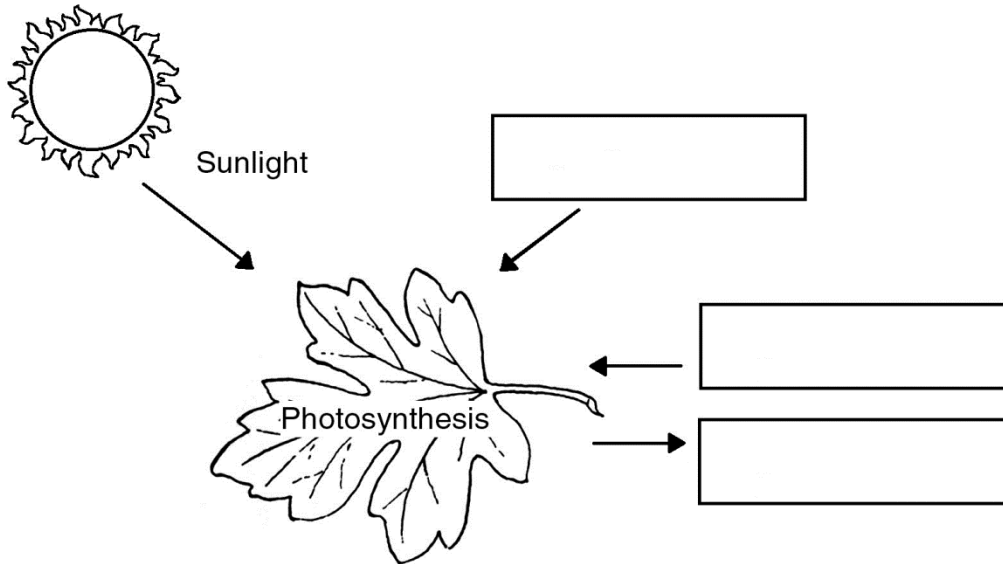


Lab 2. Photosynthesis: Where Does Photosynthesis Take Place in Plants?

1. Describe the process of photosynthesis and complete the diagram below.



2. Two students were discussing where photosynthesis happens within a plant. One student claimed that photosynthesis only occurs in the leaves of a plant. Another student claimed that photosynthesis occurs in the leaves and flowers of a plant. The table below contains data collected during an investigation. Each container was exposed to the same amount of light for the same amount of time.

Container	Contents	Initial CO₂ level	CO₂ level after 5 hours	CO₂ level after 10 hours
A	3 leaves	900 ppm	700 ppm	500 ppm
B	7 leaves	900 ppm	500 ppm	200 ppm
C	3 leaves and 1 flower	900 ppm	750 ppm	600 ppm
D	2 flowers	900 ppm	950 ppm	1,000 ppm

Use the data above to help support the student you most agree with.

3. The data that were generated in the scenario for question 2 came from an experiment.
 - a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer.

4. In science, experiments are better than systematic observations.
 - a. I agree with this statement.
 - b. I disagree with this statement.

Explain your answer, using an example from your investigation about photosynthesis.

5. It is important for scientists to understand the relationship between different quantities and how those relationships change over time. Explain why understanding a relationship between variables is important in science by using an example from your investigation about photosynthesis.

6. It is important for scientists to understand the flow of energy in a system. Explain why this is important, using an example from your investigation about photosynthesis.