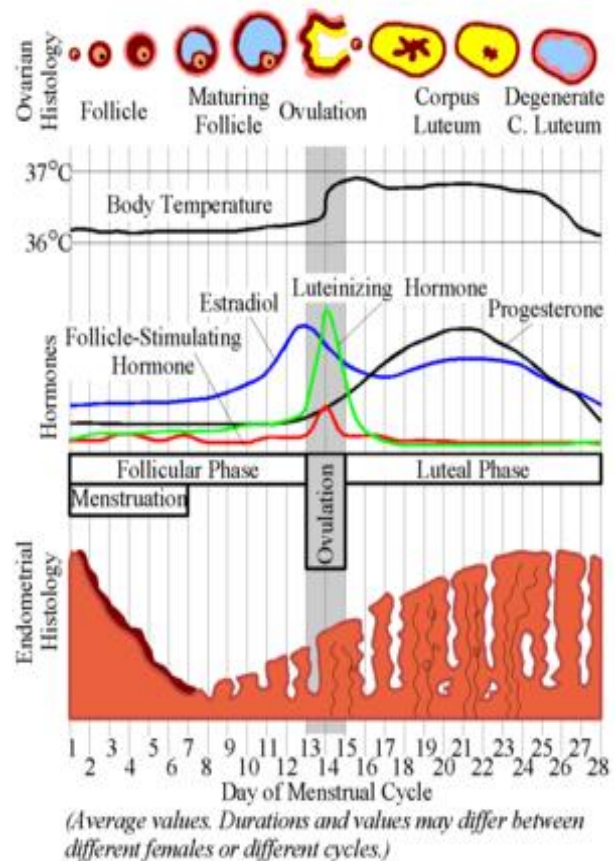
6. A) What is FSH's function? Causes maturation of follicle

- B) What causes FSH to be secreted? Puberty

- C) Why does FSH production drop once the follicle bursts? FSH matures the follicle,

once the follicle bursts and egg is released, FSH production is stopped to prevent maturing another egg incase fertilization occurs.

7. What is LH's function? Triggers ovulation



8. What gland secretes FSH and LH? **pituitary**
9. A) What is progesterone's function? **To thicken the uterine lining**
- B) What causes progesterone to be secreted? **Once ovulation occurs, corpus luteum (remainder of follicle) secretes progesterone to thicken lining and prepare for implantation**
10. Why does ovulation occur? **To release the ovum so it can be fertilized**
11. Once ovulation occurs what will occur 14 days later? **If fertilized, egg implants, if unfertilized, menstruation occurs.**
12. A) During post-ovulation, what hormone is responsible for the thickening of the uterine lining? **progesterone**
- B) What hormone was responsible during pre-ovulation? **estrogen**
13. A) What is the corpus luteum? **Remainder of follicle once it has burst**
- B) What is its function? **To secrete progesterone to thicken endometrium and to secrete LH to repair ovary**
- C) Why does the corpus luteum deteriorate? **If egg is unfertilized then there is no need for progesterone to be secreted and it will disintegrate**
14. Why does a female get her period? **Ovum is unfertilized so she sheds the endometrium lining which is full of blood vessels and so she discards the lining and the unfertilized egg.**

15. Match each hormone to its secretor.

Hormone	Secretor
a) FSH	1. Pituitary gland
b) Estrogen	2. Corpus luteum
c) LH	3. Testicle
d) Progesterone	4. Ovarian follicle
e) Testosterone	5. Pituitary gland

16. Circle the answer corresponding to the number of ova produced from a single oocyte during oogenesis.

a) 1

b) 2

c) 4

d) 8

17. a) When is oogenesis started? 3-7 months in utero

b) When is oogenesis completed so that a secondary oocyte is produced? Each month from puberty to menopause one oocyte per cycle can reach maturity and become an ovum

18. What hormone is responsible for the following phenomena:

a) Maturation of the follicle during pre-ovulatory phase: FSH

b) Thickening of uterine lining during menstrual cycle: Estrogen

c) Ovulation, or the rupturing of the follicle causing release of the egg: LH

19. True or false:

a) At birth, girls contain all the oocytes they will ever have T

b) Oogenesis starts at puberty F

c) Females can produce eggs until they die F

d) If a female gets pregnant, progesterone levels decrease F

e) LH stimulates the maturation of follicles F