

# NCERT Solutions for 7th Class Science: Chapter 1-Nutrition in Plants









# NCERT Solutions for 7th Class Science: Chapter 1-Nutrition in Plants

Class 7: Science Chapter 1 solutions. Complete Class 7 Science Chapter 1 Notes.

### NCERT Solutions for 7th Class Science: Chapter 1-Nutrition in Plants

NCERT 7th Science Chapter 1, class 7 Science Chapter 1 solutions

Page No: 9

**Excercise** 



### 1. Why do organisms need to take food?

### Answer

Organisms need to take food to get energy and perform life process. The life process include nutrition, respiration, growth, excretion, reproduction and response to stimuli which can only be done by intake of food.

### 2. Distinguish between a parasite and a saprotroph.

### **Answer**

Parasite	Saprotroph
The organism that grows on the body of another organism and derives nutrients from it is known as a parasite.	The organism that obtains nutrients from the dead or decaying organic matter is called saprotroph.
They take the readymade food from the host.	They take the digested and decayed food.
They directly feed on living organisms for their nutrition.	They feed on dead and decaying organism.
Examples- Cuscuta and orchids.	Examples- Fungi and some bacteria.

### 3. How would you test the presence of starch in leaves?

### Answer

Steps to test the presence of starch in leaves:

Step 1: A fresh leaf is taken.

Step 2: The leaf is boiled in water for few minutes to kill the cells in the leaf.

Step 3: Now, dip this leaf in iodine solution.





Step 4: The color of the leaf will changes into blue black color when iodine is added to it which shows the presence of starch in it.

### 4. Give a brief description of the process of synthesis of food in green plants.

### Answer

Photosynthesis is the process synthesis of food in the plants with the help of chlorophyll and carbon dioxide in the presence of sunlight.

Water and minerals present in the soil are absorbed by the roots and transported to the leaves by the vessels.

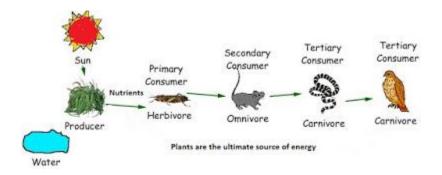
Carbon dioxide from air is taken through stomata present in leaves.

Leaves are the food factories of the plants which capture the energy of the sunlight with the help of chlorophyll. This energy is used to synthesize food from carbon dioxide and water.

### 5. Show with the help of a sketch that the plants are the ultimate source of food.

### Answer

The food chain shows that the plant is the ultimate producer. Only plant can produce food and rest of other organisms are directly or indirectly dependent on it.



### 6. Fill in the blanks:





(a) Green plants are calledfood.	since they synthesise their own
(b) The food synthesised by the plants is	stored as
(c) In photosynthesis solar energy is capt	ured by the pigment called
(d) During photosynthesis plants take in	and release
Answer	
(a) Green plants are called autotrophs since	they synthesise their own food.
(b) The food synthesised by the plants is store	red as starch.
(c) In photosynthesis solar energy is capture	d by the pigment called chlorophyll.
(d) During photosynthesis plants take in carb	on dioxide and release oxygen.
7. Name the following:	
(i) A parasitic plant with yellow, slender a	nd tubular stem.
(ii) A plant that has both autotrophic and	neterotrophic mode of nutrition.
(iii) The pores through which leaves exch	ange gases.
Answer	
(i) Cuscuta (Amarbel)	
(ii) Pitcher plant	
(iii) Stomata	
8. Tick the correct answer:	
(a) Amarbel is an example of:	
(i) autotroph	
https://www.indcareer.com/schools/ncert-solution	ns-for-7th-class-science-chapter-1-nutrition-in-p



ants/



(ii) parasite

(iii) saprotroph

(iv) host	
► (ii) parasite	
(b) The plant	which traps and feeds on insects is:
(i) Cuscuta	
(ii) china rose	
(iii) pitcher pla	nt
(iv) rose	
► (iii) pitcher	plant
9. Match the	items given in Column I with those in Column II:
Column I	Column II
Chlorophy II	Bacteria
Nitrogen	Heterotroph s
Amarbel	Pitcher Plant
Animals	Leaf
Insects	Parasite
Answer	





Column II

Column I

Chlorophyl Leaf

l

Nitrogen Bacteria

Amarbel Parasite

Animals Heterotroph

S

Insects Pitcher

**Plant** 

Page No: 10

10. Mark 'T' if the statement is true and 'F' if it is false:

- (i) Carbon dioxide is released during photosynthesis. (T/F)
- ► False
- (ii) Plants which synthesise their food themselves are called saprotrophs. (T/F)
- ► False
- (iii) The product of photosynthesis is not a protein. (T/F)
- ► True
- (iv) Solar energy is converted into chemical energy during photosynthesis. (T/F)
- ► True
- 11. Choose the correct option from the following:





### Which part of the plant takes in carbon dioxide from the air for photosynthesis?

(i) Root hair

(II) Stomata
(iii) Leaf veins
(iv) Sepals
► (ii) Stomata
12. Choose the correct option from the following:
Plants take carbon dioxide from the atmosphere mainly through their:
(i) roots
(ii) stem
(iii) flowers
(iv) leaves
► (iv) leaves
NCERT 7th Science Chapter 1, class 7 Science Chapter 1 solutions
———————





### Chapterwise NCERT Solutions for Class 7 Science:

- <u>Chapter 1 Nutrition in</u> Plants
- Chapter 2 Nutrition in Animals
- Chapter 3 Fibre to Fabric
- Chapter 4 Heat
- Chapter 5 Acids, Bases and Salts
- Chapter 6 Physical and Chemical Changes
- Chapter 7 Weather,
   Climate and Adaptations
   of Animals to Climate
- Chapter 8 Winds, Storms and Cyclones
- Chapter 9 Soil

- Chapter 10 Respiration in Organisms
- <u>Chapter 11 Transportation</u> <u>in Animals and Plants</u>
- <u>Chapter 12 Reproduction</u> in Plants
- Chapter 13 Motion and Time
- Chapter 14 Electric
   Current and Its Effects
- Chapter 15 Light
- Chapter 16 Water: A
  Precious Resource
- <u>Chapter 17 Forests: Our</u> <u>Lifeline</u>
- Chapter 18 WastewaterStory





### **About NCERT**

The National Council of Educational Research and Training is an autonomous organization of the Government of India which was established in 1961 as a literary, scientific, and charitable Society under the Societies Registration Act. The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc. Organise pre-service and in-service training of teachers; develop and disseminate innovative educational techniques and practices; collaborate and network with state educational departments, universities, NGOs and other educational institutions; act as a clearing house for ideas and information in matters related to school education; and act as a nodal agency for achieving the goals of Universalisation of Elementary Education. In addition to research, development, training, extension, publication and dissemination activities, NCERT is an implementation agency for bilateral cultural exchange programmes with other countries in the field of school education. Its headquarters are located at Sri Aurobindo Marg in New Delhi. Visit the Official NCERT website to learn more.

