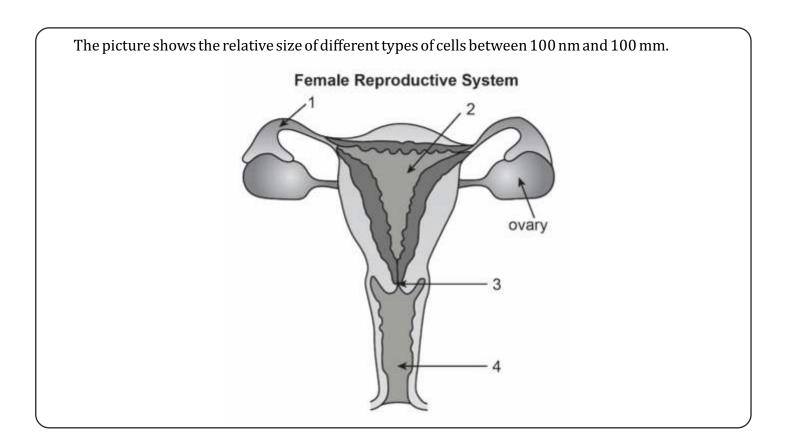




### केंद्रीय माध्यमिक शिक्षा बोर्ड CENTRAL BOARD OF SECONDARY EDUCATION

## Curriculum Aligned Competency Based Test Items Science Class 8 – Chapter 9 Reproduction in Animals



SAS21S080901

- A mature egg and a sperm unite to form a zygote. In which part of the female reproductive system does a zygote form?
  - A.
  - B. 2

1

- C. 3
- D. 4







Science Class 8 – Chapter 9

SAS21S080902

- How many eggs are usually released each month by the ovary of a woman?
  - A. One
  - B. Two
  - C. Fourteen
  - D. Twenty-four

SAS21S080903

- In which part of the female reproductive system does an embryo implant?
  - A. 1
  - B. 2
  - C. 3
  - D. 4

SAS21S080904

Which of these statements is true about a **foetus**? Circle 'Yes' or 'No' for the correct response.

Is this statement true about a foetus?	Yes or No
All body parts can be identified properly.	Yes/No
It is covered by a hard shell of protective layers.	Yes/No
It resembles a large ball made of millions of cells.	Yes/No

SAS21S080905

- Where does the fertilisation of egg occur in the process of **In Vitro Fertilisation (IVF)**?
  - A. Ovary
  - B. Water
  - C. Uterus
  - D. Petri dish

The table shows the processes of external fertilisation and internal fertilisation.

External fertilisation	Internal fertilisation
The female releases the eggs (ova) outside its body. The male releases the	The male releases the sperms inside the body of the female. Fertilisation
sperms on the eggs. Fertilisation takes place outside the female body.	takes place inside the female body.



**Curriculum Aligned Competency Based Test Items** 

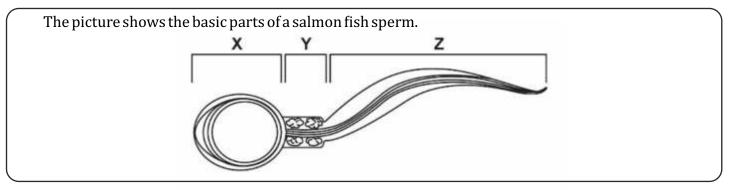


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SAS21S080906

## Which of these is true about external fertilization and internal fertilization?

	External fertilization	Internal fertilization
A.	Both parents are necessary	Both parents are necessary
B.	Embryo is not formed	Embryo is formed
C.	Involves development of eggshell Involves development of eggshell	
D.	Takes place among invertebrates	Takes place among vertebrates



SAS21S080907

Which part of the sperm helps it to swim in water and reach the egg?

SAS21S080908

- 8 Which of these animals reproduce by external fertilization?
  - A. Snake
  - B. Frog
  - C. Horse
  - D. Elephant

The picture shows the life cycle of a moth.

Life Cycle of a Moth

Cocoon
(Pupa)

Caterpillar
(Larva)







Science Class 8 - Chapter 9

SAS21S080909

9 What can be concluded from the picture? Circle 'Yes' or 'No' for the correct response.

Can this be concluded from the picture?	Yes or No
Moth is an oviparous animal.	Yes/No
A moth looks different in each stage of its life cycle.	Yes/No
There are two different stages in the life cycle of a moth.	Yes/No

# Type 2 Type 3

SAS21S080910

## Which of these statements is true?

- A. Type 1 reproduction is called binary fission.
- B. Type 2 reproduction produces two non-identical offspring.
- C. Type 3 reproduction involves unequal distribution of genetic materials.
- D. Types 1, 2 and 3 methods of reproduction involve single parent only.

## **Answers**

Science Class 8 – Chapter 9

Item Number	
Question Code	SAS21S080901
Grade & Unit Name	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Female Reproductive Organs in Humans
Competency	Explaining Phenomena Scientifically
Item Type	Multiple Choice Question
Full Credit (Full Score)	A. 1
No Credit (No Score)	Any other response or missing response
Item Number	Question 2
Question Code	SAS21S080902
Grade & Unit Name	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Female Reproductive Organs in Humans
Competency	Explaining Phenomena Scientifically
Item Type	Multiple Choice Question
Full Credit (Full Score)	A. One
No Credit (No Score)	Any other response or missing response
Item Number	Question 3
Question Code	SAS21S080903
Grade & Unit Name	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Female Reproductive Organs in Humans
Competency	Explaining Phenomena Scientifically
Item Type	Multiple Choice Question
Full Credit (Full Score)	B. 2
No Credit (No Score)	Any other response or missing response
Item Number	Question 4
Question Code	SAS21S080904
Grade & Unit Name	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Development of Embryo
Competency	Explaining Phenomena Scientifically
Item Type	Complex Multiple Choice Question
Full Credit (Full Score)	Yes No No
No Credit (No Score)	Any other response or missing response



**Curriculum Aligned Competency Based Test Items** 

Science Class 8 – Chapter 9

Item Number	Question 5
Question Code	SAS21S080905
Grade & Unit Name	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Fertilisation
Competency	Explaining Phenomena Scientifically
Item Type	Multiple Choice Question
Full Credit (Full Score)	D. Petri dish
No Credit (No Score)	Any other response or missing response

Item Number	Question 6	
Question Code	SAS21S080906	
Grade & Unit Name	Grade 8   Reproduction in Animals	
Concept   Sub-concept	Life Sciences   Fertilisation	
Competency	Interpreting Data And Evidence Scientifically	
Item Type	Multiple Choice Question	
Full Credit (Full Score)	A. Both parents are necessary /both parents are necessary	
No Credit (No Score)	Any other response or missing response	

Item Number	Question 7
<b>Question Code</b>	SAS21S080907
<b>Grade &amp; Unit Name</b>	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Structure of Sperm
Competency	Explaining Phenomena Scientifically
Item Type	Constructed Response
Full Credit (Full Score)	Mentions part Z as the response.
No Credit (No Score)	Any other response or missing response

Item Number	Question 8
Question Code	SAS21S080904
<b>Grade &amp; Unit Name</b>	Grade 8   Reproduction in Animals
Concept   Sub-concept	Life Sciences   Fertilisation
Competency	Explaining Phenomena Scientifically
Item Type	Multiple Choice Question
Full Credit (Full Score)	B. Frog
No Credit (No Score)	Any other response or missing response



**Curriculum Aligned Competency Based Test Items** 

Science Class 8 – Chapter 9

Item Number	Question 9	
Question Code	SAS21S080909	
Grade & Unit Name	Grade 8   Reproduction in Animals	
Concept   Sub-concept	Life Sciences   Metamorphosis	
Competency	Interpreting Data and Evidence Scientifically	
Item Type	Complex Multiple Choice Question	
Full Credit (Full Score)	Yes Yes No	
No Credit (No Score)	Any other response or missing response	

Item Number	Question 10	
Question Code	SAS21S080910	
Grade & Unit Name	Grade 8   Reproduction in Animals	
Concept   Sub-concept	Life Sciences   Asexual Reproduction	
Competency	Interpreting Data and Evidence Scientifically	
Item Type	Multiple Choice Question	
Full Credit (Full Score)	D. Types 1, 2 and 3 methods of reproduction involve single parent only.	
No Credit (No Score)	Any other response or missing response	