

LIFE SCIENCES grade 12

REVISION: REPRODUCTION

26 MARCH 2014



Lesson Description

In this lesson we revise:

- Reproduction in Vertebrates
- Structure of Male & Female Reproductive Systems
- Processes in Human Reproduction



Improve your Skills

Reproduction in Vertebrates

Question 1

Study the diagram and answer the questions that follow:



notes for

- 1.1 Identify the membrane numbered 1, 2 and 4
- 1.2 Provide the functions of the fluid found within part 1.
- 1.3 Provide the number that represents the allantois in this diagram
- 1.4 What is the function of the allantois?
- 1.5 Explain the difference between viviparous and oviparous embryo development.
- 1.6 Briefly explain the meaning of the terms:
 - a) precocial young
 - b) altrical young

Α

Question 2















notes for



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D

- 2.1 Provide the letter of the diagram above that depicts:
 - a) Internal fertilisation
 - b) Oviparity
 - c) Altricial development
- 2.2 Provide the disadvantages of the type of fertilisation shown in D
- 2.3 Provide the advantages of the type of development (altricial or precocial) depicted in diagram B.
- 2.4 What are the advantages of the amniotic egg shown in diagram B and D.

Structure of Male & Female Reproductive Systems

Question 1

Study the diagram and answer the questions that follow:



1.1 Provide labels for A, B, E and G.

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F

1.2 State ONE function each of C and F, respectively.



notes for

- 1.3 State the LETTER and NAME of the part where sperm are produced.
- 1.4 Explain why it is necessary for part D to 'hang outside' the body of the male.
- 1.5 Name the following:
 - (a) The cells that secrete a male sex hormone
 - (b) The hormone that stimulates the development of secondary sexual characteristics in males
- 1.6 Predict what would happen if labelled B is blocked for some reason.

Question 2

The diagram below represents the female reproductive system. Study the diagram and answer the questions that follow:



- 2.1 Label structures A, B and C.
- 2.2 State THREE functions of D.
- 2.3 Fertilisation usually takes place at Y. Why will a blockage at X:
 - (a) Prevent fertilisation at Y
 - (b) Not necessarily lead to infertility

Processes in Human Reproduction

Question 1

Study the diagram below showing the sequence of events of the development of an ovum in a 28-day cycle







notes for

1.1 Identify the following:

(a)	Follicle labelled A	(1)
(b)	Structure labelled C	(1)
(C)	Process shown at B	(1)
(d)	Hormone responsible for the formation of part A	(1)
(e)	Hormone responsible for the formation of part C	(1)
What ty	pe of cell division resulted in the formation of part D?	(1)
State whether fertilisation took place during this 28 day cycle.		(1)
Explain your answer to QUESTION 1.3		
Explain	HOW and WHY the production of FSH is inhibited when fertilisation takes place.	(4)
	(a) (b) (c) (d) (e) What ty State w Explain Explain	 (a) Follicle labelled A (b) Structure labelled C (c) Process shown at B (d) Hormone responsible for the formation of part A (e) Hormone responsible for the formation of part C What type of cell division resulted in the formation of part D? State whether fertilisation took place during this 28 day cycle. Explain your answer to QUESTION 1.3 Explain HOW and WHY the production of FSH is inhibited when fertilisation takes place.

Question 2

The graph below shows the levels of the hormones oestrogen and progesterone in a pregnant woman's blood.



2.1	When are the levels of oestrogen and progesterone the same?	(2)
2.2	How much oestrogen is in the blood on day 14?	(2)

2.3 What evidence from the graph shows that an ovum was fertilised? (2)

