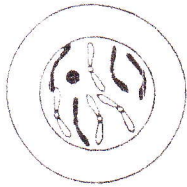


# Cell Division

# Meiosis

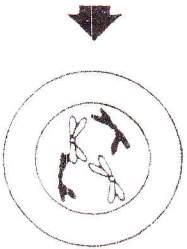
## Interphase

Chromosomes replicate and pair up as sister chromatids



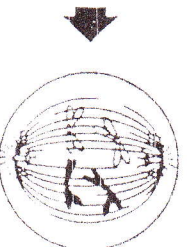
## Prophase

Sister chromatids condense to become thicker and visible. The nucleolus and nuclear envelope disappear.



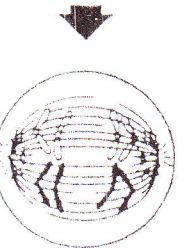
## Metaphase

Chromosomes are moved toward the center of the cell by spindle fibers radiating from opposite ends of the cell.



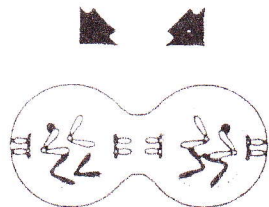
## Anaphase

The centromeres of each chromosome are pulled by the spindle fibers toward the ends of the cell, separating the sister chromatids.



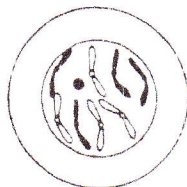
## Telophase

New nuclei form around the chromosomes at each end of the cell, completing mitosis. Cytokinesis occurs and the cell membrane pinches the cell in two.



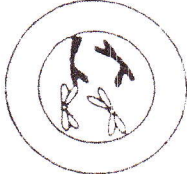
## Meiosis I

Chromosome replication occurs. Original cell with four pair of chromosomes.



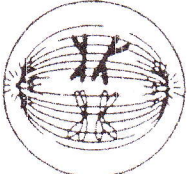
## Prophase I

Chromosomes become thicker and visible, each chromosome pair doubles. The nucleoli and nuclear envelope disappear.



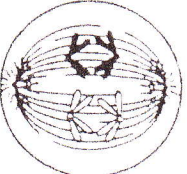
## Metaphase I

Homologous chromosomes are together. Spindle fibers are attached to the centromeres. The chromosome pairs arrange at the center of the cell.



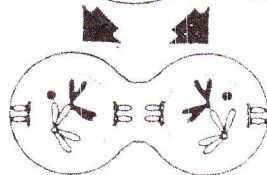
## Anaphase I

Homologous pairs separate. Spindle fibers pull one member from each pair to opposite ends of the cell. Each individual chromosome still consists of two sister chromatids.



## Telophase I

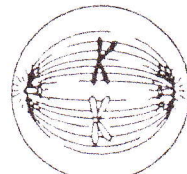
Cytokinesis takes place, forming two new haploid cells that contain one chromosome from each pair.



## Meiosis II

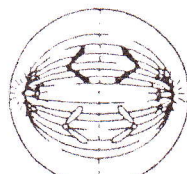
## Metaphase II

Spindle fibers form in the cell. The double chromosomes attach to the spindle fibers.



## Anaphase II

The double chromosomes are pulled to opposite ends of the cell by the spindle fibers and are separated.



## Telophase II

Cytokinesis takes place and produces four cells. Each cell contains one chromosome from each pair.

