

Name _____

Chromosome Duplication and Segregation in Mitosis: The Dance of Cell Division

Short Answer Key

1. Chromosome duplication involves copying DNA to create two identical sister chromatids, ensuring genetic information preservation in mitosis.
2. Chromosome segregation separates sister chromatids during mitosis, ensuring that each daughter cell receives an identical set of chromosomes.
3. Cytokinesis is the process of cell division that follows mitosis, dividing the cell's cytoplasm into two separate daughter cells.
4. During anaphase, sister chromatids are pulled apart and move to opposite ends of the cell, ensuring that each daughter cell receives a complete set of chromosomes.
5. Mitosis replaces old or damaged cells in the body, contributing to tissue maintenance and repair.

