

Q How do organisms reproduce?

A Organisms reproduce in two ways :-

(i) Asexual mode of reproduction where no gametes are involved, is uniparental & occurs in lower forms of organisms.

(ii) Sexual Mode of Reproduction where Gametogenesis is required, is Biparental & Occurs in advanced forms of organisms.

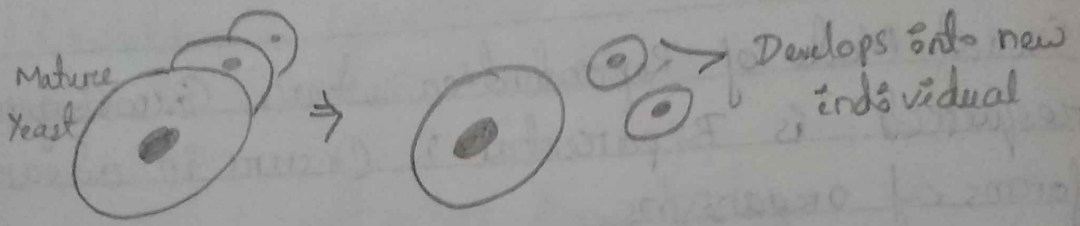
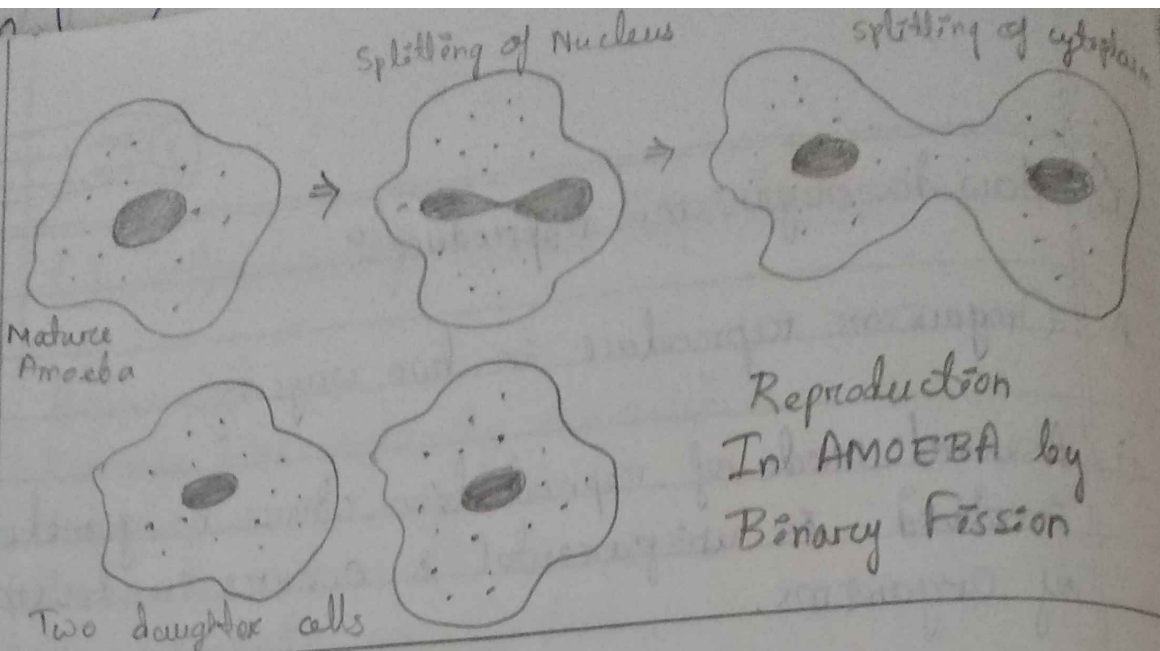
### Budding

A small cyst-like structure is formed on the parent's body which gives rise to a new individual.

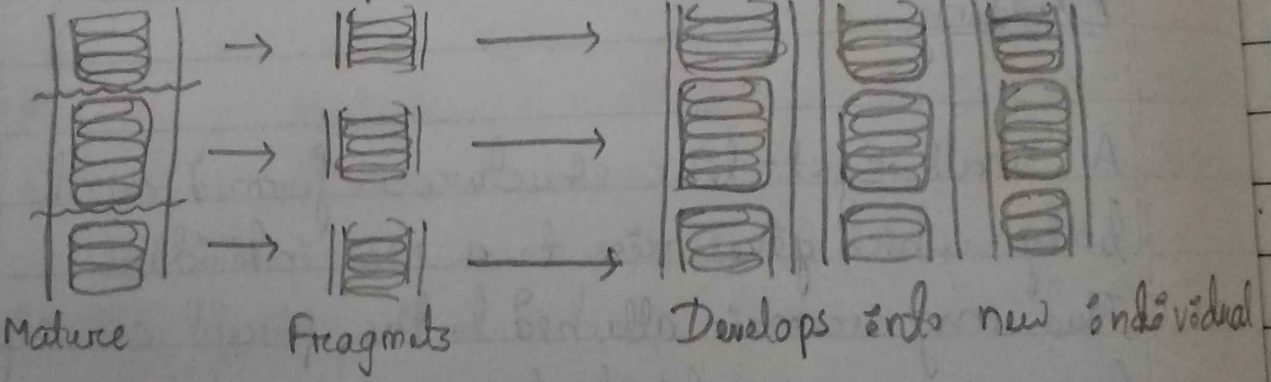
Bud may remain attached to the parent or separate & become a new individual.

parent - bud - mature - divide into progeny or forms a new individual

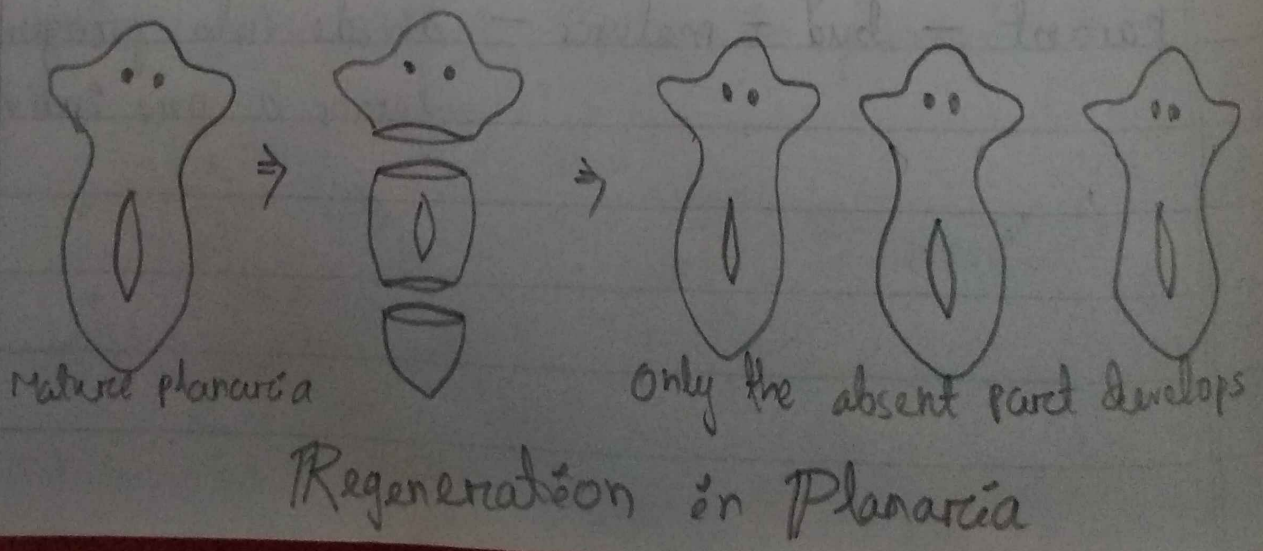




Budding in YEAST



Fragmentation in Spirogyra





## Regeneration & Fragmentation

Regeneration is the process of growing back the lost organ or body part by the organism. Ex - lizard.

Fragmentation is the process by which an organism gets fragmented into smaller pieces & each piece grows into a whole new individual.

## Spore Formation

Organisms such as fungi make spores that can grow into complete new individuals when dispersed from their parent body.

## Vegetative Propagation

Seen in plants where the vegetative part of plant like leaves, stem, roots, give rise to a new plant. This can be artificial or natural.

## Tissue Culture

Also called as ~~Propagation~~ micro propagation i.e., formation of huge no. of plants from a small part of the plant called ex plant.