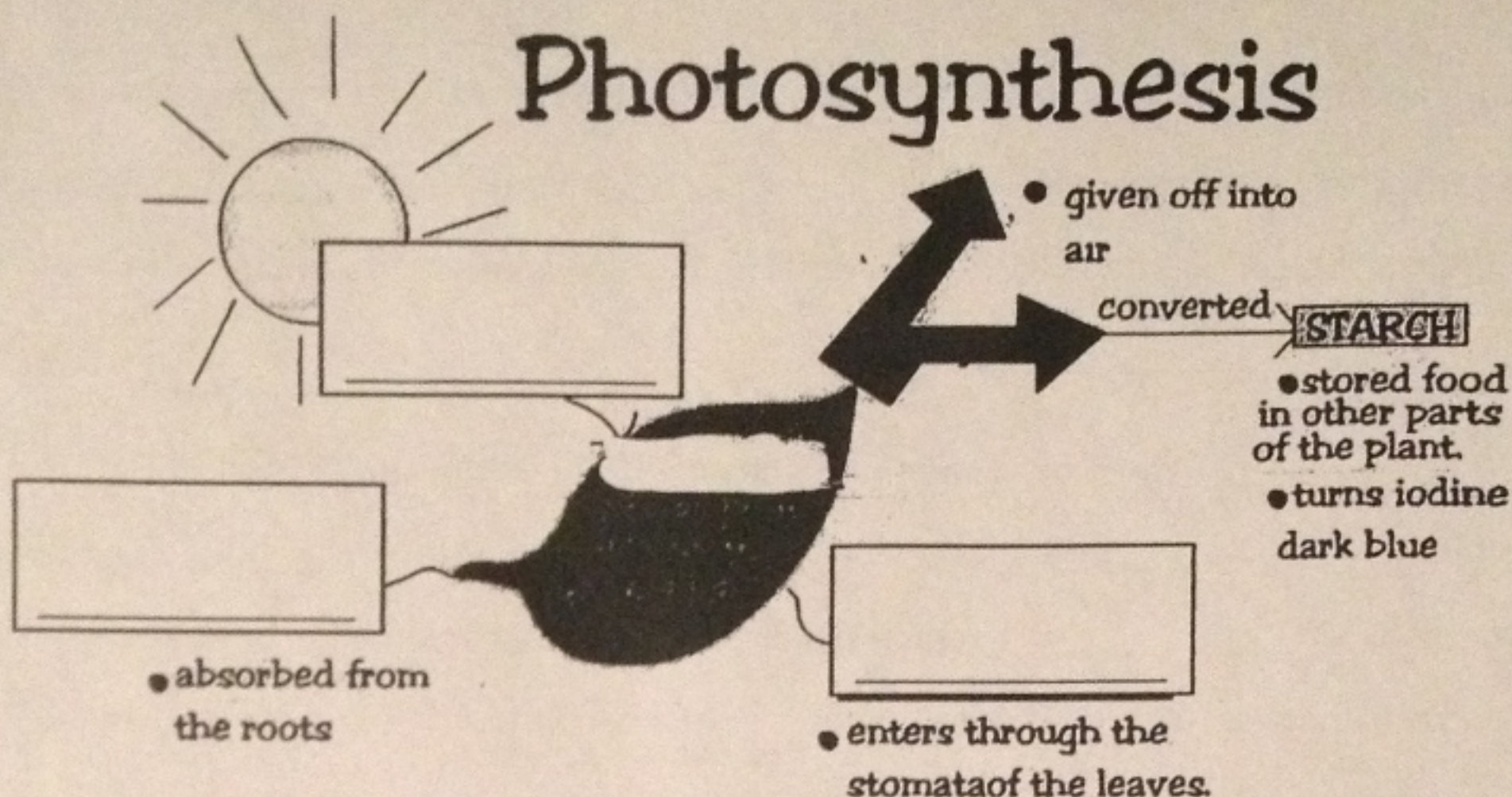


# Photosynthesis



## WORD BANK

**\*\*Words may be used more than once\*\***

Chemical Energy  
Light Energy  
Water  
Chlorophyll  
Carbon Dioxide  
Leaves  
Starch  
Sun

Food  
Uses  
Materials  
Roots  
Oxygen  
Inside  
Plant  
Roots

Capture(s)  
Animals  
Photosynthesis  
Glucose (Sugar)  
Stomata  
Chloroplast  
Stores  
Green Color

In the spring and the summer you will notice that the leaves on trees are green. This is because \_\_\_\_\_ is taking place. In order for \_\_\_\_\_ to occur, the leaf takes in certain \_\_\_\_\_ that will help with the process. A \_\_\_\_\_ needs to take a gas from the air called \_\_\_\_\_. Carbon dioxide comes from animals when they breathe. Plants also need \_\_\_\_\_, which they get from their \_\_\_\_\_ taking it out of the ground. The third thing that a plant needs to start \_\_\_\_\_ is the light from the \_\_\_\_\_.

Plants capture \_\_\_\_\_ and make their own \_\_\_\_\_ using it. The process of \_\_\_\_\_ is what allows the plants to make their own food. Photosynthesis allows the \_\_\_\_\_ each leaf to capture energy. The captured energy is used to build carbohydrates from simple raw materials (water, carbon dioxide and minerals). These carbohydrates, also known as \_\_\_\_\_, are the plants food. The plant \_\_\_\_\_ some of the

sugar, but also \_\_\_\_\_ some. Photosynthesis also needs the following raw materials to function: carbon dioxide and water. \_\_\_\_\_ breathe out \_\_\_\_\_, so this gives the plants the carbon dioxide they need. The materials enter the plant either at the \_\_\_\_\_ or the \_\_\_\_\_.

\_\_\_\_\_ the leaf there is chlorophyll. This chlorophyll is what \_\_\_\_\_ the sun's light. \_\_\_\_\_ is also what gives the leaves a \_\_\_\_\_. The sunlight is converted into \_\_\_\_\_, which is necessary to continue the process of photosynthesis. When this chemical energy is introduced to the carbon dioxide and the water, glucose (sugar) and oxygen are created. A very simple way to put this is: C \_\_\_\_\_ D \_\_\_\_\_ + W \_\_\_\_\_ + C \_\_\_\_\_ + S \_\_\_\_\_ = O \_\_\_\_\_ + S \_\_\_\_\_

There are different parts of the leaf that make this process possible. There are \_\_\_\_\_, which are pores on the underside of leaves. These pores let air enter the leaf and then at night the pores release \_\_\_\_\_ and they allow for water to evaporate. The chlorophyll is what gives the plants their green color. \_\_\_\_\_ is found in the cells of the plants inside chloroplasts. A \_\_\_\_\_ is like a home for chlorophyll.

## QUESTIONS

1. What do plants need to acquire to perform photosynthesis? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. Where does photosynthesis take place? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. What chemical is responsible for photosynthesis? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. How is photosynthesis an energy transfer? \_\_\_\_\_

5. Why is photosynthesis considered a biochemical process? \_\_\_\_\_

6. What are the products of photosynthesis? \_\_\_\_\_

7. What role do the stomata play in photosynthesis? \_\_\_\_\_

8. What role does chlorophyll play in photosynthesis? \_\_\_\_\_

9. What is the purpose of starch? \_\_\_\_\_