- Chlorophyll traps solar energy that is used to prepare food from CO₂ and water. Thus, plants convert solar energy into chemical energy.
- Sun is the ultimate source of energy.
- Green plants absorb CO₂ from atmosphere through tiny pores called stomata. •
- Stomata are present on the surface of leaves. •
- Water and minerals are absorbed by roots from soil and are transported to leaves via tiny vessel-like structures present in roots, stems, the branches and the leaves.
- Chlorophyll, sunlight, CO₂ and water are essential raw materials for photosynthesis.
- Carbohydrates and oxygen are the end products of photosynthesis.
- The presence of starch in the leaves indicates the occurrence of photosynthesis.



Algae contain chlorophyll and prepare its own foodby the photosynthesis.
Sunlight is essential for photosynthesis.

1. Sunlight is essential for photosynthesis

plant in a dark comfor 1-2 days. This is done to ensure that the Place a healthy green poted plant consults acts reserve food anothe leaves do not contain any starch. Then, cover a portion of a leaf of this plant on both sides with two uniform pieces of black paper, fixed in position with two paper clips.

Now, expose this plant to bright light. After a few hours, remove the leaf and decolorized it with alcohol and test the presence of food (starch) with iodine solution.



You will observe that the portion of the leaf covered with black paper does not show any presence of starch (food).

2. Chlorophyll is essential for photosynthesis

Place a variegated plant (i.e. a plant which has both green and non-green areas, for e.g. croton or