Meiosis and process involved in it

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Meiosis and its Stages

Meiosis cell division is crucial for necessary for sexual reproduction. It produces gametes known as sperm and egg cells in animals. The Fungi generates spores. Meiosis 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 DNA. 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

Meiosis 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.
- Fertilization 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.

Reference Links:

- http://www.cellsalive.com/meiosis.htm
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