

Cell Biology

Name:

Mitosis

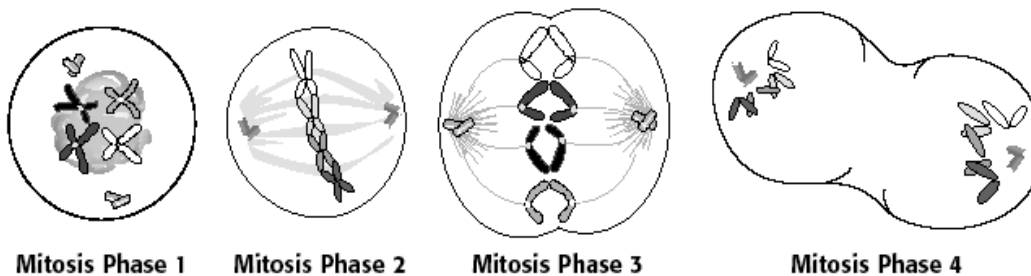
Period:

Use Chapter 5, Section 2 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them.

cell membrane copied cytokinesis daughter cells mitosis mitosis nuclear membrane
nuclear membrane separate

Mitosis and the Cell Cycle (p.154)

Use the figure below and Figure 4 in your book to answer questions 1 through 7.



1. Just before mitosis begins, the chromosomes in the nucleus of the cell are _____.
2. When chromosomes turn into rodlike structures, _____ has begun.
3. Before paired chromatids can line up in the center of the cell, the _____ must dissolve.
4. After lining up in the center of the cell, the paired chromatids _____ and move to opposite sides of the cell.
5. Once the chromosomes are at opposite sides of the cell, a _____ forms around each set of chromosomes.
6. Finally, _____ is complete when the chromosomes decondense in the newly-formed nuclei.
7. After the nuclear membranes have formed around the chromosomes, the _____ pinches in two, making two new cells.

Cytokinesis (p.154)

8. When the cytoplasm of a cell is divided by the cell membrane, the process is called _____.
9. Two _____ are formed after cytokinesis.
- _____ 10. Which of the following does the cell membrane do during cytokinesis in an animal cell?
a. pinches in two b. forms a cell plate c. makes copies of its DNA d. shrivels up
- _____ 11. Which of the eukaryotic cells below do NOT have a cell wall?
a. algae cells b. plant cells c. animal cells d. fungi cells
- _____ 12. What forms between the two new cells during plant cell cytokinesis?
a. a cell plate b. a cell membrane c. a nuclear membrane d. cytoplasm