

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

## Section 1.2 Understanding the Cell Cycle

Read pages 17 – 23

- 1) How did you begin your life?
- 2) How many cells will your body be made of when you become an adult?
- 3) What is necessary for living organisms to grow and develop?
- 4) What must each new cell have?
- 5) What is the process that ensures that each new cell has a nucleus with a complete set of instructions (DNA) called?
- 6) What must happen before mitosis can begin?
- 7) What is the process called in question 6?
- 8) Replicated chromatin coils up to form what?
- 9) What are chromosomes joined in the middle by?
- 10) What has happened after replication?

11) Describe the phases of mitosis.

12) At the end of mitosis, there is still only \_\_\_\_\_ cell, but it now has \_\_\_\_\_ identical nuclei.

13) What happens in animal cells after the end of mitosis?

14) What happens in plant cells after the end of mitosis?

15) What phase does a cell spend most of its time in?

16) What does the prefix *inter* mean?

17) What happens during interphase?

18) What is the cell cycle?

19) Why must the nuclear membrane break down in mitosis?