

1. In your own words, write a definition for each of the following terms: *cell cycle* and *cytokinesis*.

UNDERSTANDING KEY IDEAS

- _____ 2. Eukaryotic cells
- a. do not divide.
 - b. undergo binary fission.
 - c. undergo mitosis.
 - d. have cell walls.
3. Why is it important for chromosomes to be copied before cell division?

4. Describe mitosis.

MATH SKILLS

5. Cell A takes 6 h to complete division. Cell B takes 8 h to complete division. After 24 h, how many more copies of cell A would there be than cell B? Show your work below.

6. Predicting Consequences What would happen if cytokinesis occurred without mitosis?

7. Applying Concepts How does mitosis ensure that a new cell is just like its parent cell?

8. Making Comparisons Compare the processes that animal cells and plant cells use to make new cells. How are the processes different?
