



SUBJECT: BIOLOGY

CHAPTER: 3

CHAPTER NAME: REPRODUCTION IN HUMANS

PERIOD-1

CHANGING YOUR TOMORROW

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Introduction-

What is reproduction?

Reproduction is one of the seven life processes.

All living things reproduce.

Humans use sexual reproduction to produce their young.

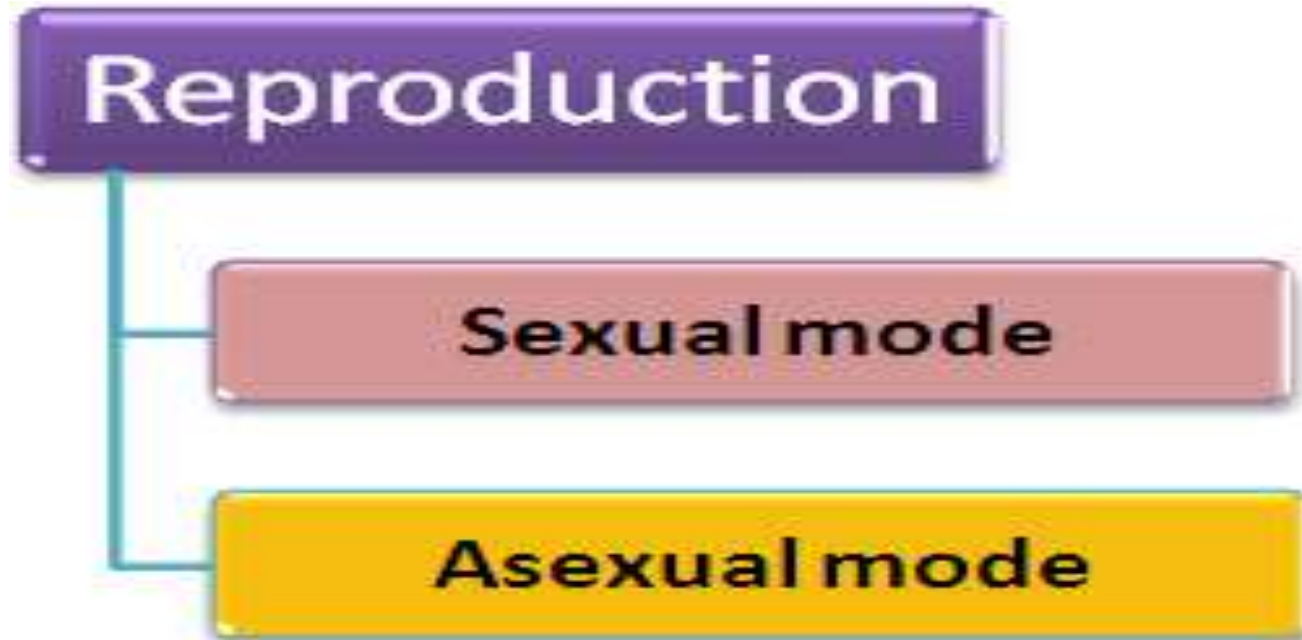
In order to do this, the two parents (male and female) have different reproductive systems and organs that produce different sex cells.



Jupiterimages Corporation



Types of reproduction



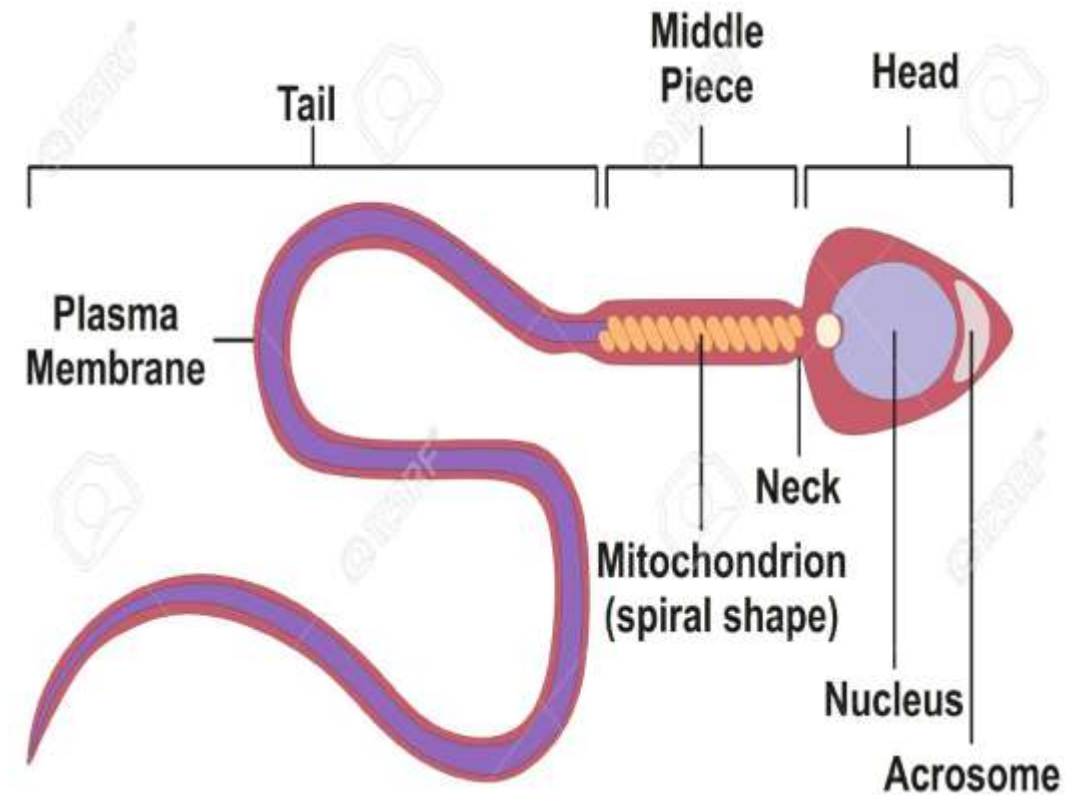
Reproductive cells(Gametes)

Adaptation of sperm cells to its function.

- A sperm cell has a **long tail** to help it swim to the egg.
- mid- piece which contains large amount of **mitochondria** to release energy needed to make the tail move.
- The head of the sperm also contain **enzymes** to break down and digest the zona pellucida of the egg so that it can fertilize it.



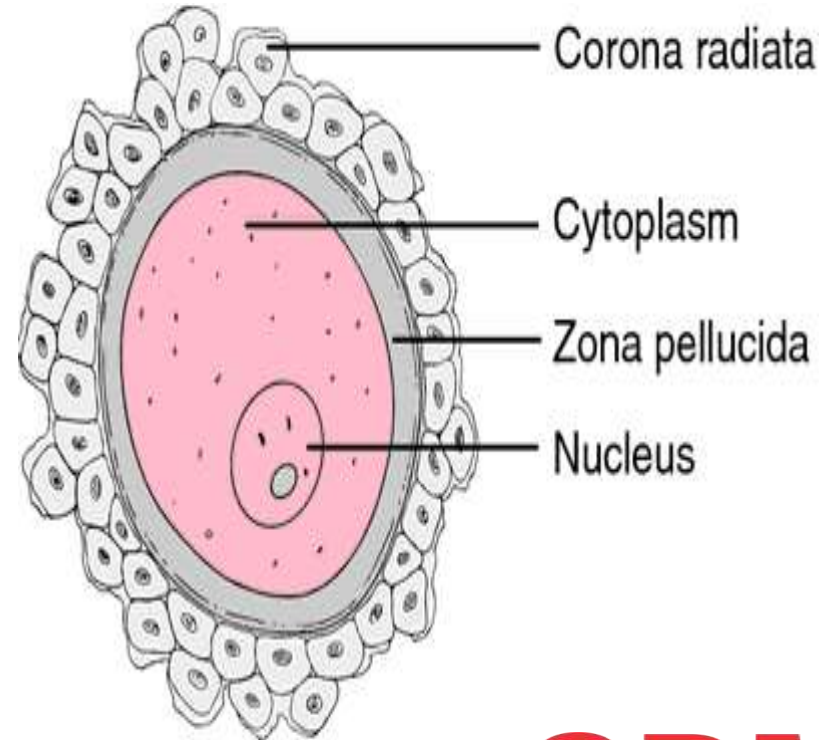
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ova

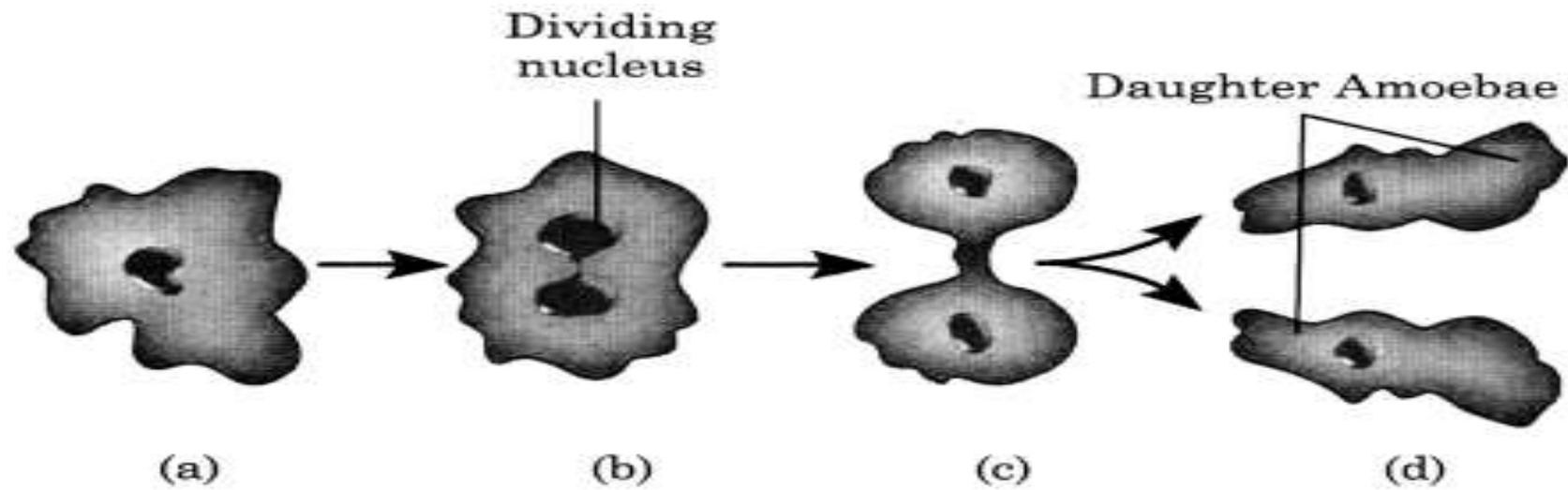
EGG / OVA

- Female sex cells are produced by the ovaries.
- The largest cell in the human body, about the size of a grain of sand.
- One egg is released *about* every 28 days.
- Each egg has 23 chromosomes.
 - Eggs are first released during puberty and are no longer released once a woman goes through menopause.



Asexual Reproduction in animals

Binary Fission:



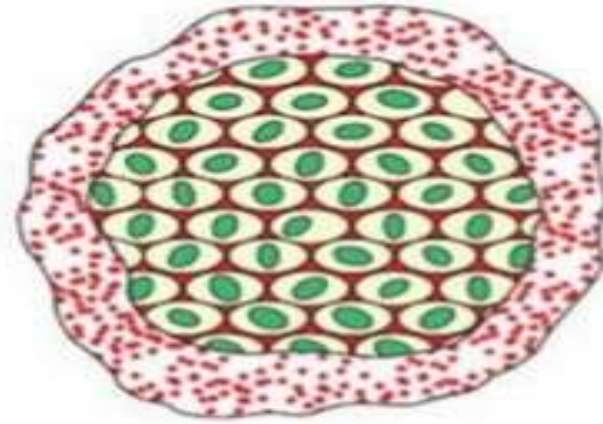
Binary fission in Amoeba

Multiple fission

- In multiple fission, a single cell divides into many daughter cells simultaneously.

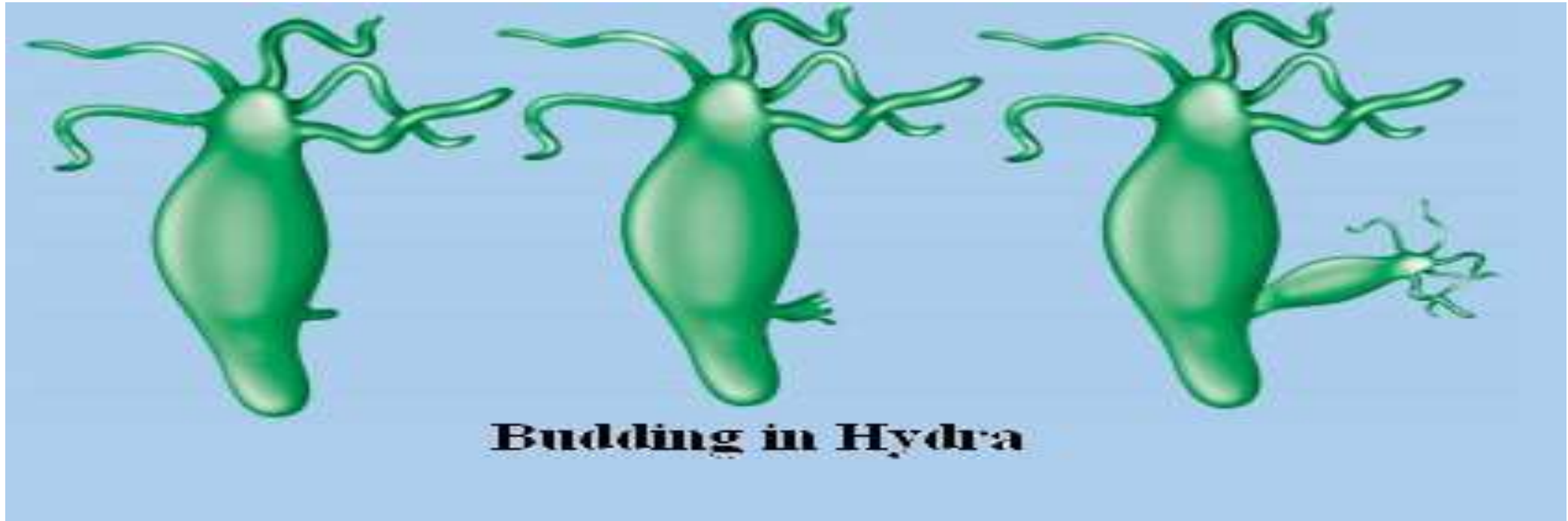
Examples:

- *Plasmodium* and *Amoeba*



Multiple fission in Plasmodium

Budding in hydra-



Regeneration in planaria.

Regeneration

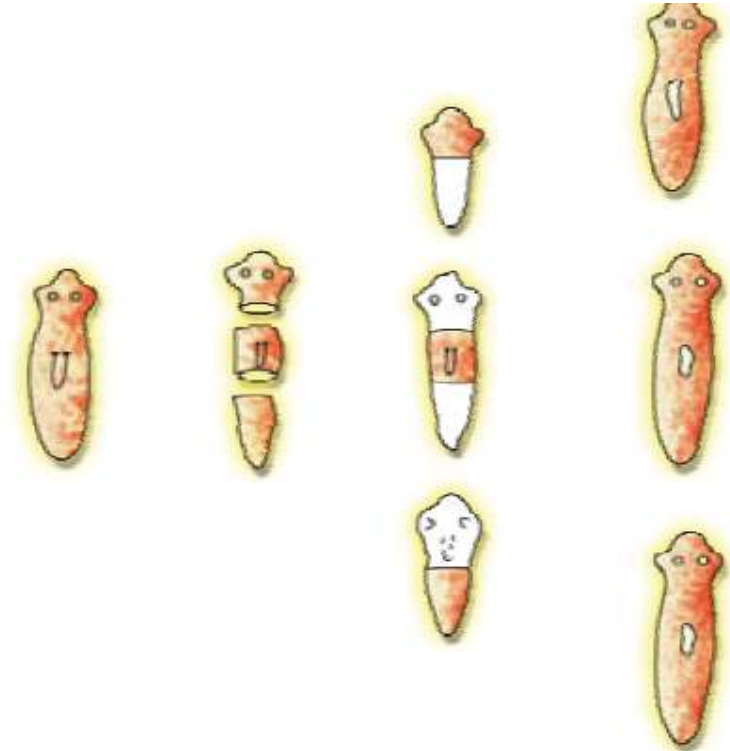
In this form, the body of the parent breaks into distinct pieces, each of which can produce an offspring.



Pieces of coral broken off in storms can grow into new colonies.



A new starfish can grow from one detached arm.



Regeneration in Planaria

- <https://www.youtube.com/watch?v=hTC1eNTBXvE>

THANKING YOU
ODM EDUCATIONAL GROUP.

