

MITOSIS vs. MEIOSIS

Definitions

Mitosis: A specific stage in the cell cycle where somatic cells divide, resulting in two identical diploid daughter cells.

Meiosis: The process by which sex cells divide, resulting in four haploid gametes.

Diploid means a cell has two copies of each chromosome, and **haploid** means a cell has one copy of each chromosome.

Compare and Contrast

Mitosis	Meiosis
<ul style="list-style-type: none"> - A type of cell division - Occurs in somatic cells - Occurs in four phases: <ul style="list-style-type: none"> • prophase • metaphase • anaphase • telophase - Results in two genetically identical daughter cells. - Resulting daughter cells are diploid - Chromosome number remains the same 	<ul style="list-style-type: none"> - Also a type of cell division - Occurs in sex cells (egg & sperm) - Occurs in eight phases total (same phases as mitosis but repeated) - Results in four genetically unique daughter cells - Resulting daughter cells are haploid - Chromosome number is halved in each daughter cell

Stages

