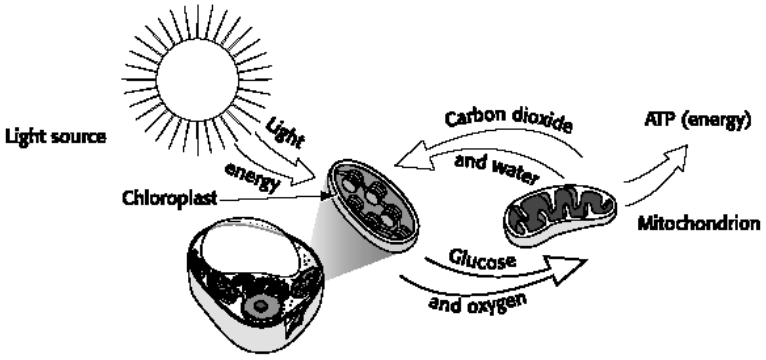
Cell Biology Name:

Photosynthesis & Respiration Connection Period:

Use Chapter 5, Section 1 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them.

bacteria	cellular respiration	fungi	lactic acid	oxygen	photosynthesis



Use the figure above and Figure 3 on p.150 to answer questions 1, 2, and 3.

_____ 1. Look at the figure. Which two processes does it show?
a. photosynthesis and breathing
b. breathing and growing
c. growing and cellular respiration
d. photosynthesis and cellular respiration

_____ 2. Look at the color coding in Figure 3. Where does the process of cellular respiration take place?
a. in the mitochondrion b. in the cell membrane c. in the fluids d. in the chloroplast

_____ 3. Look at the figure. Besides energy (ATP), what else is released during cellular respiration?
a. carbon dioxide (CO_2) and oxygen (O_2)
b. carbon dioxide (CO_2) and glucose ($C_6H_{12}O_6$)
c. carbon dioxide (CO_2) and water (H_2)

Connection Between Photosynthesis and Respiration (p.151)

4. When cells take in carbon dioxide (CO_2) to make glucose and release oxygen (O_2), it is called

_____ .

5. When cells use oxygen (O_2) to break down glucose and release carbon dioxide (CO_2), this is

_____ .

Fermentation (p.151)

6. Muscle cells use fermentation to get energy when they cannot get the gas _____ for cellular respiration.

7. The buildup of _____ causes muscle fatigue and a burning feeling in the muscles.

8. Besides occurring in animals, fermentation can also happen in _____ and

_____ .