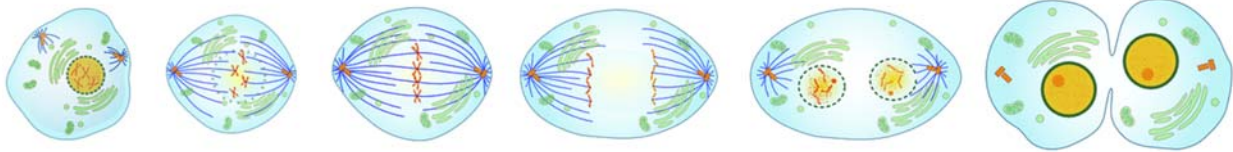


Name _____

Labelling the Stages of Mitosis Answer Key

Directions: Label each phase of mitosis and describe what takes place at each phase.



Prophase Metaphase Anaphase Telophase

Describe what takes place in each phase.

Prophase	Chromosomes condense and become visible, and the nuclear envelope breaks down. The mitotic spindle, composed of microtubules, starts to form and extend from the centrosomes.
Metaphase	Chromosomes align at the cell's equatorial plane, known as the metaphase plate, held in place by spindle fibers attached to their centromeres.
Anaphase	Sister chromatids are separated and pulled toward opposite poles of the cell by the shortening of the spindle fibers.
Telophase	Chromatids reach the poles and begin to decondense, while the nuclear envelope reforms around each set of chromosomes, leading to the formation of two distinct nuclei within the cell.