

Use with textbook pages 191–193.

## What happens in meiosis?

Vocabulary	
2	fertilization
3	gametes
4	haploid
23	meiosis
46	meiosis I
body cell	meiosis II
chromosome	mitosis
diploid	zygote
embryo	

Use the terms in the vocabulary box to fill in the blanks. You can use each term more than once. You will not need to use every term.

- Female and male organisms produce specialized cells called \_\_\_\_\_ that are necessary for reproduction. Eggs are the \_\_\_\_\_ from female parents. Sperm are the \_\_\_\_\_ from male parents.
- During sexual reproduction, the gametes from the two parents combine during a process called \_\_\_\_\_ to form a new cell called a \_\_\_\_\_.
- As the zygote undergoes repeated \_\_\_\_\_ and cell division, it matures into a(n) \_\_\_\_\_.
- A human diploid body cell has \_\_\_\_\_ pairs of chromosomes.
- Human gamete cells have a total of \_\_\_\_\_ chromosomes. Gametes are said to be \_\_\_\_\_.
- During meiosis, each \_\_\_\_\_ in a cell is duplicated once and then the cell divides twice.
- The first division of the cell is called \_\_\_\_\_, which starts with a diploid cell and finishes with two haploid cells.
- Each of the two haploid cells undergoes a second division called \_\_\_\_\_, which starts with two haploid cells and ends with four haploid cells.
- Meiosis starts with one \_\_\_\_\_ cell and ends with \_\_\_\_\_ haploid cells.

Name \_\_\_\_\_

Date \_\_\_\_\_

Use with textbook pages 188-202.

# Meiosis

Match each Term on the left with the best Descriptor on the right. Each Descriptor may only be used once.	
Term	Descriptor
1. _____ diploid number	<b>A.</b> matching chromosomes
2. _____ embryo	<b>B.</b> process in which gametes from two parents combine
3. _____ fertilization	<b>C.</b> two sets of chromosomes
4. _____ gametes	<b>D.</b> produces offspring that are genetically different from each other
5. _____ genetic diversity	<b>E.</b> develops from a zygote
6. _____ haploid number	<b>F.</b> new diploid cell formed by the process of fertilization
7. _____ homologous chromosomes	<b>G.</b> the process of mitosis
8. _____ sexual reproduction	<b>H.</b> variety in a species
9. _____ zygote	<b>I.</b> one set of chromosomes
	<b>J.</b> specialized cells; sperm from males and eggs from females

Circle the letter of the best answer.

10. Human body cells have

- A. 17 chromosomes
- B. 23 chromosomes
- C. 46 chromosomes
- D. 92 chromosomes

11. The process of meiosis produces gametes with \_\_\_\_\_ as body cells.
- A. the same number of chromosomes
  - B. one quarter the number of chromosomes
  - C. half the number of chromosomes
  - D. double the number of chromosomes

12. Sexual reproduction

I.	always produces identical offspring
II.	requires two parents
III.	increases genetic diversity

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II, and III

13. Meiosis I

- A. starts with a diploid cell and ends with two haploid cells
- B. starts with a haploid cell and ends with two diploid cells
- C. starts with two diploid cells and ends with a haploid cell
- D. starts with a two haploid cells and ends with a diploid cell

14. Meiosis II

- A. starts with two haploid cells and ends with four haploid cells
- B. starts with two diploid cells and ends with four haploid cells
- C. starts with four diploid cells and ends with two haploid cells
- D. starts with four haploid cells and ends with two haploid cells