

## Chapter 8 Photosynthesis

### Vocabulary Review

**Matching** *In the space provided, write the letter of the definition that best matches each term.*

- |                                     |   |
|-------------------------------------|---|
| _____ 1. photosynthesis             | a. clusters in the thylakoid membrane of chlorophyll and other pigments   |
| _____ 2. chlorophyll                | b. the region of the chloroplast outside the thylakoid membranes  |
| _____ 3. pigment                    | c. electron carrier   |
| _____ 4. adenosine triphosphate     | d. process in which plants use the energy of sunlight to make high-energy carbohydrates                           |
| _____ 5. thylakoid                  | e. reactions that use ATP and NADPH to produce high-energy sugars   |
| _____ 6. photosystems               | f. light-absorbing molecules  |
| _____ 7. stroma                     | g. the basic energy source of all cells   |
| _____ 8. NADP <sup>+</sup>          | h. reactions that produce oxygen gas and convert ADP and NADP <sup>+</sup> into the energy carriers ATP and NADPH |
| _____ 9. Calvin cycle               | i. saclike photosynthetic membranes in chloroplasts   |
| _____ 10. light-dependent reactions | j. principal pigment of plants  |

**Answering Questions** *In the space provided, write an answer to each question.*

11. What is an organism that obtains energy from the food it consumes? \_\_\_\_\_  
\_\_\_\_\_
12. What is an organism that is able to make its own food? \_\_\_\_\_  
\_\_\_\_\_
13. What is released when the chemical bond is broken between the second and third phosphates of an ATP molecule? \_\_\_\_\_  
\_\_\_\_\_
14. What are the reactants of the equation for photosynthesis? \_\_\_\_\_  
\_\_\_\_\_
15. What are the products of the equation for photosynthesis? \_\_\_\_\_  
\_\_\_\_\_