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$\qquad$

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

## Content Practice B

## 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?
$\qquad$
4. What is the difference between mitosis and cytokinesis?
$\qquad$
$\qquad$
5. What makes up a chromosome?
$\qquad$
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?
$\qquad$
$\qquad$
$\qquad$
7. How is the cell cycle important to some unicellular organisms?
$\qquad$
$\qquad$
8. How is the cell cycle important to multicellular organisms?
$\qquad$
$\qquad$
