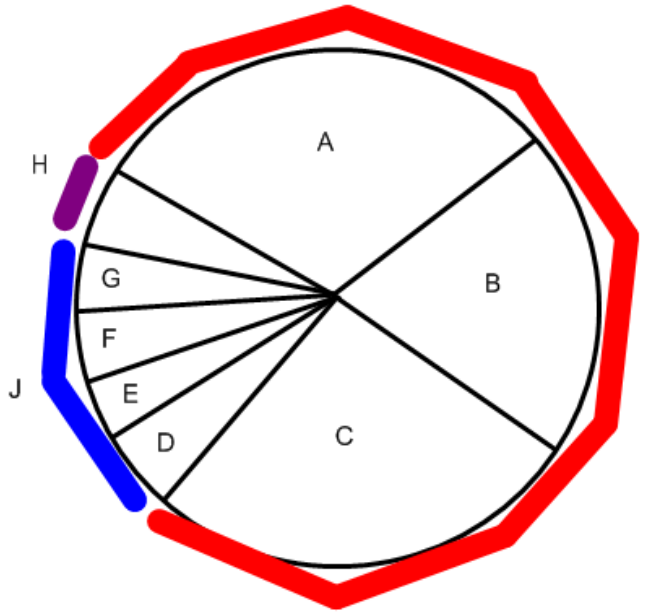


worth 31 points

Cell Cycle Review Worksheet

Match the letters shown in the pie chart with the correct description of that phase provided below. Some letters may be used more than once.



- | | |
|---|-------|
| 1. Spindle fiber breaks down; nuclear membrane reappears; cytokinesis begins | _____ |
| 2. Metaphase | _____ |
| 3. Duplication of chromosome material occurs | _____ |
| 4. Periods of growth (2 answers) | _____ |
| 5. Anaphase | _____ |
| 6. G1 | _____ |
| 7. Chromosomes line up in the middle of the cell | _____ |
| 8. Period of growth and preparation before mitosis begins; consists of G1, G2 and S | _____ |
| 9. Telophase | _____ |
| 10. G2 | _____ |
| 11. Division of the nucleus | _____ |
| 12. Interphase | _____ |
| 13. Cytokinesis | _____ |
| 14. Nuclear membrane breaks down; centrioles move; spindle fiber begins to form | _____ |
| 15. S | _____ |
| 16. Sister chromatids move to opposite sides of the cell | _____ |
| 17. Prophase | _____ |
| 18. Division of the cytoplasm | _____ |

Match the correct descriptions below with the Mitosis pictures provided by place the letters in the correct boxes.
 Name of phase goes above each picture. Description should go below each picture.



- A. Anaphase
- B. Nuclear membrane forms around the new DNA and the spindle disintegrates
- C. Prophase
- D. Sister chromatids separate
- E. Telophase
- F. Spindle fibers attach to chromatids and move them to the center of the cell
- G. Metaphase
- H. Chromatids condense and mitotic spindle forms

_____ Which of the following happens when a cell divides?
 a. The cell's volume increases.
 b. It becomes more difficult for the cell to get enough oxygen and nutrients.
 c. The cell has DNA overload.
 d. Each daughter cell receives its own copy of the parent cell's DNA.

_____ Which pair is correct?
 a. G₁ phase, DNA replication
 b. G₂ phase, preparation for mitosis
 c. S phase, cell division
 d. M phase, cell growth

_____ Which of the following is a correct statement about the events of the cell cycle?
 a. Little happens during the G₁ and G₂ phases.
 b. DNA replicates during cytokinesis.
 c. The M phase is usually the longest phase.
 d. Interphase consists of the G₁, S, and, G₂ phases.

_____ One difference between cell division in plant cells and in animal cells is that plant cells have
 a. centrioles.
 b. centromeres.
 c. a cell plate.
 d. chromatin.

_____ During normal mitotic cell division, a parent cell having four chromosomes will produce two daughter cells, each containing
 a. two chromosomes.
 b. four chromosomes.
 c. eight chromosomes.
 d. sixteen chromosomes.