Name Date Class

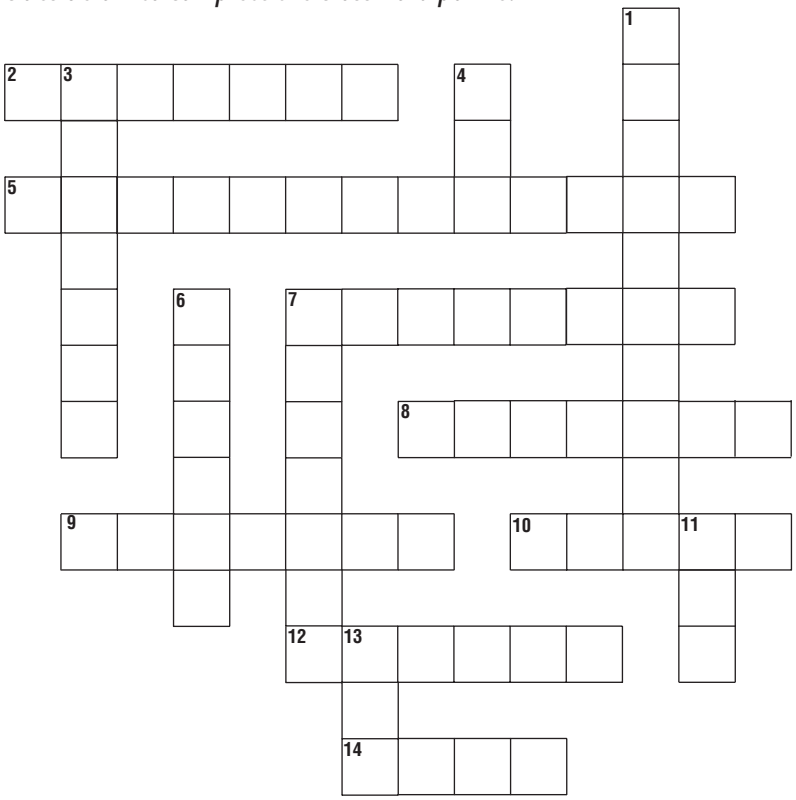
Chapter Review

Cell Reproduction

Chapter 12

Part A. Vocabulary Review

Directions: *Use the clues below to complete the crossword puzzle.*



Across

2. describes cells that do not have pairs of chromosomes

5. the joining of an egg and a sperm

7. any permanent change in a gene or chromosome of a cell

8. describes cells that have pairs of chromosomes

9. the process in which the nucleus divides to form two identical nuclei

10. cells formed in the male reproductive organs

12. type of reproduction when two sex cells, usually an egg and a sperm, come together

14. a section of DNA (on a chromosome) where instructions for making specific proteins are found

Down

1. a structure in the nucleus that contains hereditary material

3. type of reproduction when a new organism (sometimes more than one) is produced that has hereditary material identical to the parent organism

4. the code that contains all the information that an organism needs to grow and function

6. the cell that forms when an egg and a sperm join

7. a process by which haploid sex cells are produced

11. a type of nucleic acid that carries the codes for making proteins from the nucleus to the ribosomes

13. cells formed in the female reproductive organs which contain stored food along with the other cell parts

Assessment

Chapter Review (continued)

Part B. Concept Review

Directions: *Name the steps of mitosis described below. Write the terms in the blanks at the left.*

_____ **1.** nucleolus and nuclear membrane disappear, spindle fibers and centrioles appear

_____ **2.** duplicated chromosomes (pairs of chromatids) line up in the center of the cell and attach to spindle fibers at centromere

_____ **3.** centromere divides, chromatids split and identical chromosomes move to opposite ends of cell.

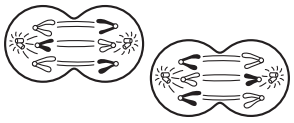
_____ **4.** spindle fibers disappear, new nucleus forms at each end of the cell

Directions: *Answer the following questions on the lines provided.*

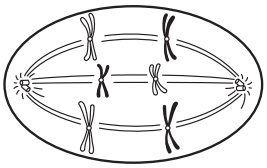
5. Name three examples of asexual reproduction.

a. _____ **b.** _____ **c.** _____

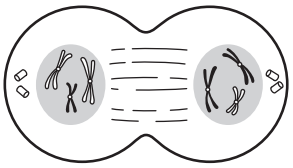
6. Name the steps of meiosis shown in the diagrams below.



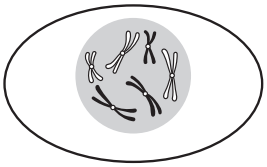
a. _____



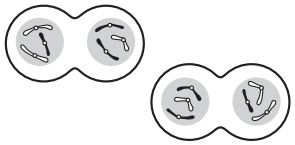
b. _____



c. _____



d. _____



e. _____

7. List three differences between mitosis and meiosis.

a. _____

b. _____

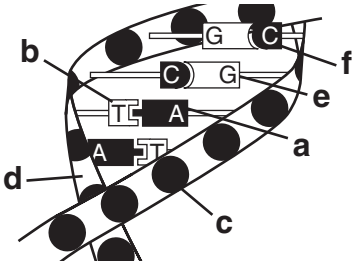
c. _____

8. Identify the six parts of the DNA molecule below.

a. _____

b. _____

c. _____



d. _____

e. _____

f. _____