Puberty and cycles worksheet

1. Define the following words:

a) Puberty: All the physical & psychological changes which occur in the body.

b) Hormones: Chemicals that cause changes

c) Glands: Cells or organs that secrete hormones

d) Menstrual cycle: all the changes a female goes through due to glandes hormones

e) Ovum: female sex cell

f) Oocyte: immature egg

g) Oogenesis: process of ovum being produced by meiosis

h) Ovulation: ovum released into fallopian tube.

i) Follicle: immature egg - oocyte

j) Corpus luteum: remainder of follicle - releases hormones

k) Endometrium: uterine lining where zygote implants

l) Erection: increase in vasemo & rigidity of penis

m) Ejaculation: release of semen from penis

n) Pre ejaculation: release of semen before ejaculation

2. Match the letters with the possible choices. The choices can be used more than once.

a- Glands that both males and female have: pituitary
b- Hormones that both male and female have: FSH + LH
c- Hormone that only males have: testosterone
d- Hormones that only females have: estrogen + progesterone
e- Gland that only males have: testicles
f- Gland that only females have: ovaries

Choices: estrogen, progesterone, FSH. LH, pituitary gland, testosterone, testicles and ovaries

3. What are the female primary sexual characteristics? menstrual cycle + ovum produced

4. What ~~are~~ is the males primary sexual characteristic? produce sperm

5. Give 3 secondary characteristics for females breasts, hips, fatty tissues

6. Give 3 secondary sexual characteristics for males muscle mass, voice change facial hair

7. Match the word with its function.

a) Follicle EE	A) Causes ovulation
b) LH A	B) Causes endometrium to thicken
c) Progesterone B	C) Causes follicle to develop
d) FSH CC	D) Secretes progesterone
e) Corpus luteum D	E) Secretes estrogen
f) Estrogen F	F) Causes LH to be secreted

8. Explain what happens during the following days of the menstrual cycle.

1-5	Menstrual phase
6-14	proliferation phase
15-28	secretory phase
1-13	an oocyte is developing
14	ovulation
11-15	fertile period

9. Why does a female get her period? endometrium shedding, didn't get pregnant

10. Explain how an erection occurs: penis fills with blood.

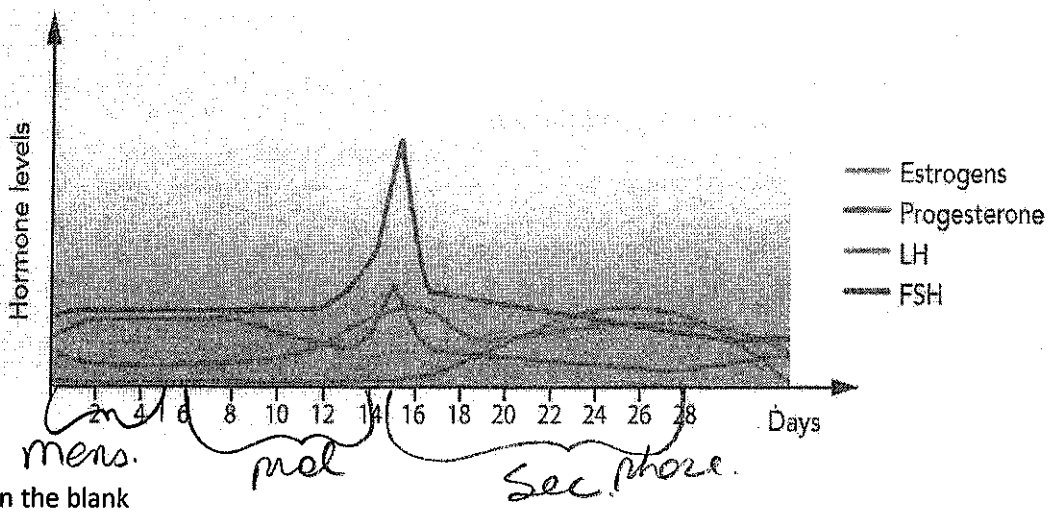
11. Explain if a penis can ejaculate without being erect? No, must be erect

12. Why are males able to father children in their 70's? always produce sperm

13. If the ovum only lives 12-24 hours, why is a female fertile for 72 hours? Sperm can live in female for upto 72 hours.

14 ↑LH

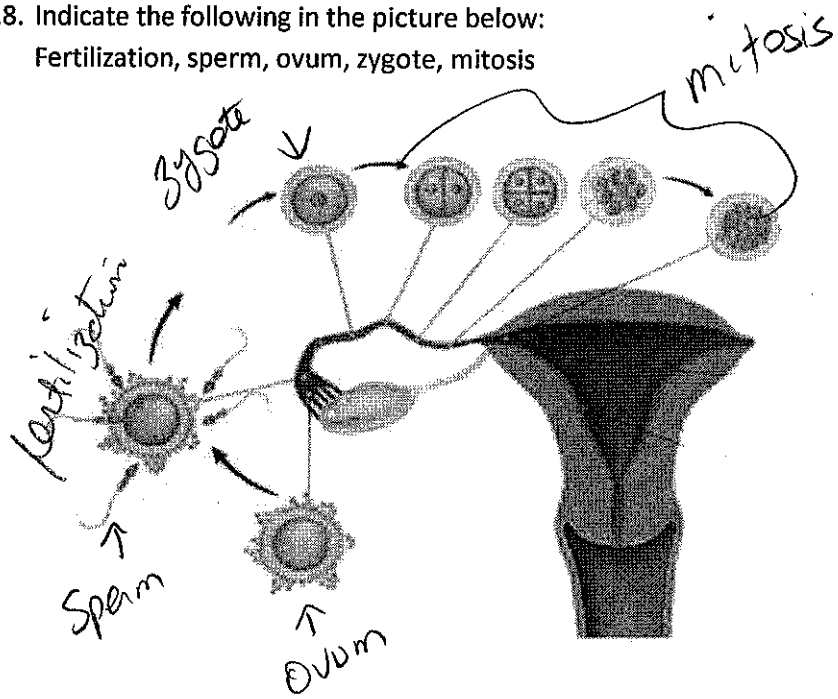
16. Look at the graph below. What day will ovulation occur? How do you know? Show the days which have the menstrual phase, the days which are the proliferation phase and the secretory phase days.



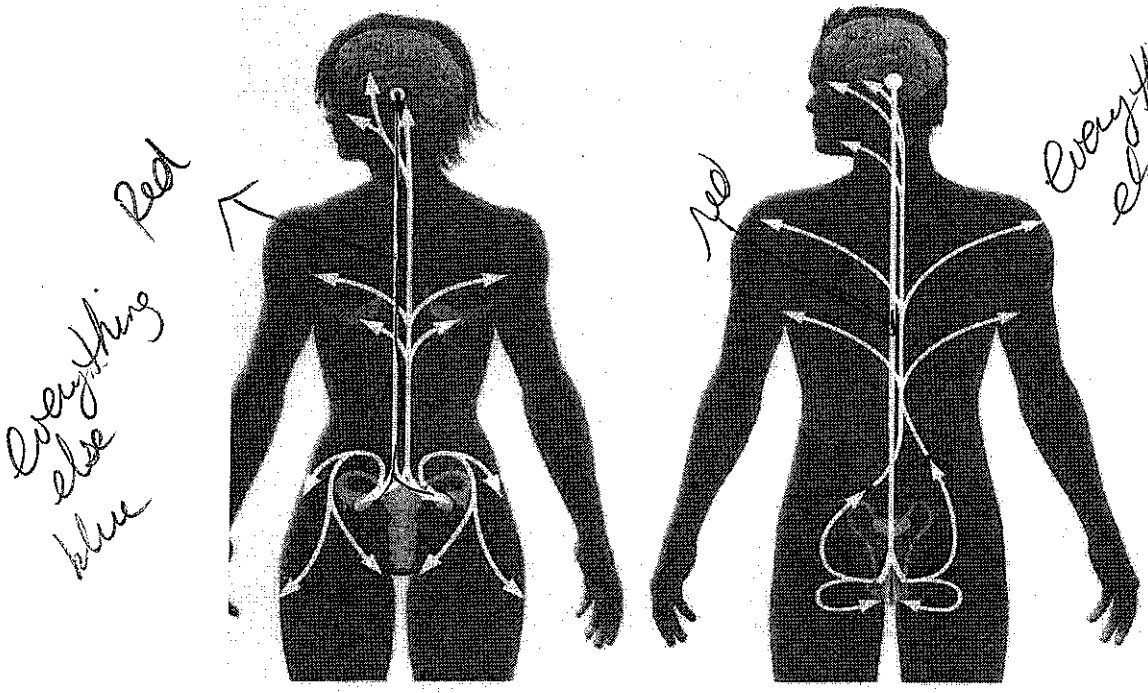
17. Fill in the blank

Sperm is produced in the testis. The testicles are glands which secrete the hormone testosterone. This hormone causes secondary sexual characteristics. The gametes are sex cells. They each have 23 chromosomes which make them haploid. When the sperm meets the ovum a zygote is produced. A zygote has 46 chromosomes which makes it diploid. Once the zygote is produced, the cell will continue the process of mitosis for the next 9 months.

18. Indicate the following in the picture below:
Fertilization, sperm, ovum, zygote, mitosis



14. The effect of hormones responsible for puberty is indicated by arrows on these illustrations of a man and a woman. Colour the arrows representing the action of FSH and LH in in red. Colour the arrows representing the action of estrogen, progesterone and testosterone in blue.



P 142-143 textbook

15. Identify the following structures on the picture below: fallopian tube, endometrium, ovum, corpus luteum and follicle.