

Name: _____

Date: _____

Period: _____

THE CELL CYCLE WORKSHEET

Matching: match the term to the description

Prophase

Interphase

Telophase

Metaphase

Anaphase

- _____ 1. The sister chromatids are moving apart.
- _____ 2. The nucleolus begins to fade from view.
- _____ 3. A new nuclear membrane is forming around the chromosomes.
- _____ 4. The cytoplasm of the cell begins to divide.
- _____ 5. The chromosomes become invisible (at the end).
- _____ 6. The chromosomes are located at the equator of the cell.
- _____ 7. The nuclear membrane begins to fade from view.
- _____ 8. The division (cleavage) furrow appears.
- _____ 9. The chromosomes are moving towards the poles of the cell.
- _____ 10. Chromosomes line up along the equator.
- _____ 11. The spindle fibers are formed.
- _____ 12. Chromosomes are not visible yet.
- _____ 13. Cytokinesis is completed during this phase.
- _____ 14. The cell plate is completed.
- _____ 15. DNA is replicated.
- _____ 16. The reverse of prophase.
- _____ 17. The organization phase

Fill in the blank: Some will be used more than once.

**Prophase
Interphase
Telophase**

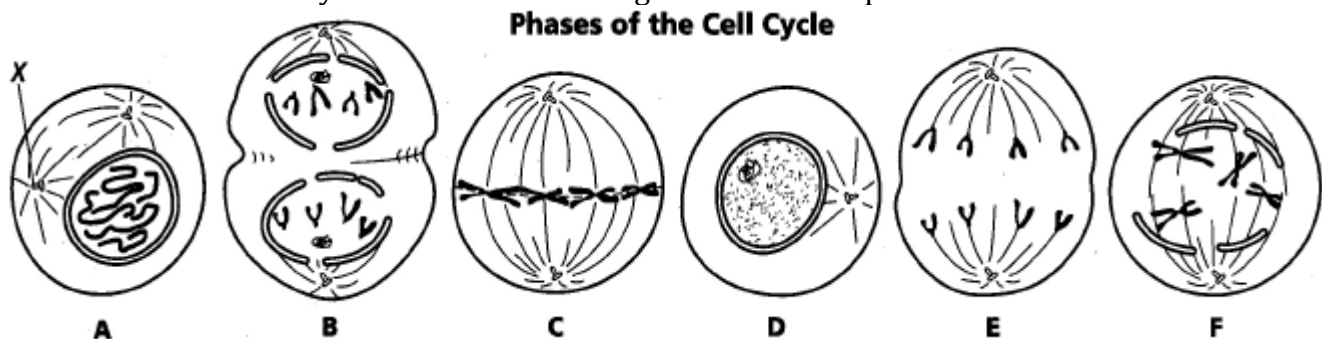
**Metaphase
Anaphase
Centromere**

**Chromatid
Cytokinesis
Mitosis**

**Spindle fiber
Cell plate**

- _____ 18. What phase are daughter cells in at the end of the cell cycle?
- _____ 19. During what phase of mitosis do centromeres divide and the chromatids move toward their respective poles?
- _____ 20. What is the phase where chromatin condenses to form chromosomes?
- _____ 21. What is the name of the structure that connects the two chromatids?
- _____ 22. In a chromosome pair connected by a centromere, what is each individual chromosome called?
- _____ 23. What are the two parts of cell division?
- _____ 24. What structure forms in prophase along which the chromosomes move?
- _____ 25. Which phase of mitosis is the last phase that chromatids are together?
- _____ 26. Which phase of the cell cycle is characterized by a non-dividing cell?
- _____ 27. What structure is produced when protein fibers radiate from centrioles?
- _____ 28. What forms across the center of a plant cell near the end of telophase?
- _____ 29. The period of cell growth and development between mitotic divisions?
- _____ 30. What is the phase where cytokinesis occurs?

The diagram below shows six cells in various phases of the cell cycle. Note the cells are not arranged in the order in which the cell cycle occurs. Use the diagram to answer questions 1-7.



1. What phase are cell A and F in? _____
2. Which cell is in metaphase? _____
3. In cell A, what structure is labeled X? _____
4. List the diagrams in order from first to last in the cell cycle. _____

5. Are the cells depicted plant or animal cells? _____

a. Explain your answer.

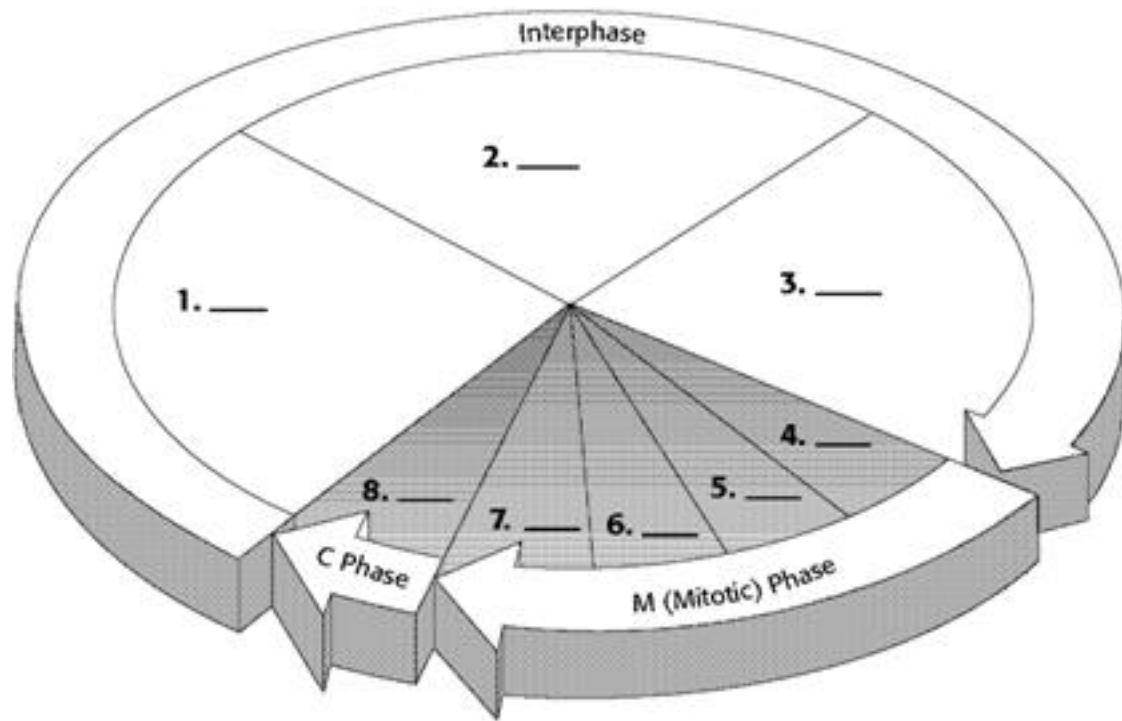
b. If it were the other type of cell what would be different in the diagrams?

6. What is the longest phase of the cell cycle? _____

7. Why is mitosis important?

8. Predict what would happen if an individual had faulty spindle fibers.

9. Predict what would happen if cytokinesis was skipped.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Cancer

1. What is cancer?

2. What is the difference between a malignant and a benign tumor?

