

BOOK ACTIVITIES STATEMENTS:

1. Explain in your own words how new human individuals grow.
2. Describe the differences between gender and sexuality. In which category does reproduction belong?
6. Which changes that happen in puberty are shared by both females and males?
7. Why do testicles need to be outside the body? In which part of the testicles is sperm produced?
8. In terms of sexual reproduction, what is the function of the penis? To facilitate this event, the penis has to become erect. Describe what properties of the penis allow this to happen.
9. Where is testosterone produced? How does the endocrine system stimulate the production of testosterone?
11. What is the difference between sperm and semen? Which parts of the male reproductive system transform sperm into semen?
12. Where do sperm get their energy from? Which fluid activates sperm?
15. The endometrium is composed of many blood vessels. However, its thickness is changeable. Why do you think this is? When would it be at its thickest and when would it be at its thinnest?
16. Describe two properties of the vagina which make it easier for the penis to enter it?
18. As well as the vagina, the uterus also has elastic properties. Why is this?

REVISION ACTIVITIES

4. Why is a woman's urethra a simple duct between 4 cm and 6 cm long while a man's is much longer, more complex and up to 20 cm long?

7. Answer the following questions about ovarian follicles:

- a) Where does the follicle develop? Which hormone is responsible for its development?
- b) Which hormone does the follicle produce as it matures? What effect does this hormone have on the endometrium?
- c) What is inside the follicle?
- d) Which hormone stimulates ovulation?
- e) What happens in the follicle after ovulation?

10. The Bartholin's glands in the female reproductive system are the female equivalent of the Cowper's glands. Find out about these glands and answer the following questions:

- a) Where are the Bartholin's glands?
- b) What is their function?
- c) Why are they considered the female homologue of the Cowper's glands?

Book activities:

19. What is meiosis? How does this affect the number of chromosomes in sperm and eggs?

21. Why could using a laptop computer affect sperm production? What else can affect it?

22. Do the products of meiosis in the maturation phase of both spermatogenesis and oogenesis all become sperm or eggs?

26. What is the significance of the tall pink column in the above table? What does the yellow column refer to?

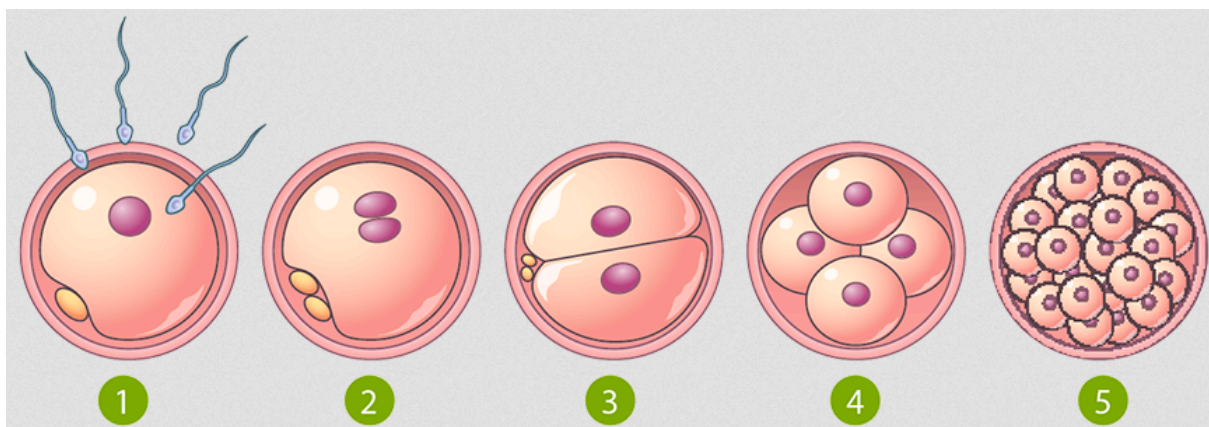
28. During which phase of the ovarian cycle does fertilisation occur?

29. How many sperm fuse with the egg? How does an egg help sperm to penetrate it? What is the name of the first cell produced after fertilisation?

32. During which stage of pregnancy does the foetus begin to interact? How does it do this?

Revision activities:

13. Look at the sequence below.



- a) What process is occurring in picture 1? Where does this process occur?
- b) What is the name of the cell in picture 2?

- c) What is happening to the cell in picture 2 in the next pictures?
- d) What is the name of the structure in picture 5? What will happen to it when it reaches the uterus?

17. Answer the following questions:

- a) Which hormone is responsible for contractions of the myometrium during the dilation stage of labour?
- b) Which gland produces this hormone? Where is this gland located?

Book activity:

37. Which non-sexually transmitted disease is shared by both males and females? For each sex, which areas of the reproductive system are most commonly affected?

49. Describe the similarities and differences between artificial insemination and in vitro fertilisation. Which method would be most appropriate if the male were able to ejaculate normally, but this did not result in pregnancy?