

# The Cell and Inheritance

## Understanding Main Ideas

Complete the table below by filling in the spaces with the correct stage of meiosis—Beginning, Meiosis I, Meiosis II, End.

Event	Stage in Meiosis
The double-stranded chromosomes move to the center of the cell. The centromeres separate.	1. _____
Two cells form, each with half the number of chromosomes. Each chromosome still has two chromatids.	2. _____
Four sex cells form with half the number of chromosomes as the parental cells.	3. _____
The chromosomes are copied.	4. _____

Answer the following questions in the spaces provided.

5. What is the chromosome theory of inheritance?

\_\_\_\_\_

\_\_\_\_\_

6. Why is it important that sex cells have half the number of chromosomes as body cells?

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\_\_\_\_\_

\_\_\_\_\_

## Building Vocabulary

Fill in the blank to complete the statement.

7. The process by which the number of chromosomes is reduced by half to form sex cells is called \_\_\_\_\_.