

UPDAAN



2025

How Do organisms Reproduce ?

Biology

Lecture - 03

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Topics to be covered

- 1 Asexual vs sexual Reproduction
- 2 Types of Asexual Reproduction
(Part - 02)
- 3 MCQ practice and Homework





Question of the Day

Which cell organelles can divide itself by binary fission ?

* Mitochondria

* Chloroplast

Question



Q.3



Identify this process by meme

- A Binary fission in amoeba ✓
↳ irregular
- B Multiple fission is leishmania
- C Fragmentation in spirogyra
- D None of these



✓ Common feature of Spirogyra and plasmodium

Multicellular
(E)

(E)

Q.1

Unicellular

↳ fragmentation

↳ Multiple fission

- A Both ~~prokaryotic~~ organism
Eukaryotic X
- B Both can reproduce through asexual reproduction (✓)
- C Both reproduces through asexual reproduction using gametes X
- D Both are Multicellular

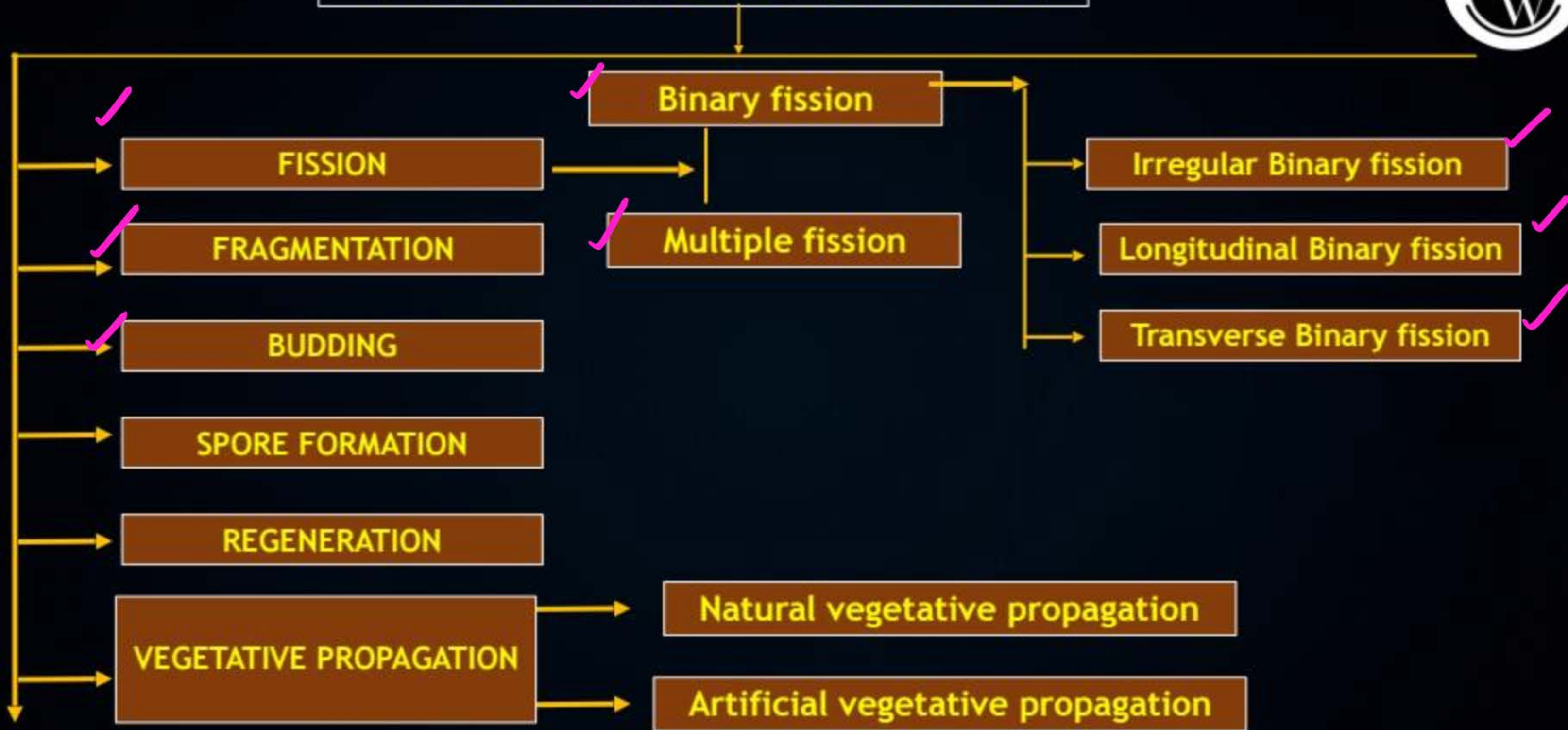


(False)

Choose incorrect statement

- ☒ A Gametes are produced during multiple fission (f)
- ☐ B Sperm cell is male gamete (T)
- ☐ C Spirogyra reproduces by fragmentation (T)
- ☐ D Malarial parasite shows multiple fission (T)





Yeast is a type of fungi

(A)



TRUE



(B)

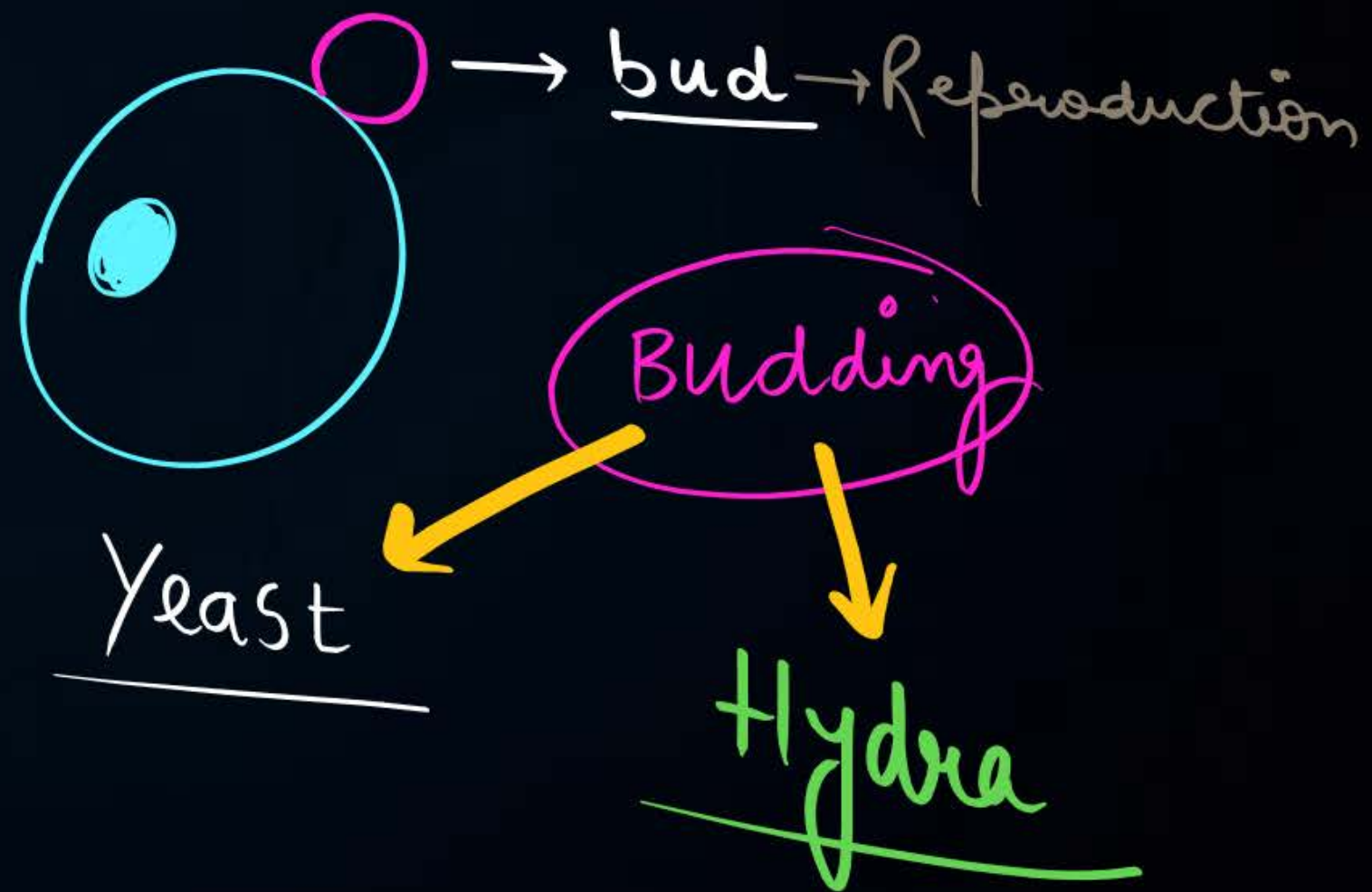


FALSE





Out-growth





Budding in Yeast

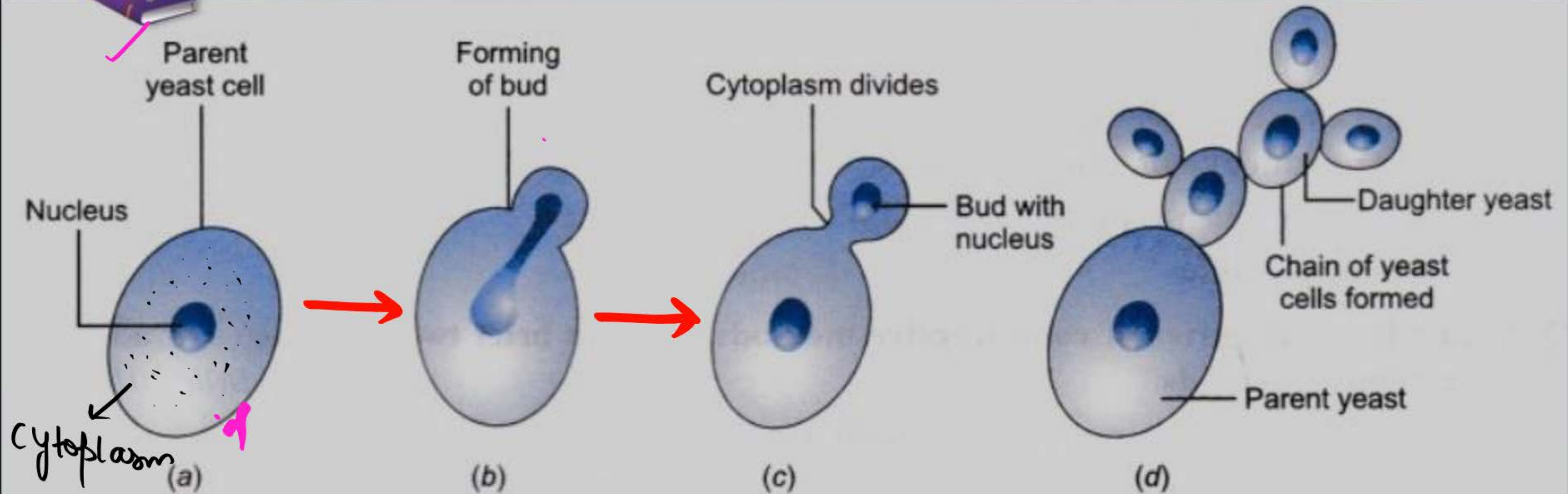


Yeast { Saccharomyces Cerevisiae }



- Uni-cellular organism [Eukaryotic]
- Single-celled fungi
- Reproduce by budding

Budding in Yeast



Hydra is a type of ~~plant~~

Animal.

(A)



TRUE

(B)



FALSE ✓

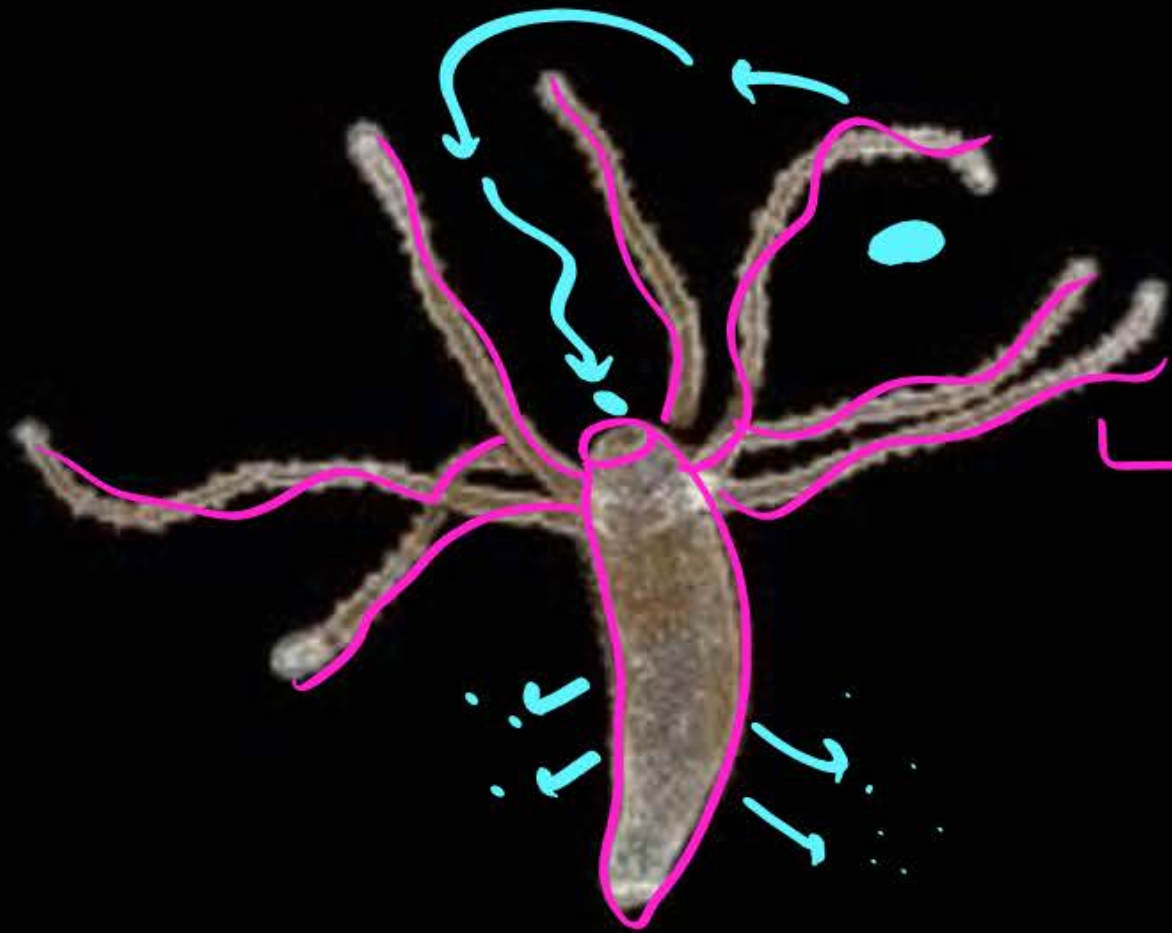




Budding in Hydra



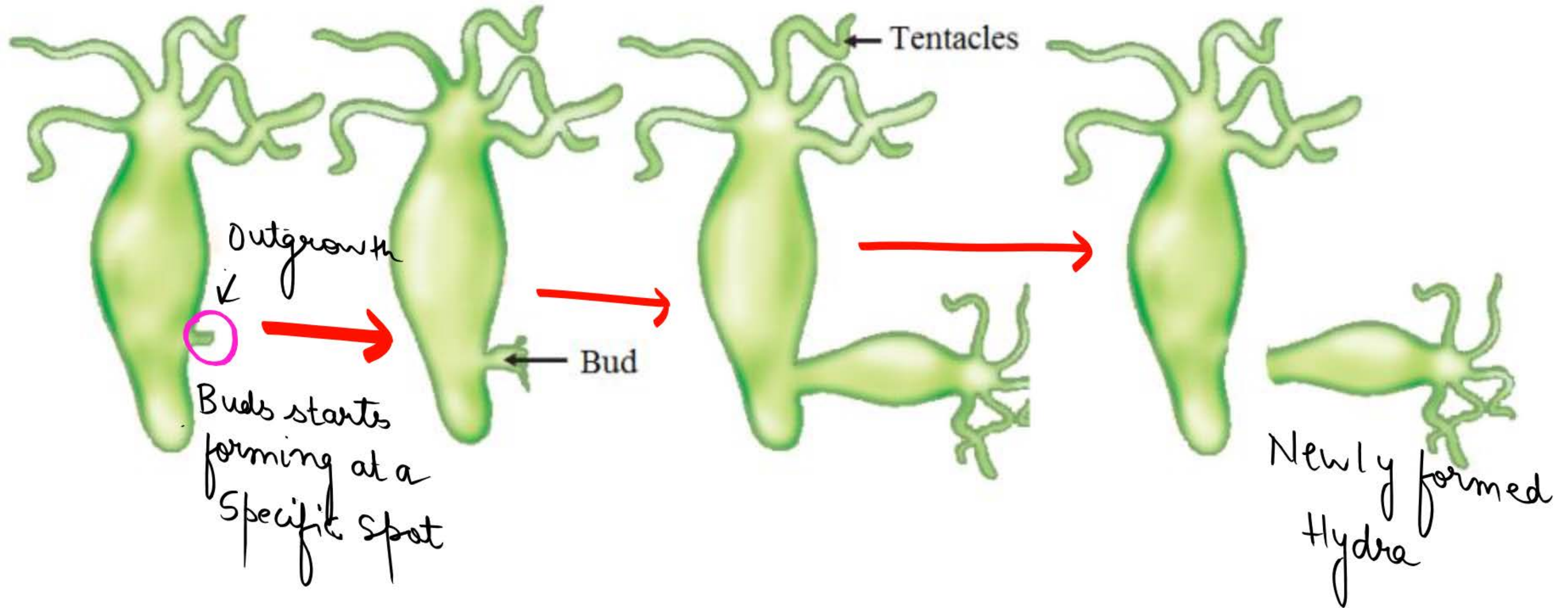
- Aquatic Animal
- Multi-cellular { 1 - 5 cm }
- Reproduce
 - Budding ✓
 - Regeneration



→ Tentacle → Capturing of the food.

Parent Hydra

BUDDING IN HYDRA



Hydra shows

- ☒ A Budding \neq Regeneration
- ☐ B Fragmentation
- ☐ C Multiple fission
- ☐ D Both A and B

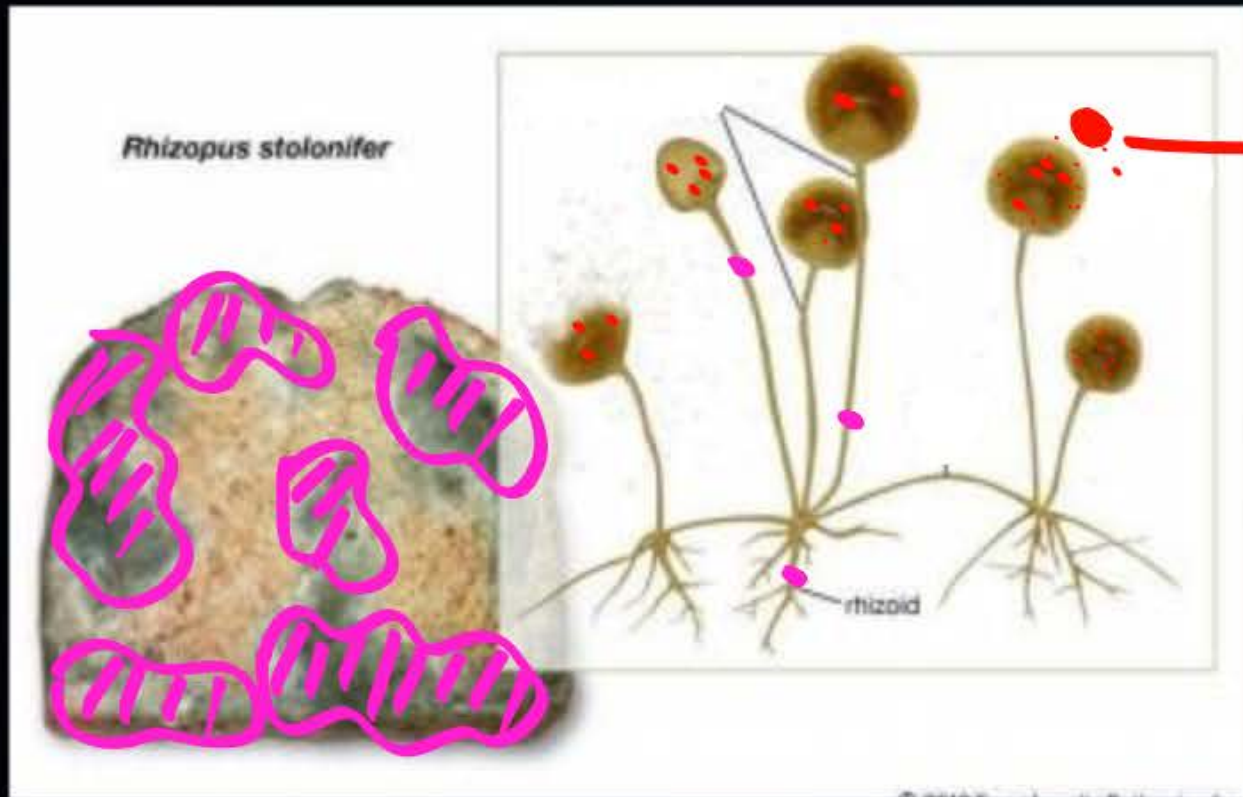




Spore formation in Rhizopus

RHIZOPUS

- { Bread Mould }
- { Multi-cellular fungi }



"Spores"

- Specialized Cells which are responsible for reproduction.
- Single-Cell.
- Asexual reproduction

Spore

Favourable
Condition

Germinate

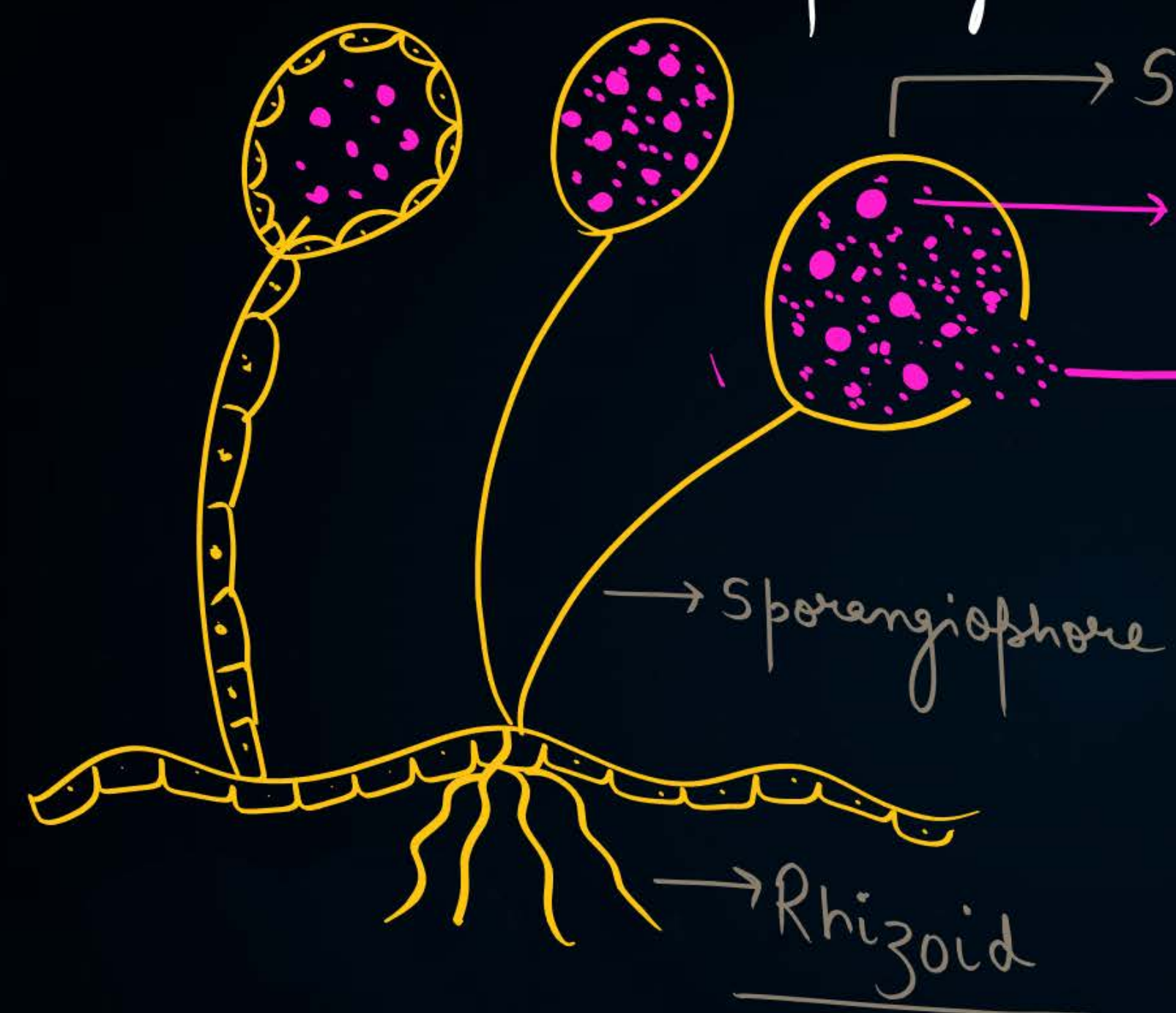
→ New Rhizopus is formed.

Sporangia are present at the tip of Sporangiospore



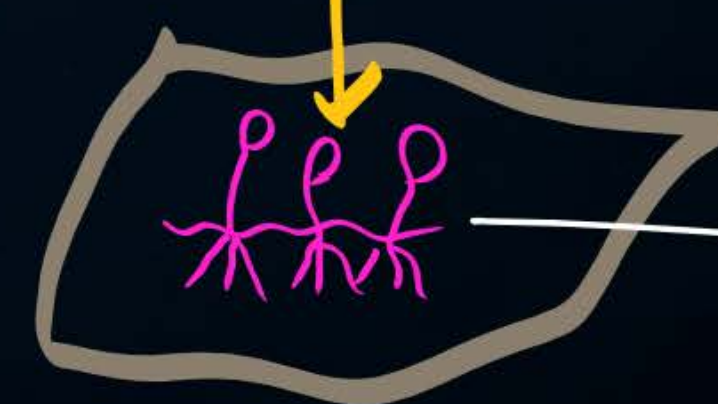
→ Sporangia [Blob-like Structure]

→ Spore [Help in Reproduction]



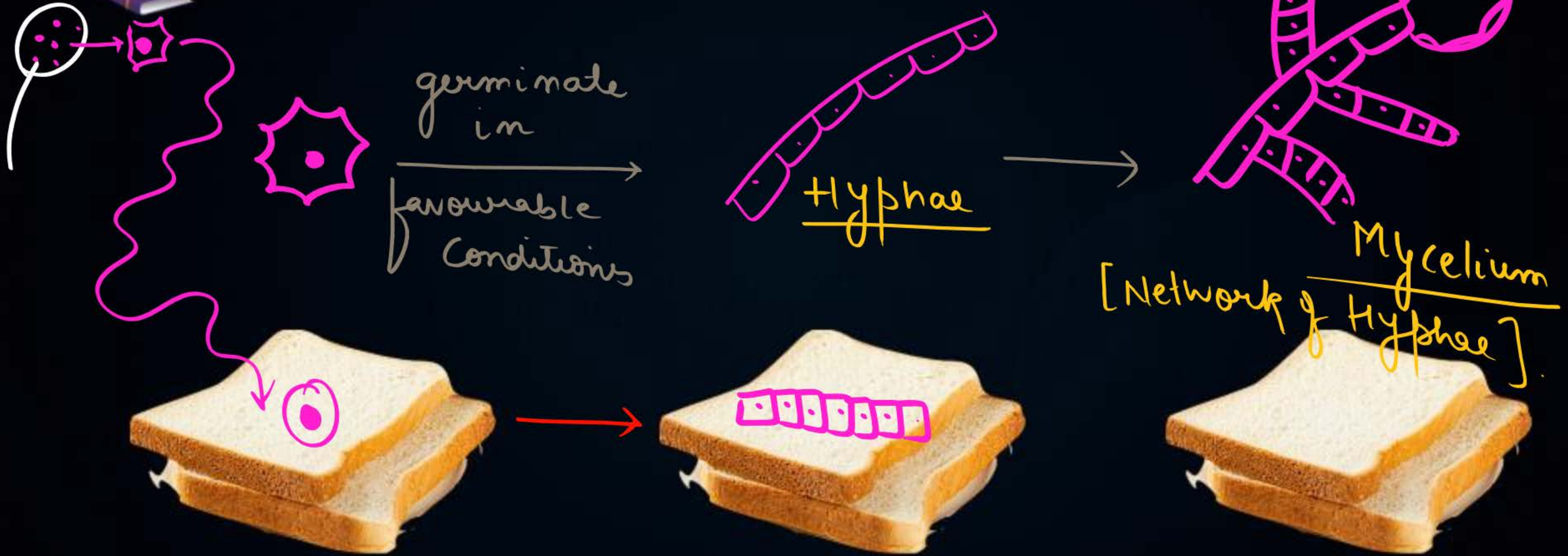
Spore

↓ favourable Conditions




→ New Rhizopus

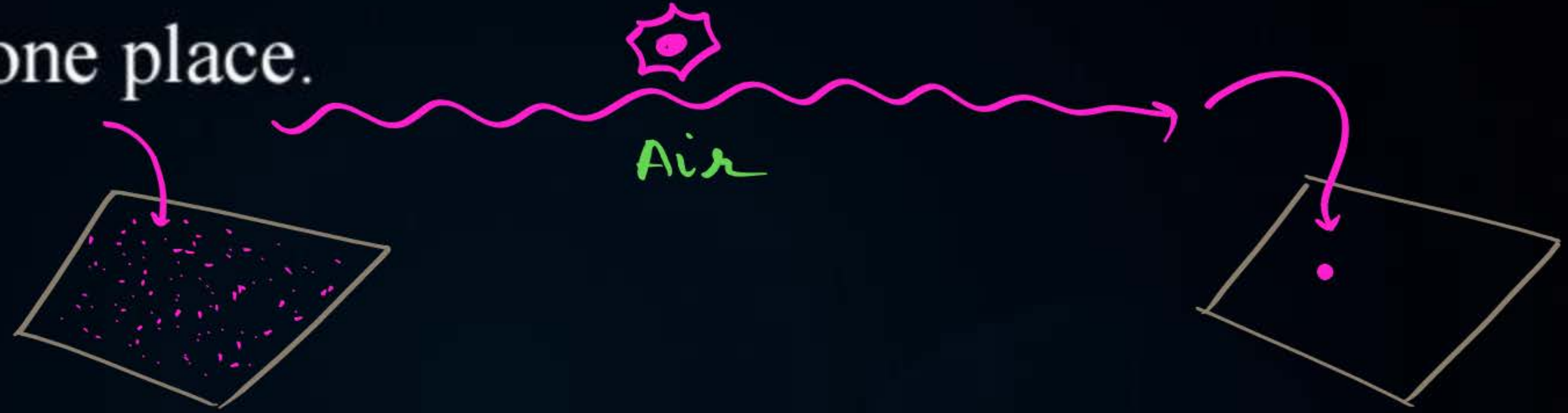
Spore formation in Rhizopus



How will an organism be benefitted if it reproduces through spores? ✓

- Large numbers of spores are produced in one sporangium.
↳ Large no. of new individuals can be formed in a single time.
- They are rounded and very light in weight and hence can be easily transferred 

- Spores are distributed easily by air to far-off places to avoid competition at one place.



- Spores are covered with thick walls to prevent dehydration under unfavourable conditions.



Thick protective Coat
[prevent loss of water]

Sporangia are present at the tips of ____

- A** Rhizoids
- B** Spores
- C** Sporangiophores ✓
- D** Spirogyra

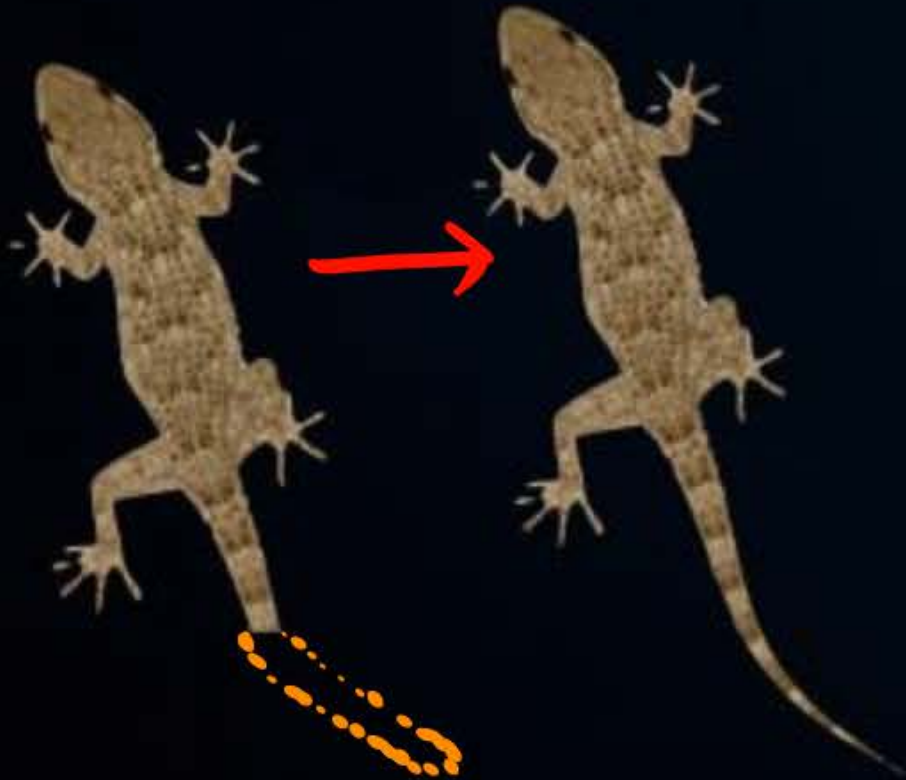
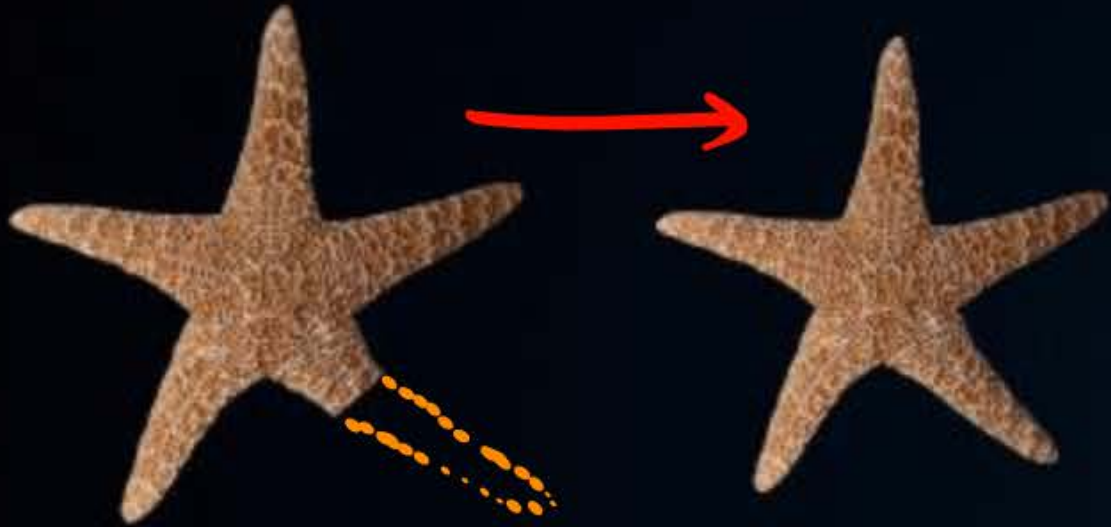




Regeneration

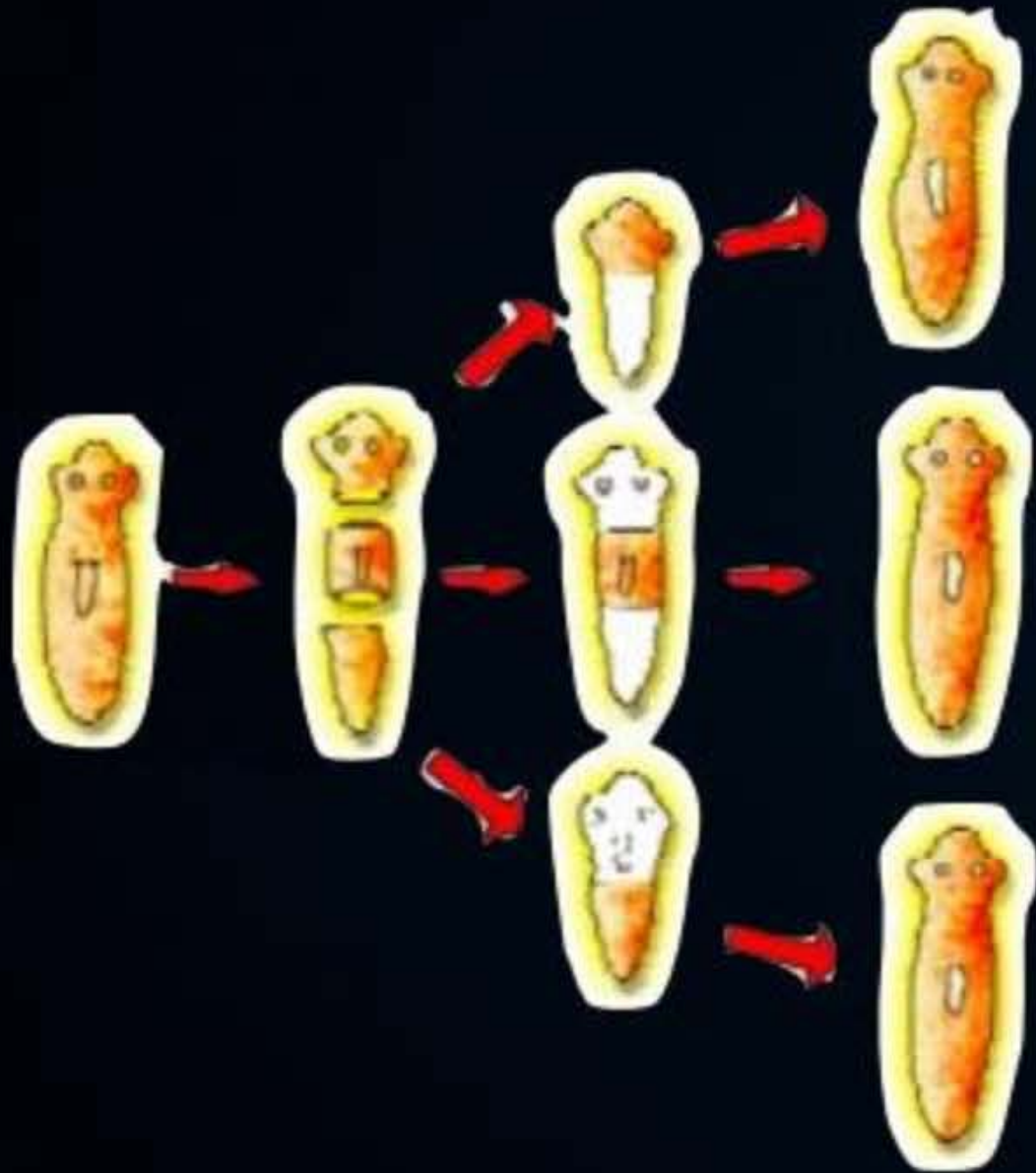


The ability / capacity of few organisms to regain / regrow its lost body part is called regeneration.





Regeneration In planaria



Planaria [Flat Worm]

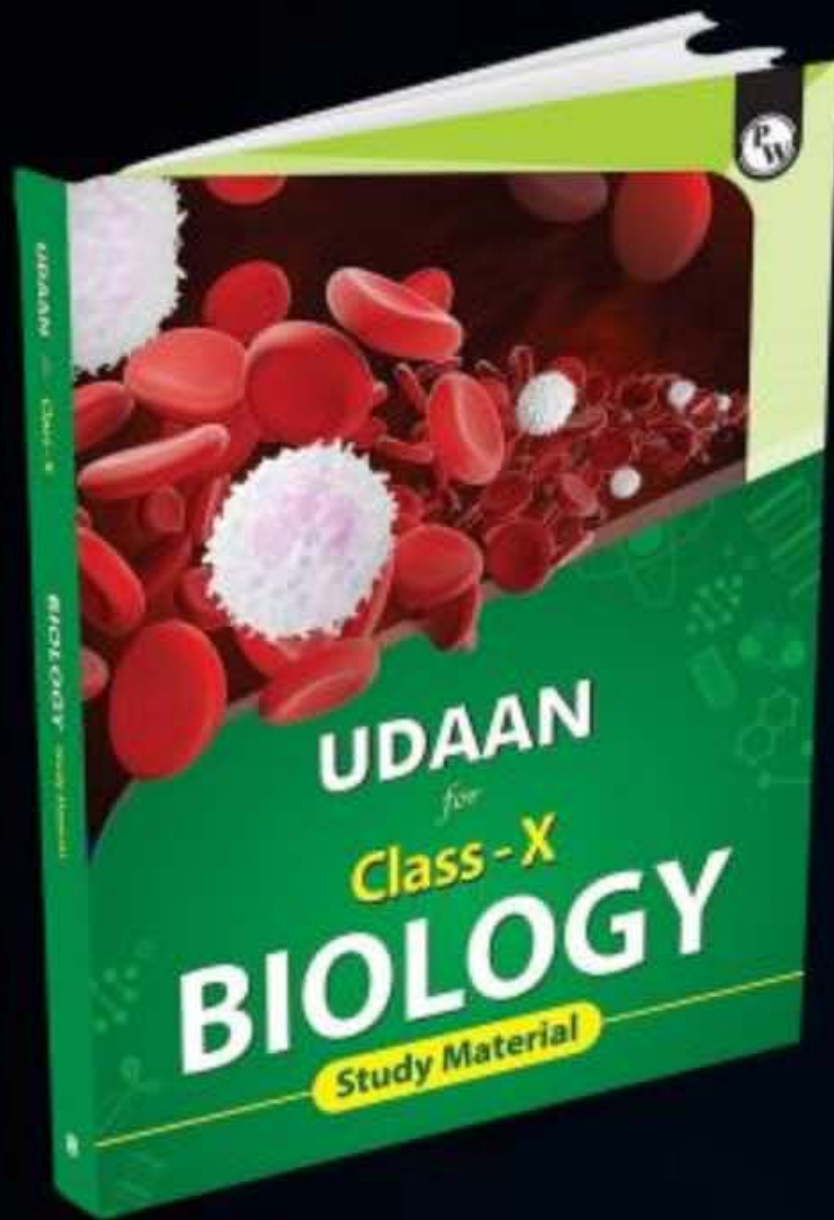
- Aquatic Animal
- Multi-Cellular organism
- Reproduce by both asexual & sexual method.

Spore ✓ → ?
↑

In case of Bread mould ,Specialised cells responsible for reproduction are produced inside _____.

- A Rhizoids
- B Sporangia ✓
- C Sporangiophore
- D None of these





Homework



FROM PW MODULE
(Udaan - CLASS 10)

PAGE : 141 - Q-11 , Q-14

A cartoon illustration of a young boy with orange hair, wearing a black graduation cap and gown, standing on a purple book. He is holding a green globe in his left hand.

Question of the Day

Which body part of human being can regenerate itself?



Joke/Meme of the Day



Chops off lizards tail

Lizard:



There is another



THANK
YOU

