**Word Bank:**

Anaphase

Cell Cycle

Cell Division

Cell Membrane

Cell Plate

Centromere

Chromosomes

Cytokinesis

DNA

G1 Phase

G2 Phase

Interphase

Prophase

Metaphase

Mitosis

S Phase

Sister Chromatid

Spindle Fibers

Telophase

|  |  |  |
| --- | --- | --- |
|  |  | Determines what food can get in a cell and what waste can get out |
|  |  |  |
|  |  | Holds our genetic information  Acts as a set of instructions for the cell |
|  |  |  |
|  |  | The process of growing, copying, and dividing |
|  |  |  |
|  |  | The process by which a cell divides into two new daughter cells |
|  |  | Where growth and duplication takes place  Includes G1 phase, S phase, and G2 phase |
|  |  | The cell grows  New proteins and organelles are synthesized |
|  |  | DNA synthesis takes place  Chromosomes are replicated |
|  |  | DNA tightly coiled around proteins  http://chsweb.lr.k12.nj.us/mstanley/outlines/chromotheory/image126.gif |
|  |  | Organelles and molecules required for cell division are produced |
|  |  | Identical copies of the DNA  Made in the S-phase |
|  |  | Holds two sister chromatid together |
|  |  | Division of the cells nucleus |
|  |  | Division of the cells cytoplasm |
|  |  | Centrioles separate  Chromatin condenses  Spindle begins to form  Nuclear envelope breaks down |
|  |  | Chromosomes line up in the middle |
|  |  | Sister chromatids separate |
|  |  | Chromosomes gather at opposite ends of the cell  A new nuclear envelope forms |
|  |  | A structure that forms in plants halfway between the divided nuclei |
|  |  | Helps separate the chromosomes |