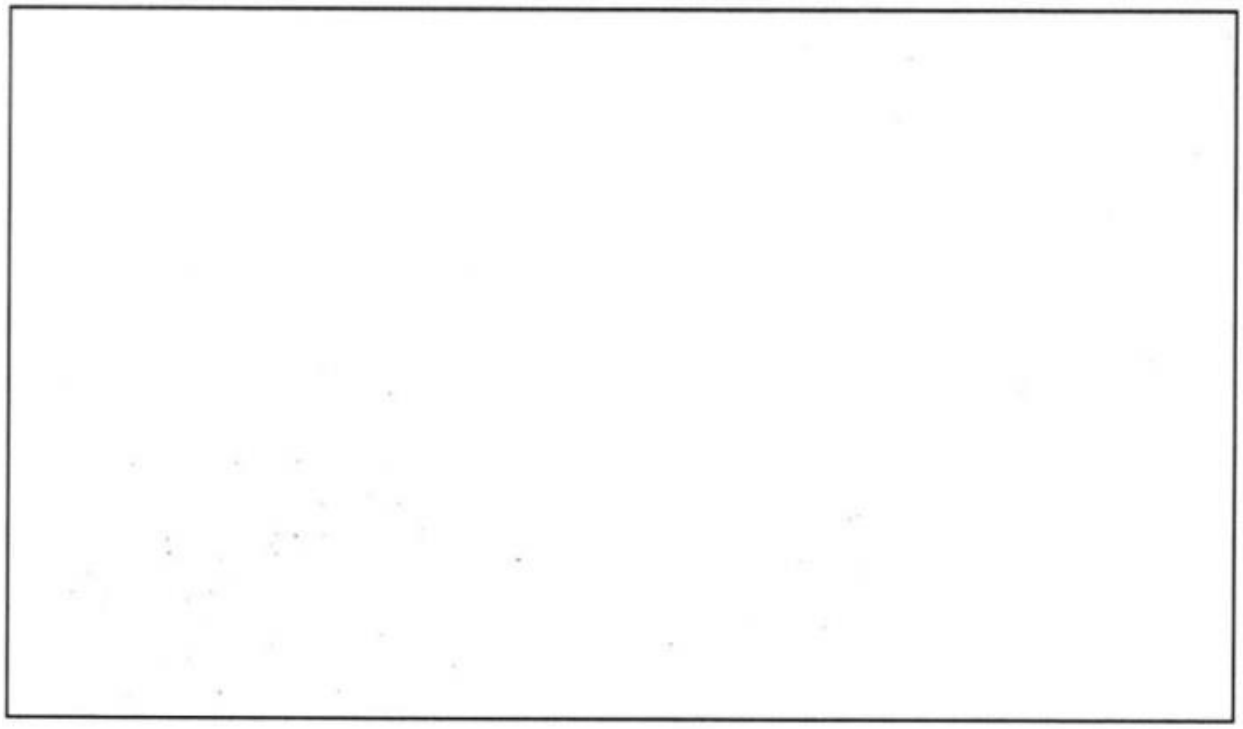
Grade 7 Nutrition in Plants Worksheets

A. Answer the following questions in short:

1. Why do organisms need to take food?
2. Distinguish between a parasite and a saprophyte.
3. How would you test the presence of starch in leaves?
4. Give a brief description of the process of photosynthesis of food in green plants.
5. Show with the help of a sketch that the plants are the ultimate source of food.



6. Name all the nutrients present in food.
7. What is photosynthesis?
8. Define nutrition.
9. Name the organs associated with photosynthesis.
10. We make our own food in the kitchen. This means that humans are also autotrophs. Do you agree? Give reasons.
11. How can we protect our things from getting spoiled?

B. Fill in the blanks:

1. Green plants are called …….. since they synthesise their own food.
2. The food synthesised by the plants is stored as …….. .
3. In photosynthesis solar energy is captured by the pigment called …….. .
4. During photosynthesis plants take in …….. and release …….. .

5. …….. are chemical substances present in food.
6. A fungus we like to eat is …….. .
7. Mode of nutrition in algae is …….. .

C. Name the following:
1. A parasite plant with yellow, slender and tubular stem. …….
2. A plant that has both autotrophic and heterotrophic mode of nutrition. ……
3. The pores through which leaves exchange gases. ……..

D. Tick (✓) the correct option:
1. Amarbel is an example of:
(a) autotroph
(b) parasite
(c) saprotroph
(d) host

2. The plant which traps and feeds on insects is:
(a) Cuscuta
(b) China rose
(c) Pitcher plant
(d) Rose

3. Plants take carbon dioxide from the atmosphere mainly through their:
(a) roots
(b) stem
(c) flowers
(d) leaves

4. Which part of the plant takes in carbon dioxide from the air for photosynthesis?
(a) Root hair
(b) Stomata
(c) Leaf veins
(d) Sepals

5. Which of the following is used from the atmosphere during photosynthesis?
(a) Oxygen
(b) Hydrogen
(c) Minerals
(d) Carbon dioxide

6. Water reaches the leaves from root by:
(a) stomata
(b) phloem
(c) xylem
(d) all of these

E. Match the following:

'A'	'B'
1. Chlorophyll	a. Bacteria
2. Nitrogen	b. Heterotrophs
3. Amarbel	c. Pitcher plant
4. Animals	d. Leaf
5. Insects	e. Parasite

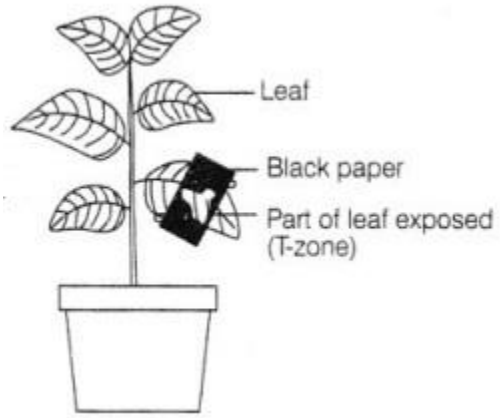
F. State 'True' or 'False':
1. Carbon dioxide is released during photosynthesis. …….
2. Plants which synthesise their food themselves are called saprotrophs. ……..
3. The product of photosynthesis is not a protein. …….
4. Solar energy is converted into chemical energy during photosynthesis. …….
5. Pitcher plant is a carnivore. …….
6. Product of photosynthesis is water and light. …….
7. Tiny openings present in leaf surface is called stomata. …….

G. Give two examples of each:
1. Useful fungi
(i)
(ii)

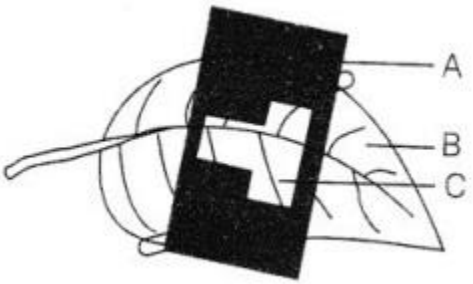
2. Leguminous plants
(i)
(ii)

H. The figure given below shows an experimental set up.
Following are the steps needed to do a starch test but in random order. Arrange these steps in correct order:
1. Pluck a leaf from the plant.

2. Leave the potted plant out in the sun for a few hour.
3. Boil the leaf in alcohol.
4. Boil the leaf in water.
5. Wash the leaf and then add a few drops of iodine solution over it.

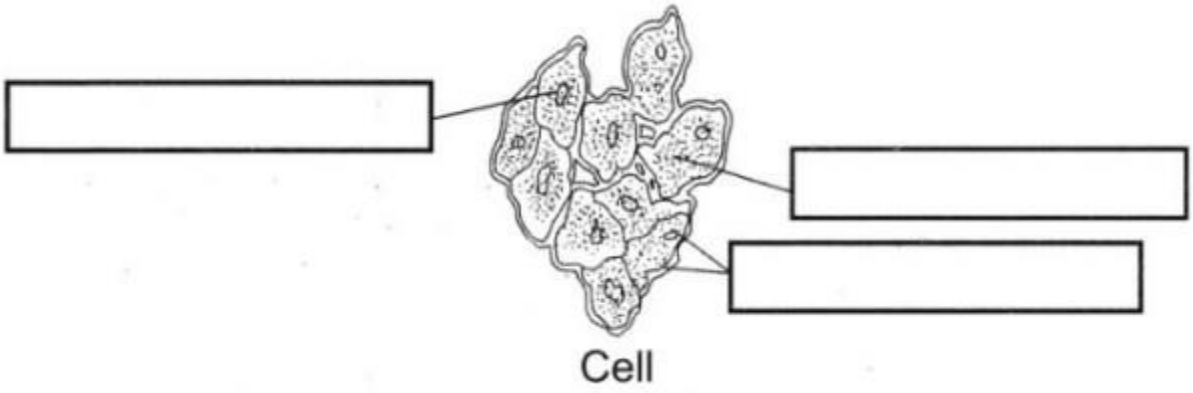


I. After adding iodine colour change in parts A, B and C of the leaf is seen. Give reason for the observation:



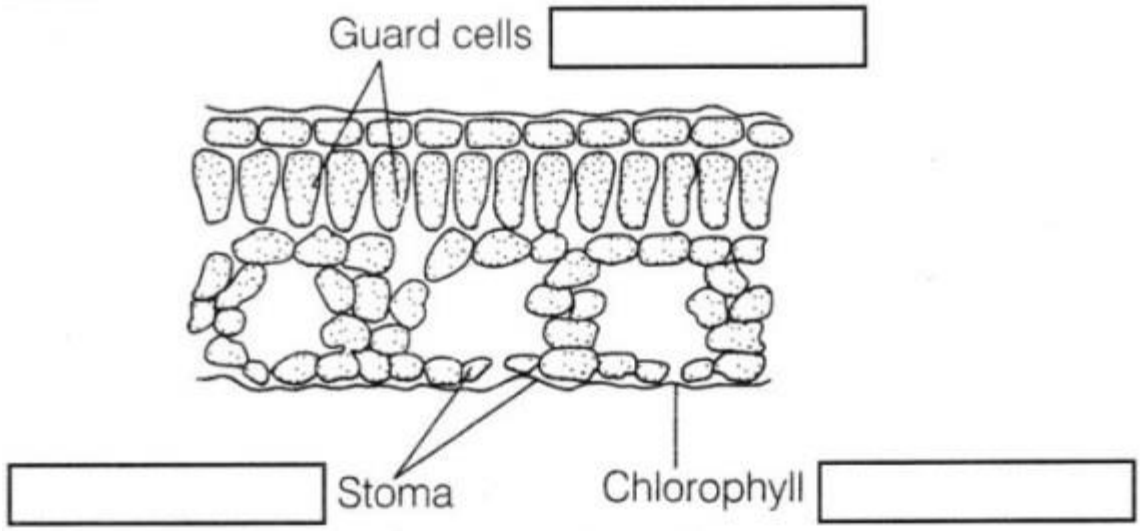
1. Part A
2. Part B
3. Part C

J. Label the different parts of the figure given below:



K. Correct the incorrectly labelled parts in the figure of section of a leaf below:

A section of leaf:



L. Science Puzzle:

Solve the following crossword puzzle:

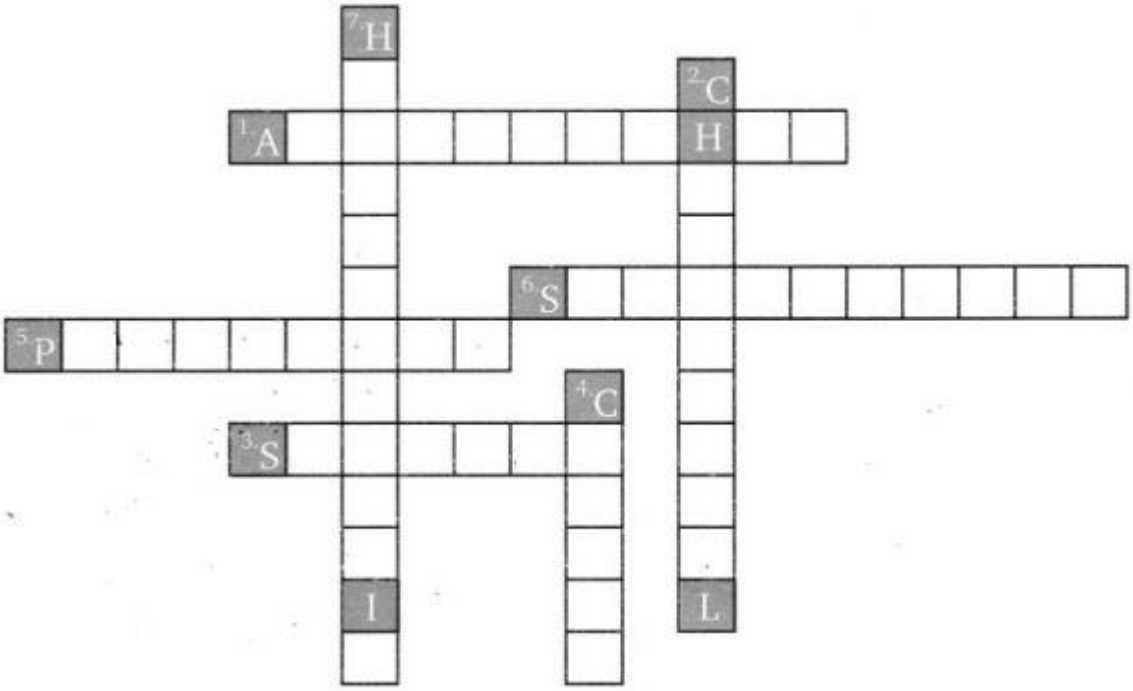
Across (→)

1. Mode of nutrition by green plants.
3. Small aerating pores present in the leaf.
5. In Cuscuta, this type of heterotrophic nutrition is found.
6. Organisms which feed on dead and decaying organic matter.

Down (↓)

2. A green pigment present in leaves.
4. An unusual plant adapted to grow in extremely hot and dry environment.

7. A mode of nutrition found in non-green plants.



M. Draw a diagram of a pitcher plant showing lid and pitcher:

N. Visit a green house if there is one near your place. Observe how they raise plants. Find out how they regulate the amount of light, water and carbon dioxide to grow the plants.