

Name _____

The Marvelous Stages of Mitosis: A Cellular Ballet

Multiple Choice Questions

1. Which stage of mitosis involves the separation of sister chromatids?
 - a) Prophase
 - b) Metaphase
 - c) Anaphase
 - d) Telophase

2. What is the main purpose of interphase in the cell cycle?
 - a) To prepare for cell division
 - b) To separate chromosomes
 - c) To align chromosomes at the equator
 - d) To complete cell division

3. During which stage of mitosis do spindle fibers attach to the centromeres of chromosomes?
 - a) Interphase
 - b) Prophase
 - c) Metaphase
 - d) Telophase

4. What is the outcome of cytokinesis in animal cells?
 - a) Formation of a cell plate
 - b) Pinching of the cell membrane
 - c) Creation of two new nuclei
 - d) None of the above

5. Why is mitosis essential for the growth and repair of an organism?
 - a) It creates genetically unique cells.
 - b) It reduces the number of chromosomes.
 - c) It ensures that every cell has the right number of chromosomes.
 - d) It completes the cell cycle.

