

**Chapter 8 Photosynthesis** **Section Review 8-2**

**Reviewing Key Concepts**

**Matching** Match each scientist with the appropriate experiment or conclusion. Write the letter of the correct scientist on the line provided. A letter may be used more than once.

- a. Priestley
  - b. van Helmont
  - c. Ingenhousz
- \_\_\_\_\_ 1. Plants need sunlight to produce oxygen.
  - \_\_\_\_\_ 2. Plants gain most of their mass by taking in water.
  - \_\_\_\_\_ 3. Using a candle and a jar, he observed that plants produce a substance that kept the candle burning.
  - \_\_\_\_\_ 4. He measured the mass of the soil in which a plant grew.
  - \_\_\_\_\_ 5. He observed plants exposed to light.

**Short Answer** On the lines provided, answer the following questions.

6. What is the overall equation for photosynthesis?  
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7. Explain how light energy affects a chlorophyll molecule.  
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**Reviewing Key Skills**

8. **Predicting** If a plant is kept under green-colored light for an extended period of time, what will happen to the plant's food production?  
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\_\_\_\_\_
9. **Inferring** A plant that has a high amount of the orange pigment carotene would have leaves of what color? Explain your answer.  
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10. **Design an Experiment** Design an experiment to test the effects of air pollution on plants. Be sure to include a control.  
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