

Name _____

Hour _____

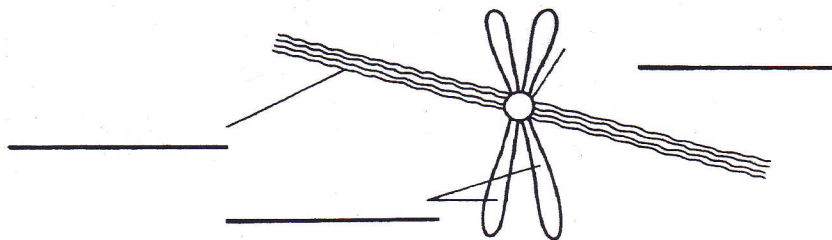
Cell Cycle

Label the diagram below of a chromosome. Use these choices:

centromere

chromatids

microtubules



Completion

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 G_1 , S, and G_2 .
4. The _____ is the series of events that cells go through as they grow and divide.

Multiple Choice

- ____ 5. 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
 - b. mitosis
 - c. cytokinesis
 - d. cancer
- ____ 6. Before cell division, each chromosome consists of two identical "sister"
 - a. centromeres.
 - b. cell cycles.
 - c. chromatids.
 - d. spindles.
- ____ 7. 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

- ____ 8. If a cell has 12 chromosomes, how many chromosomes will each of its daughter cells have after mitosis?
- a. 4
 - b. 6
 - c. 12
 - d. 24

Short Answer

9. What are the four phases of the cell cycle?
10. What happens when the cell copies its chromosomes?
11. Describe what happens during interphase.