

Chapter 10 Cell Growth and Division

Chapter Vocabulary Review

Completion *On the lines provided, complete the following sentences.*

1. The M phase is also known as _____.
2. Each pair of chromatids is attached at an area called the _____.
3. The three phases of _____ are G₁, S, and G₂.
4. The _____ is the series of events that cells go through as they grow and divide.
5. The _____ is a fanlike microtubule structure that helps separate the chromosomes.
6. _____ is the division of the cell nucleus.
7. The four phases of mitosis are _____, _____, _____, and _____.
8. The division of the cytoplasm during the M phase is called _____.
9. Proteins known as _____ regulate the timing of the cell cycle in eukaryotic cells .
10. _____ is a disorder in which some of the body's own cells lose the ability to control growth.

Multiple Choice *On the line provided, write the letter that best completes the statements or answers the question.*

- _____ 11. What process ensures that each daughter cell gets one complete set of genetic information and that each daughter cell also has increased surface area?

a. cell division	c. cytokinesis
b. mitosis	d. cancer
- _____ 12. Before cell division, each chromosome consists of two identical "sister"

a. centromeres.	c. chromatids.
b. cell cycles.	d. spindles.
- _____ 13. The four phases of the cell cycle are

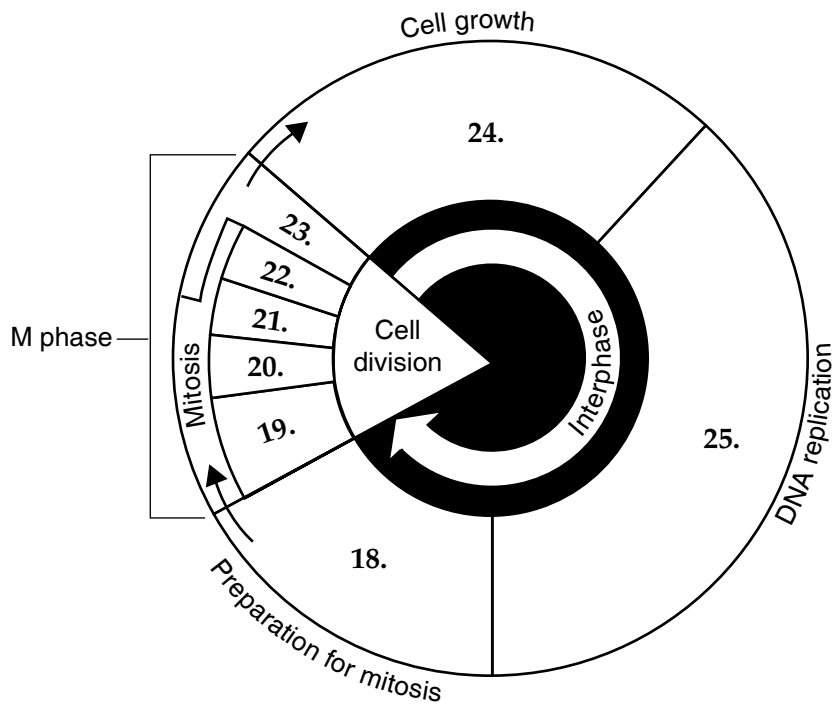
a. interphase, mitosis, G ₁ , and G ₂ .
b. M phase, G ₁ phase, S phase, and G ₂ phase.
c. prophase, metaphase, anaphase, and telophase.
d. cytokinesis, mitosis, interphase, and metaphase.
- _____ 14. What phase of mitosis takes the longest period of time?

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

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- _____ 15. What part of the cell separates and takes up positions on opposite sides of the nucleus during prophase?
 a. centrioles c. chromatids
 b. centromeres d. spindles
- _____ 16. What phase of mitosis usually occurs at the same time as cytokinesis?
 a. anaphase c. prophase
 b. telophase d. cell division
- _____ 17. What is the name for tumors that form and can cause damage to surrounding tissue?
 a. cyclins c. cytokinesis
 b. mitosis d. cancer

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



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|-----------|-----------|
| 18. _____ | 22. _____ |
| 19. _____ | 23. _____ |
| 20. _____ | 24. _____ |
| 21. _____ | 25. _____ |