

SECTION 8-3 REVIEW**MEIOSIS****VOCABULARY REVIEW** Define the following terms.

1. gamete _____

2. tetrad _____

3. independent assortment _____

4. polar bodies _____

MULTIPLE CHOICE Write the correct letter in the blank.

- _____ 1. During synapsis, the
- | | |
|--------------------------------------|--|
| a. DNA in each chromosome is copied. | c. cytoplasm divides. |
| b. spindle fibers disappear. | d. chromosomes line up next to their homologues. |
- _____ 2. During crossing-over, portions of chromatids
- | | |
|---|--|
| a. double the amount of DNA in each chromosome. | c. break off and attach to adjacent chromatids on the homologous chromosome. |
| b. move from autosomes to sex chromosomes. | d. separate from each other and move to opposite poles of the cell. |
- _____ 3. In which phase of meiosis do tetrads form?
- | | | | |
|---------------|----------------|-----------------|----------------|
| a. prophase I | b. telophase I | c. metaphase II | d. anaphase II |
|---------------|----------------|-----------------|----------------|
- _____ 4. Meiosis II
- | | |
|--|--|
| a. is preceded by the copying of DNA. | c. separates homologous chromosomes into opposite poles of the cell. |
| b. separates chromatids into opposite poles of the cell. | d. produces diploid offspring cells. |
- _____ 5. In oogenesis, a diploid reproductive cell divides meiotically to produce
- | | |
|--------------------------|--------------------------|
| a. one diploid gamete. | c. one haploid gamete. |
| b. four diploid gametes. | d. four haploid gametes. |

SHORT ANSWER Answer the questions in the space provided.

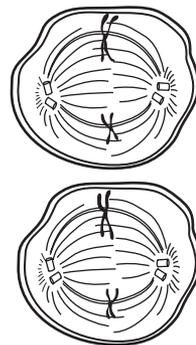
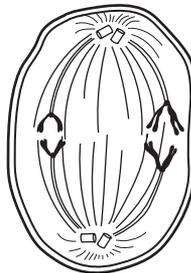
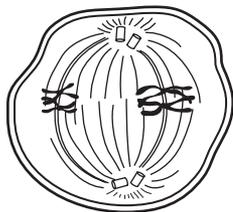
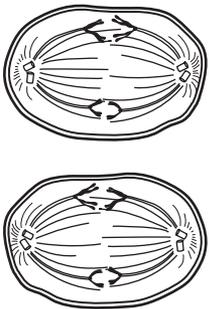
1. Describe two ways in which genetic recombination occurs during meiosis. _____

2. List the four phases of meiosis I, and briefly explain what occurs during each phase.

3. How do the products of meiosis I differ from those of meiosis II? _____

4. **Critical Thinking** What are one advantage and one disadvantage of asexual reproduction compared with sexual reproduction? _____

STRUCTURES AND FUNCTIONS In the spaces provided below, label each figure with the phase of meiosis that it represents.



a _____ b _____ c _____ d _____