

Cell Biology

Name:

Cell Cycle Analysis

Period:

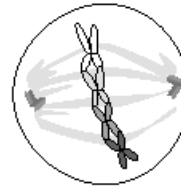
Use Chapter 5, Section 2 and the diagram below to answer the questions, which describe the phases of the cell cycle. Write the correct phase label in the space provided for each question. Each of the phases will be used only once. The descriptions are NOT in order.



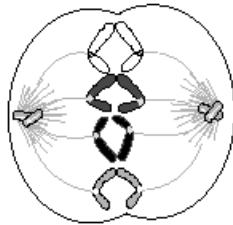
Interphase



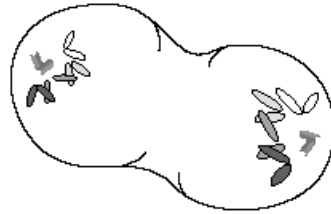
Mitosis Phase 1



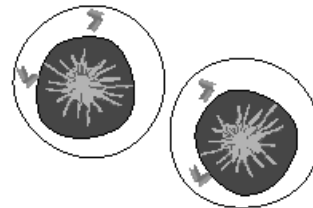
Mitosis Phase 2



Mitosis Phase 3



Mitosis Phase 4



Cytokinesis

- _____ 1. The chromatids separate and move to opposite sides of the cell.
- _____ 2. The nuclear membrane is dissolved. Paired chromosomes align (line up) at the cell's equator.
- _____ 3. The cell is at rest. Just before mitosis begins, chromosomes are copied.
- _____ 4. A nuclear membrane forms around each set of chromosomes, and the chromosomes decondense. Mitosis is complete. The cell membrane begins to pinch off.
- _____ 5. Mitosis begins. In the nucleus, chromosomes condense from long strands into paired, rodlike structures.
- _____ 6. In cells that lack a cell wall, the cell pinches in two, creating two new daughter cells. In cells that have a cell wall, a cell plate forms and separates the two new daughter cells.