

Stages of a Cell Cycle

Goal • Reinforce terms and concepts about the cell cycle.

What to Do

Write your answers to the following questions in the spaces provided.

Matching

Match the statements in column A, with the five phases of mitosis in column B. Write the letter of the response in the blank on the left. If you need help, refer to the illustrations in *SCIENCEPOWER*™ 9, pages 18–19.

A

- _____ 1. Nucleolus appears within each new nucleus.
- _____ 2. Centromeres divide.
- _____ 3. Chromosomes become visible.
- _____ 4. Spindle fibres begin to form.
- _____ 5. DNA replicates.
- _____ 6. Replicated strands move toward opposite poles.
- _____ 7. Chromosomes form a line across the middle of the cell.
- _____ 8. Nuclear membrane forms around each set of chromosomes.
- _____ 9. Cell grows.

B

- a prophase
- b metaphase
- c anaphase
- d telophase
- e interphase

Completing the Chart

10. Place a check mark (✓) under each phase in which you can see the structures listed in the first column.

Structures Present	Interphase	Prophase	Metaphase	Anaphase	Telophase
Nucleus					
Nucleolus					
Nuclear membrane					
Chromatin					
Chromosomes					
Spindle fibres					

Short Answer

11. Describe the end result of mitosis.