Meiosis and process involved in it

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Meiosis and its Stages

<u>Meiosis</u> cell division is crucial for necessary for sexual reproduction. It produces gametes known as sperm and egg cells in animals. The Fungi generates spores. <u>Meiosis</u> starts with one cell with two copies of each chromosome. In this one chromosome received from the particular organism's mother and one from its father. They produce 4 gamete cells each with one copy of chromosome. All the resulting chromosomes of the gamete cells are a unique mixture of both parental <u>DNA</u>. This ensures that's the off springs shows the variations from their parents. This encourages the genetic diversity rate in sexually reproducing organisms and enables the evolution processes.

REPRODUCTION IN MEIOSIS

<u>Meiosis</u> converts a diploid cell into a haploid cell. This makes a unique change in the genetic information of the organism and helps for the rise in the rate of diversity of organism.

Asexual (vegetative) reproduction

- A form of duplication using only mitosis.
- Example, a new plant grows out of the root or a shoot from an existing plant.
- Produces only genetically identical offspring since all divisions are by mitosis.
- 1. Clones are the offsprings has an exact copy of the original organism
- 2. This is a rapid and effective mechanism allows the organisms to spread.
- 3. No diversity introduction is possible because they are totally identical to the parental organism.

Sexual Reproduction

- Combination of two haploid sex cells produces the gametes.
- <u>Fertilization</u> is the process named for the combination of genetic information from two parental cells and it results with the equal half information from the parental organism.
- The Female organisms produce 'egg' and the Male produces sperm
- Both are haploid and has a single set of chromosomes
- The zygote will be formed in a diploid state.

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Reference Links:

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