

CONCEPT REVIEW

● **Photosynthesis and Respiration**

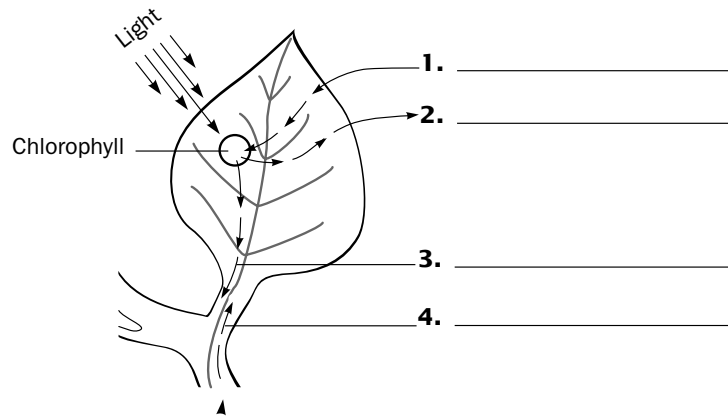
After it is labeled, the diagram below will illustrate photosynthesis. Write each of the following terms on the correct numbered line. Then answer the questions that follow.

Carbon Dioxide

Glucose

Oxygen

Water



5. a. In photosynthesis, what substances come in from the outside?

- b. What substances are produced?

6. Write the overall equation for photosynthesis in the space provided.

Answer the following questions relating to cellular respiration.

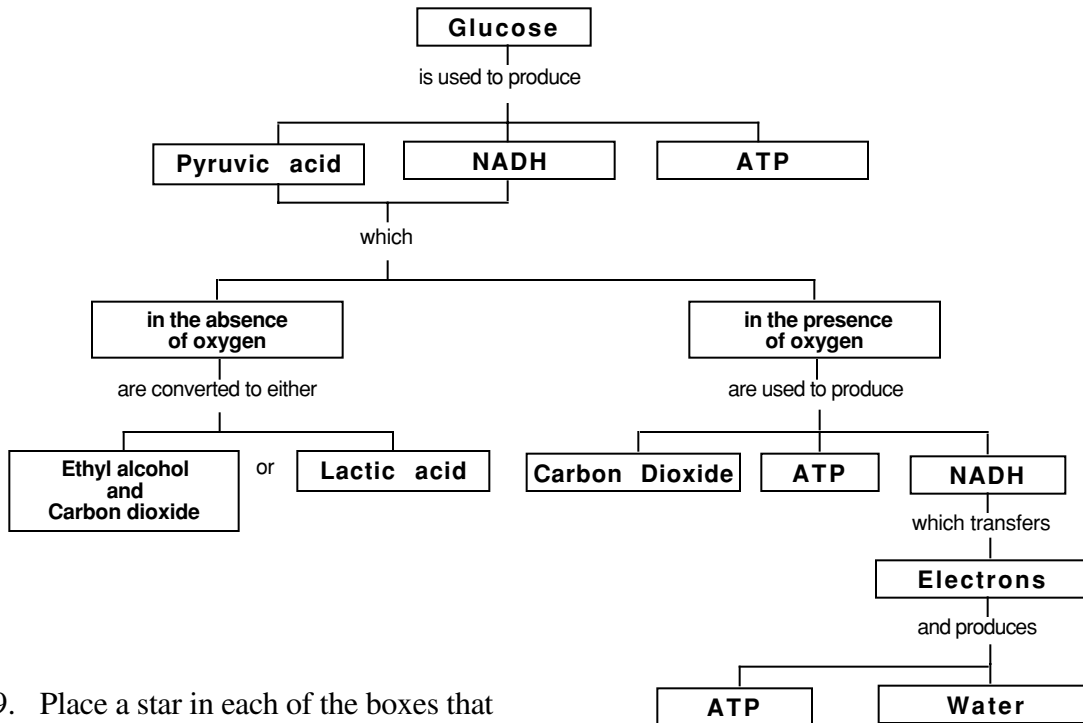
7. The purpose of cellular respiration is to _____ the energy from carbohydrates and other organic molecules stored during photosynthesis.

8. Write the formula that shows the release of energy by a molecule of ATP.

CONCEPT REVIEW

● **Photosynthesis and Respiration** *continued*

The concept map below illustrates cellular respiration. Compare the map with the discussion of this topic in your textbook. Then do the exercises that follow.



9. Place a star in each of the boxes that show stored energy.
10. Color the boxes in the concept map above.
Use one color for the boxes that show glycolysis. Then use different colors for (a) the path taken during fermentation and (b) the path taken during oxidative reproduction.
11. a. In the process of cellular respiration, what substance comes in from the outside?

b. What are the end products of the process?
12. Write the overall equation for oxidative respiration in the space below.
13. Compare and contrast the equation for oxidative respiration with the equation for photosynthesis.