

Genetics: The Science of Heredity ▪ 5.3 Review and Reinforce**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. Why is it important that sex cells have half the number of chromosomes as body cells?

Building Vocabulary

Fill in the blank to complete the statement.

6. The process by which the number of chromosomes is reduced by half to form sex cells is called _____.
7. During _____, genetic material from two parents combines to produce a new organism.
8. A _____ cell contains two sets of chromosomes, one set from each parent.