Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period\_\_\_\_

**Mitosis**

1. Define Mitosis



1. Cells A and F show an early and a late stage of the same phase of mitosis. What phase is it?
2. Which cell is in metaphase?
3. Which cell is in the first phase of mitosis?
4. In cell A, what structure is labeled X?
5. Which cell is in the “in between” phase of mitosis?
6. Place the diagrams in order from first to last.
7. Are the cells depicted plant or animal cells? Explain your answer.
8. What is the longest phase of the cell cycle?
9. Why is mitosis important?
10. What is the difference between chromatin and chromsomes
11. Define or relate the importance of each of the following:
    1. Centromere
    2. Centrioles
    3. Asters
    4. Microtubules
    5. Kinetochore
    6. Dyenin
12. What is G0 phase?

**Matching:** match the term to the description (drag/drop or write the letter)

\_\_\_\_\_ 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 is being divided.

\_\_\_\_\_ 5. The chromosomes become invisible.

\_\_\_\_\_ 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. Chromatids line up along the equator.

\_\_\_\_\_ 11. The spindle is formed.

\_\_\_\_\_ 12. Chromosomes are not visible.

\_\_\_\_\_ 13. Cytokinesis is completed.

\_\_\_\_\_ 14. The cell plate is completed.

\_\_\_\_\_ 15. Chromosomes are replicated.

\_\_\_\_\_ 16. The reverse of prophase.

\_\_\_\_\_ 17. The organization phase.