

**THE CELL CYCLE WORKSHEET****Matching:** match the term to the description. Terms can be used more than once.

A. Interphase    B. Prophase    C. Metaphase    D. Anaphase    E. Telophase    F. Cytokinesis

- |  |   |
|--|---|
| _____ 1. The chromosomes are moving apart.                       | _____ 9. The chromosomes are moving towards the ends of the cell.               |
| _____ 2. The cell is growing                                     | _____ 10. Chromosomes line up along the middle of the cell.                     |
| _____ 3. A new nucleus is forming around the chromosomes.        | _____ 11. The spindles attach to the centromeres that hold chromosomes together |
| _____ 4. The cytoplasm of the cell is being divided.             | _____ 12. Chromosomes are just starting to become visible.                      |
| _____ 5. The chromosomes are not visible.                        | _____ 13. Cytokinesis is finished.  |
| _____ 6. The chromosomes are located at the equator of the cell. | _____ 14. Chromosomes are doubled.  |
| _____ 7. The nucleus begins disappear.                           | _____ 15. The longest phase of the cell cycle                                   |
| _____ 8. The cell membrane starts to pinch in.                   |   |

**Fill in the blank:** Some will be used more than once.**A. Prophase****D. Metaphase****G. Chromatid****J. Spindle fiber****B. Interphase****E. Anaphase****H. Cytokinesis****K. Cell plate****C. Telophase****F. Centromere****I. Mitosis****L. M phase**

- |  |   |
|--|---|
| _____ 16. What phase are daughter cells in after mitosis is finished?                            | _____ 21. What pulls chromosomes apart?   |
| _____ 17. During what phase of mitosis do the chromosomes move toward opposite ends of the cell? | _____ 22. Which phase of mitosis is the last phase that chromosomes are together? |
| _____ 18. What is the phase where DNA condenses to form chromosomes?                             | _____ 23. Which phase of the cell cycle is the cell not dividing?                 |
| _____ 19. What is the name of the structure that connects the two parts of the chromosome?       | _____ 24. The period of cell growth and development between mitotic divisions?    |
| _____ 20. What are the <b>two parts</b> of the cell cycle?                                       |   |

## Short Answers

25. Why is mitosis important?

26. Predict what would happen if an individual had spindle fibers that didn't work.

27. Predict what would happen if cytokinesis was skipped.

28. Explain why different kinds of cells in the body might live for different lengths of time.