

CSEC Human and Social Biology
Photosynthesis
Worksheet

Section A: Living Organisms and The Environment

Topic :Photosynthesis

Lesson Objectives, Students should be able to:

- 1. Explain the process of photosynthesis*
- 2. Investigate the effect of light and chlorophyll on the production of starch*

1.

- a. What is photosynthesis? (2 mks)
- b. Exactly why is photosynthesis so important?(2 mks)
- c. Where does photosynthesis occur?(1 mk)
- d. What raw materials are needed for the process of photosynthesis?(3 mks)
- e. Write the chemical reaction for photosynthesis.(2 mks)

2.

a. Photosynthesis is the process by which plants manufacture their food

i. Complete the word equation below for photosynthesis.

Water + _____ → Glucose + _____

ii. One condition necessary for photosynthesis is the presence of chlorophyll.

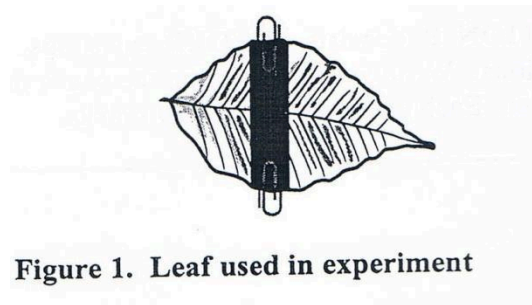
Name ONE OTHER condition necessary for photosynthesis.

b. Students in a class are asked to carry out the following experiment to investigate photosynthesis.

-Attach a strip of foil to the upper and lower surfaces of a leaf of a potted plant, as shown in figure 1.

-Put the plant in a sunny place.

-After a few days detach the leaf and test it for starch.



- i. List the steps involved in testing the leaf for the presence of starch.
- ii. What would you expect the results of the experiment on page 2 to be? Explain