|  |  |  |
| --- | --- | --- |
| MITOSIS | BOTH | MEIOSIS |
| -Produces 2 daughter cells-Daughter cells are Diploid-Produces Somatic cells-Daughter cells are genetically identical to the parent cell-Used for growth and repair.-One “stage”-Anaphase: Sister chromatids are pulled apart | -Same phases (Prophase, metaphase, anaphase, telophase, cytokinesis)-Forms of cell division (create new cells)-Require chromatin to be condensed into chromosomes-Both end with cytokinesis | -Produces 4 daughter cells-Daughter cells are Haploid-Produces gametes-Each gamete is genetically unique- Two “stages” (meiosis I and II)-Crossing over occurs during Prophase I-Only occurs in organisms that reproduce sexually- Anaphase I: entire chromosomes are pulled to the poles-Anaphase II: sister chromatids are pulled apart |