

Source: [KBhBIO101CellCycle](#)

1 | Mitosis

Mitosis is the process by which somatic cells (not sperm/egg) replicate itself — by duplicating its DNA and splitting itself into two cells. The process of mitosis happens in 4ish stages.

- **(P)rophase** — nucleus break down and DNA becomes bundled into chromosomes. The mitotic spindles began to form that will help pull the DNA away.
- **(M)etaphase** — capturing of bundled chromosomes to line them up along the metaphase plate at the equator. The kinetocore (center) of the chromosome become attached to the mitotic spindles in preparation for the anaphase.
- **(A)naphase** (“a for away”) — the microtubuals push poles apart and yank chromasomes by their kinetocore to opposite ends of the poles. Kinetore senses tension, and when it is correct, molecules are sent down the microtubials to send a split signal
- **(T)elophase** — the spindle disappears and the microtubuals break to form the cell wall of the two new cells. The chromosomes fall apart and the newly tangled bundle of DNA becomes encircled by the new nucleus.