

Assessment

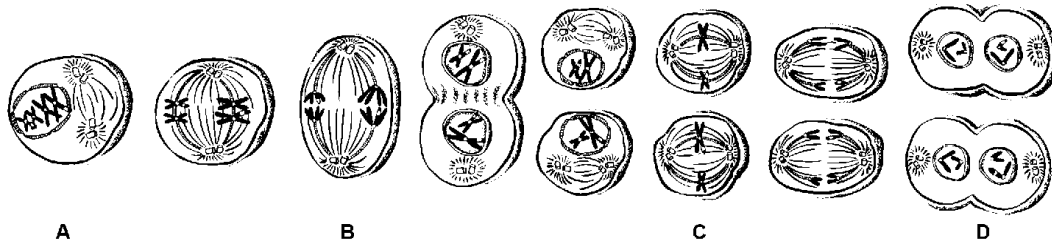
Chapter Test

Meiosis and Sexual Reproduction

In the space provided, write *T* if the statement is true or *F* if it is false.

- _____ 1. Oogenesis makes only one functional egg in the ovaries.
- _____ 2. Meiosis halves the number of chromosomes and forms haploid cells from diploid cells.
- _____ 3. Gametes are diploid (have two sets of chromosomes).
- _____ 4. Autosomes determine the sex of an individual.

Questions 5 and 6 refer to the figure below, which shows the stages of meiosis. In the space provided, write the letter of the correct answer to each question.



- _____ 5. Chromosomes line up at the cell's equator (center) and are attached at their centromeres to spindle fibers during which stage?
 - a. A
 - b. B
 - c. C
 - d. D
- _____ 6. Homologous chromosomes move to opposite poles of the cell during which stage?
 - a. A
 - b. B
 - c. C
 - d. D

Chapter Test *continued*

In the space provided, write the letter of the term or phrase that best completes each sentence or answers each question.

- _____ 7. Which of the following is *not* haploid (has one set of chromosomes)?
a. gametophytes
b. sporophytes
c. eggs and sperms
- _____ 8. During meiosis, two divisions create
a. four haploid cells.
b. two identical cells.
c. two haploid cells.
- _____ 9. A _____ is a haploid plant reproductive cell made by meiosis.
a. spore
b. clone
c. sexual
- _____ 10. The _____ process in most animals makes diploid zygotes.
a. asexual
b. life
c. fertilization
- _____ 11. The kind of reproduction in which a single parent passes copies of all its genes to its offspring is _____ reproduction.
a. meiosis
b. gametophyte
c. asexual
- _____ 12. The haploid phase of a plant that makes gametes by mitosis is the _____
a. gametophyte.
b. fertilization.
c. oogenesis.
- _____ 13. If the gametes of an individual are its only haploid cell, that individual has a _____ life cycle.
a. diploid
b. ovum
c. crossing-over

Chapter Test *continued*

Using the word bank below, fill in each blank provided.

asexual reproduction genetic mitosis
diversity meiosis zygote

14. _____ includes the processes of binary fission, budding, and parthenogenesis.
15. The process called _____ guarantees that the number of chromosomes in gametes is half the number of chromosomes in body cells.
16. A fertilized egg cell that is diploid is called a _____.
17. The advantage of sexual reproduction is increasing genetic _____.
18. In alternation of generations, spores are produced by the process of meiosis, and gametes are produced by the process of _____.