

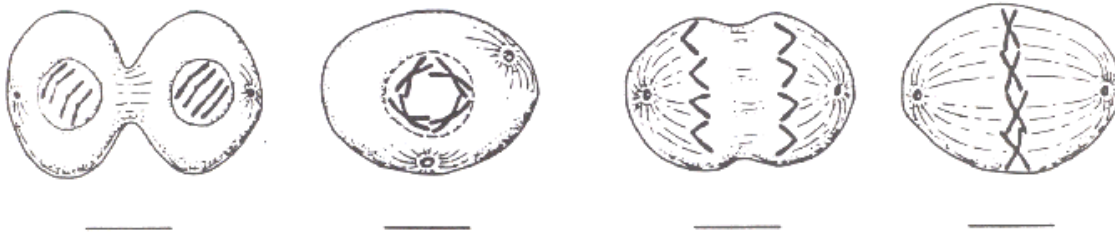
Name _____

Date _____ Section _____

THE CELL CYCLE

DIRECTIONS 1-4: Injured and old, worn-out cells in your body are constantly being replaced by new cells. New cells are produced by the processes of mitosis and cell division. Study the four stages of mitosis shown in the pictures. Number the stages in the order in which they occur.

Match the names of the stages below with their descriptions. Then answer the questions.



DIRECTIONS 5-8: Label the name of each stage above. Use the word bank bold faced and italicized below to help you.

DIRECTIONS 9-13: Use the word bank bold faced and italicized below to put the best letter in each blank

A. prophase

B. metaphase

C. anaphase

D. telophase

_____ 9. The doubled chromosomes separate. Single chromosomes move to opposite ends of the spindle.

_____ 10. Doubled chromosomes form, the nuclear envelope disappears, and the spindle forms.

_____ 11. The cell divides in two.

_____ 12. The spindle disappears. A nuclear envelope forms around each set of chromosomes.

_____ 13. Doubled chromosomes line up in the middle of the spindle.

DIRECTIONS 14-25: Use your understanding of cell division to address each of the following

14. In what stage is a cell before mitosis begins?

15. What takes place in the cell during this stage?

16. What process occurs as mitosis ends?

17. How do mitosis and cell division differ in animal cells and plant cells?

18. Why is the process of mitosis important in cell division?

19. Write the saying that you will be using to remember the stages of Mitosis in order.

20 Write the names of the stages in correct order below:

21. Define the words cell division:

22. What is the name given to the original cell before it divides? _____

23. The two cells formed due to cell division are called _____.

24. Mitosis is a form of _____ reproduction.

25. The parent cell is _____ to the daughter cells.