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How Do Organisms Reproduce?

Reproduction

Reproduction is the process by which all organisms multiply in number and increase their population.

Type of reproduction

Asexual reproduction

Asexual reproduction is a method of reproduction that involves only one organism. A single organism reproduces two or multiple organism on its own. This is seen in all unicellular organism, some multicellular organism and few plants.

Sexual reproduction

The mode of reproduction that involves two individual; one male and one female. They produce sex cells or gametes which fuse to form a new organism.

Asexual Reproduction

Fission

- Fission is an asexual reproduction that is common in most of the unicellular organism.
- When the fission results in two daughter cells, it is binary fission (e.g. paramecium). When fission results in many daughter cells, it is called multiple fission (e.g. Plasmodium).
- Planes of fission may be different for different organisms.

Binary fission In Amoeba figure

Multiple fission in plasmodium vivax

Budding

Budding is a type of asexual reproduction in which 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 (yeast) or may separate and become a new individual (hydra).

Budding in Hydra

Regeneration and fragmentation

- Regeneration is the process of growing back the lost organ or body part by the organism (e.g. Lizard).
- Fragmentation is the process by which an organism gets fragmented into smaller pieces and each piece grows into a whole new organism
- E.g. Planaria, Hydra

Draw diagram of Fragmentation and Regeneration in Hydra and Planaria.