

Content Practice A**LESSON 1*****The Cell Cycle and Cell Division***

Directions: On each line, write the term from the word bank that correctly completes each sentence. Each term is used only once.

cell cycle **centromere** **cytokinesis** **daughter cells**
interphase **mitosis** **sister chromatids**

1. The _____ is the regular pattern of growth, development, and division in cells.
2. Identical strands of a chromosome are called _____.
3. Two identical nuclei are formed during _____.
4. Cytoplasm divides to form two cells during _____.
5. The two cells produced during the cell cycle are called _____.
6. After chromatin is duplicated, sister chromatids are connected by a(n) _____.
7. The two main phases in the cell cycle are _____ and the mitotic phase.

Directions: Complete each sentence by circling the correct word(s) in parentheses.

8. The most important result of the cell cycle is two (identical/very different) cells.
9. The cell cycle is important for reproduction in (multicellular/unicellular) organisms.
10. The cell cycle is important for growth and repair in (multicellular/unicellular) organisms.
11. After cell division, the parent cell (divides again/no longer exists).

Content Practice B

LESSON 1

The Cell Cycle and Cell Division

Directions: Answer each question on the lines provided.

- 1. What are the two main phases of the cell cycle?

- 2. During which phase of the cell cycle is chromatin duplicated?

- 3. During which main phase of the cell cycle do mitosis and cytokinesis occur?

- 4. What is the difference between mitosis and cytokinesis?

- 5. What makes up a chromosome?

- 6. What is produced at the end of the cell cycle? How do they compare to each other and to the parent cell? What happens to the parent cell?

- 7. How is the cell cycle important to some unicellular organisms?

- 8. How is the cell cycle important to multicellular organisms?

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