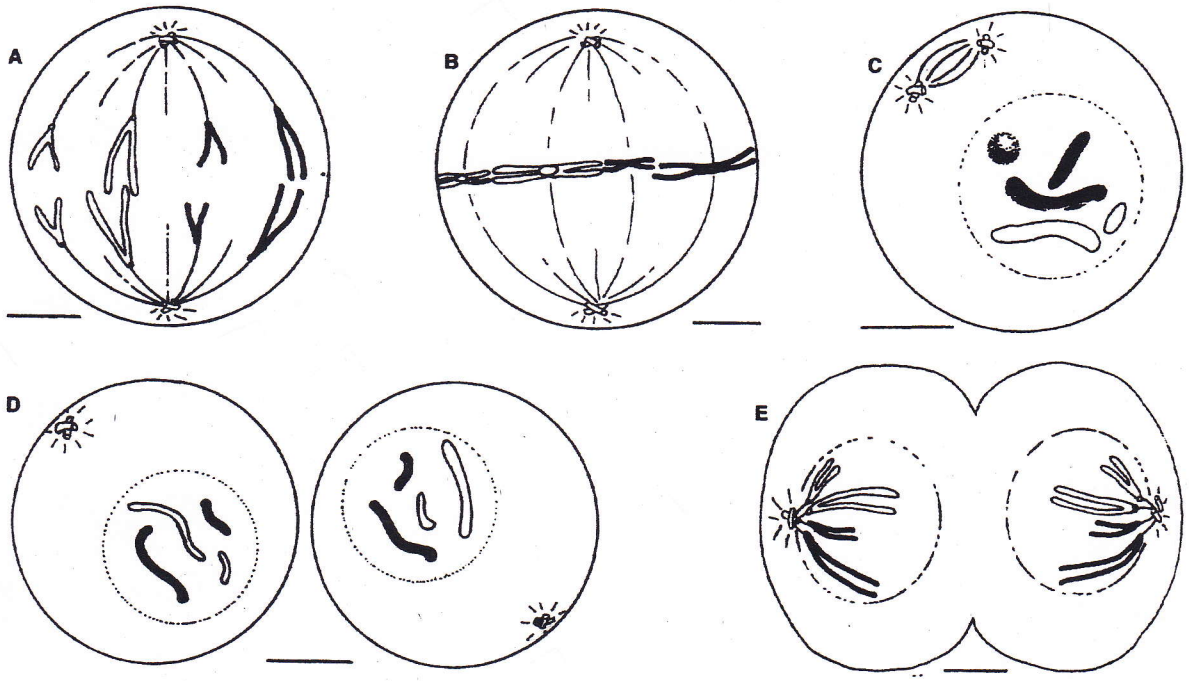
Name_____

Hour_____

Mitosis

The following steps of interphase and mitosis are out of order. Place the numbers 1-5 in the blanks to show the correct order.



In the blanks below, write the letter of the diagram above that is being described.

1. Two new identical cells are formed._____
2. Cytoplasm begins to separate._____
3. Sister chromatids are first pulled apart._____
4. Chromosomes are completely separated and at opposite ends of the cell._____
5. Sister chromatids can be seen for the first time._____
6. This is what cells look like before going through mitosis._____
7. Nuclear membrane begins to break down._____
8. Sister chromatids move to the cell's center and line up on fibers._____
9. A nuclear membrane begins to form around chromosomes._____

Completion

10. The_____is a fanlike microtubule structure that helps separate the chromosomes.

11. _____is the division of the cell nucleus.

12. The four phases of mitosis are_____, _____,

_____, _____.

13. The division of the cytoplasm during the M phase is called_____.

Multiple Choice

_____14. What phase of mitosis takes the longest period of time?

a. prophase
b. cytokinesis
c. anaphase
d. interphase

_____15. What part of the cell separates and takes up positions on opposite side of the nucleus during prophase?

a. centrioles
b. centromeres
c. prophase
d. spindles

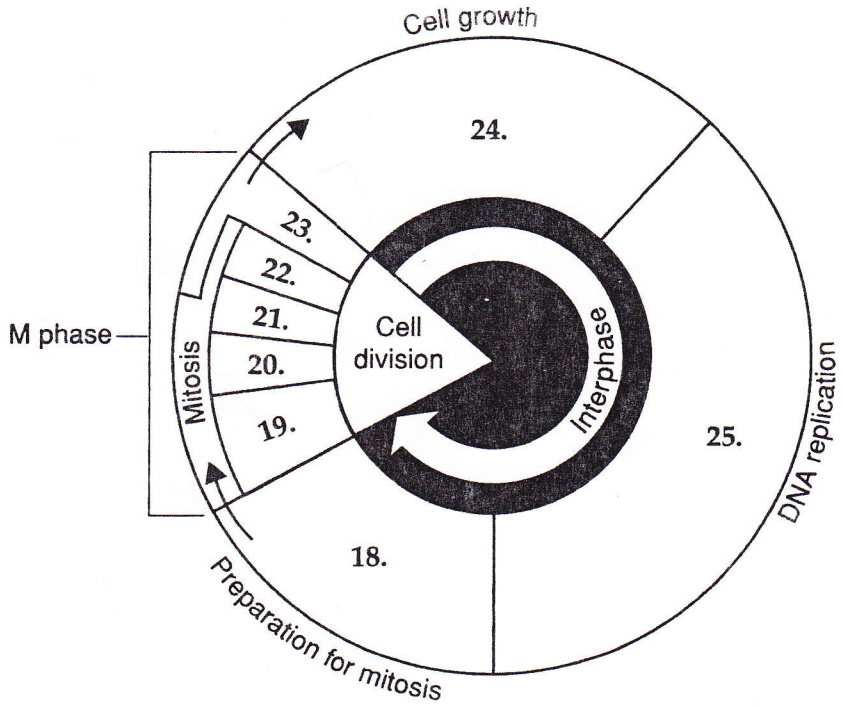
_____16. What phase of mitosis usually occurs at the same time as cytokinesis?

a. anaphase
b. telophase
c. prophase
d. cell division

_____17. The phase of mitosis during which chromosomes become visible and the centrioles separate from one another is

a. prophase
b. anaphase
c. metaphase
d. telophase

On the lines below, label the events in the cell cycle that correspond with the numbers in the diagram.



18._____

19._____

20._____

21._____

22._____

23._____

24._____

25._____