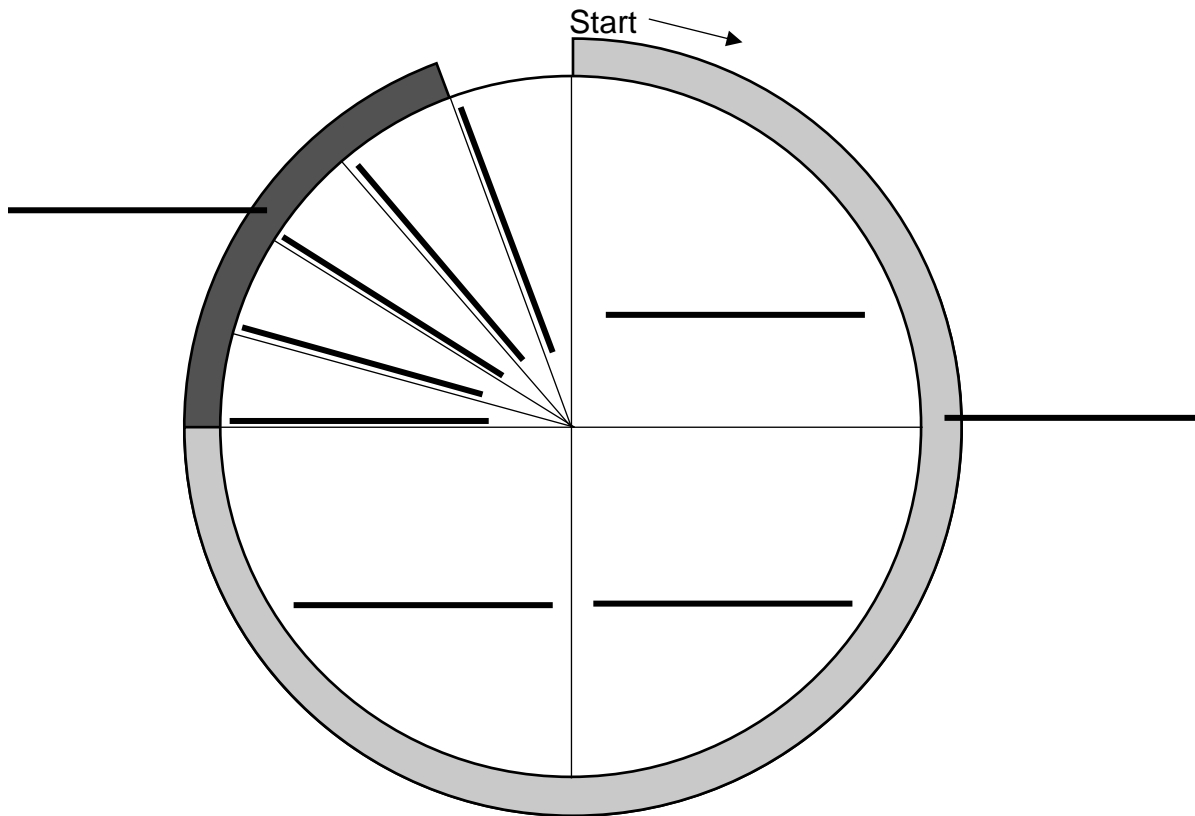


Name \_\_\_\_\_ Block \_\_\_\_\_ Date \_\_\_\_\_

### The Cell Cycle and Mitosis Quiz – BIO.5a

Label the diagram below using the following phases. (5 pts; 0.5 each)

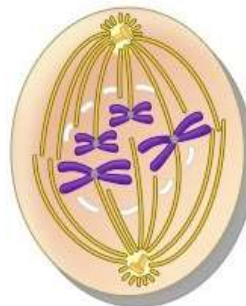
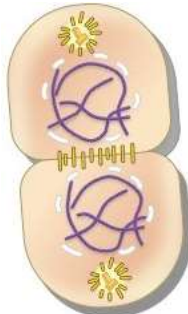
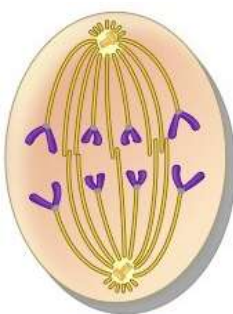
Anaphase	Cytokinesis	G1-Phase	G2-Phase	Interphase
Metaphase	Mitosis	Prophase	S-Phase	Telophase



- Number the images (1 – 4) below in chronological order from the beginning of mitosis. (2pts; 0.5 each)
- Label each phase using the following terms. (4pts; 1 each)

Anaphase	Metaphase	Prophase	Telophase
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Number: \_\_\_\_\_



Phase: \_\_\_\_\_

Name \_\_\_\_\_ Block \_\_\_\_\_ Date \_\_\_\_\_

Match the phase name with its brief description. Each phase name will only be used once. (6pts; 1 each)

- Cell grows, metabolizes, and becomes specialized
  - Cell prepares for mitosis
  - Division of the cytoplasm
  - Division of the nucleus; includes PMAT
  - DNA replication occurs
  - Longest part of the cell cycle; includes G1, S, and G2 phases
- A. Cytokinesis
  - B. G1-Phase
  - C. G2-Phase
  - D. Interphase
  - E. Mitosis
  - F. S-Phase

Match the phase name with its brief description. Each phase name will only be used once. (2pts; 0.5 each)

- Chromosomes condense; nuclear membrane disappears
  - Chromosomes line up in the middle of the cell
  - Two nuclei re-form around daughter chromosomes
  - Sister chromatids are pulled apart by spindle fiber
- A. Anaphase
  - B. Metaphase
  - C. Prophase
  - D. Telophase

Which of three of the following terms describe the daughter cells that result from mitosis. (3pts; 1 each)

Diploid cells	Four cells	Haploid cells
Identical cells	Two cells	Unique cells

Answer each question using a complete sentence.

1. Explain in general what causes cancer or how cancer cells are different from normal cells. (1 pt)
  
  
  
  
  
  
  
  
  
  
2. Describe two possible functions of mitosis. In other words, what are two possible reasons why an organism would perform mitosis? (2 pts)