Senior Secondary Biology
Topic: PHOTOSYNTHESIS-1
Scientists and their Contributions
Drag and Drop Exercise

Dear Student

You have studied **Photosynthesis for Higher Plants** *in your class. Now you may play this learning game. Here Ten (10) names of scientists and their contributions related to the chapter are provided. Choose from the list the proper names and place against the correct explanations. Enjoy and test yourself. Repeat to secure full marks.*

Created by: Dr. Abhijit Saha, Training Associate (Biology), ZIET Bhubaneswar, INDIA

Julius von Sachs	Ruben and Kamen	Hill and Bendall	Jan Ingenhousz
Cornelius van Niel	Melvin Calvin	Joseph Priestley	T.W Engelmann
Robert Hill	Hatch and Slack		

Sl	Description	Drop in this column
1	He revealed the essential role of air in the growth of green plants and discovered oxygen in 1774.	
2	He showed with an experiment that it is only the green part of the plants that could release oxygen.	
3	He found that the green parts in plants is where glucose is made, and that the glucose is usually stored as starch.	
4	The bacteria were used to detect the sites of O_2 evolution. He observed that the bacteria accumulated mainly in the region of blue and red light of the split spectrum. A first action spectrum of photosynthesis was thus described.	
5	Based on his studies of purple and green bacteria, demonstrated that photosynthesis is essentially a light-dependent reaction in which hydrogen from a suitable oxidisable compound reduces carbon dioxide to carbohydrates	
6	Showed that in the absence of CO_2, illuminated chloroplasts evolve reducing power and oxygen, probably through splitting or photolysis of water	
7	By using water having heavy isotope of oxygen ^{18}O, found that oxygen evolved in photosynthesis comes from water	
8	Using Chlorella and radioactive $^{14}CO_2$ found out the pathway of carbon assimilation	
9	Discovered C_4 cycle of CO_2 fixation	
10	Proposed Z-scheme of Light Reaction	