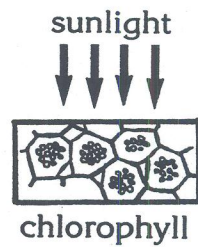
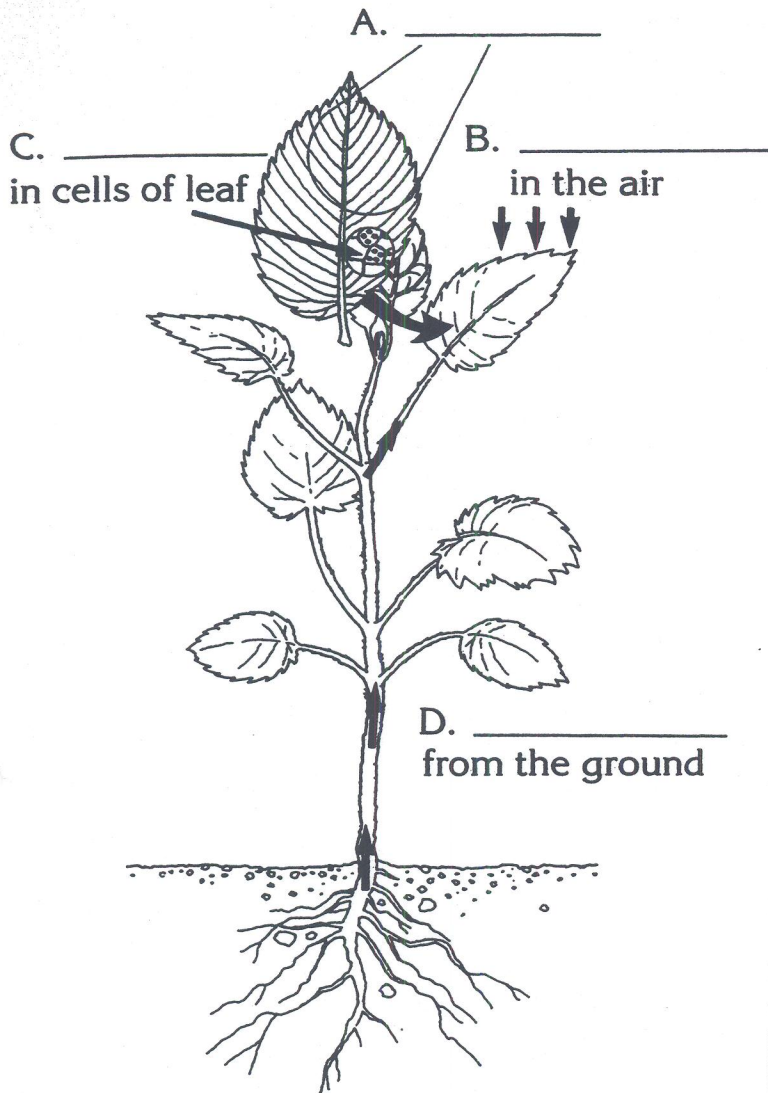
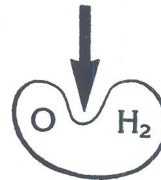


Photosynthesis

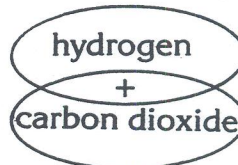
Photosynthesis is the process by which green plants manufacture food.



Chlorophyll absorbs sunlight energy; some is stored in the compound ATP.



Energy is released to split water molecule.



Hydrogen can combine with carbon dioxide.



Simple sugars (glucose) are formed.

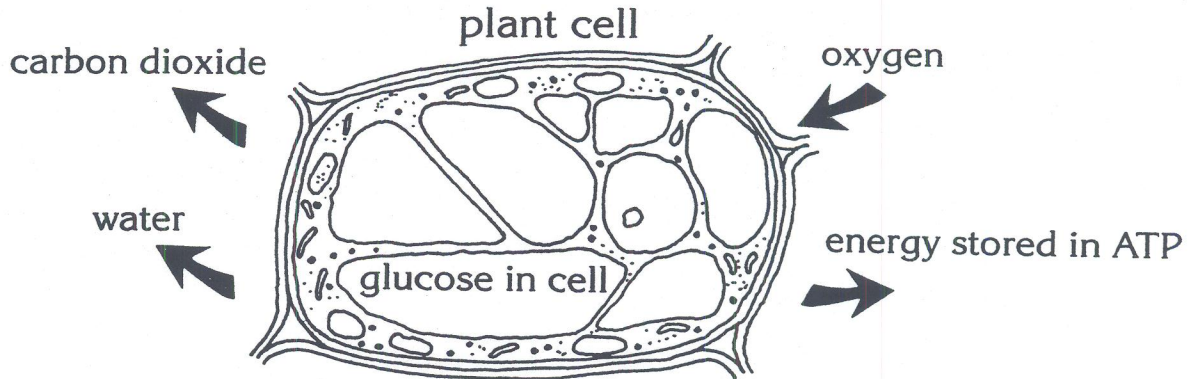
General Formula for Photosynthesis
(in the presence of light energy)



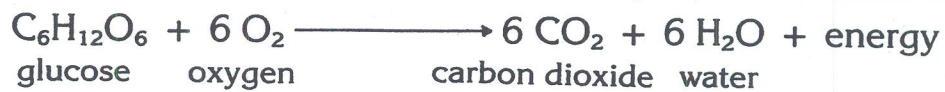
1. On lines A-D, label the major components of photosynthesis.
2. What compound serves to transfer and store energy for later use? _____
3. What is the general chemical equation for photosynthesis? _____
4. What gas is released into the air as a result of photosynthesis? _____
5. What inorganic substances are necessary for photosynthesis? _____
6. Could photosynthesis occur in a plant on a cloudy day? _____ Explain your answer.

Respiration

Respiration is the process by which energy is released for cell use.



General Formula for Respiration



1. Complete the comparison chart below by indicating the way each component listed is used or produced:

	Photosynthesis	Respiration
a. glucose	_____	_____
b. oxygen	_____	_____
c. carbon dioxide	_____	_____
d. water	_____	_____

2. The energy for respiration comes from _____.
3. What are the products of respiration? _____
4. In fermentation, glucose is broken down and carbon dioxide and alcohol are produced. Is fermentation a form of photosynthesis or respiration? _____

Explain your answer. _____

5. Write photosynthesis or respiration before each statement.

- _____ a. occurs day and night
- _____ b. occurs in all living plant cells
- _____ c. produces carbon dioxide gas
- _____ d. Glucose is formed.
- _____ e. Chlorophyll is energized.