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Subject - Science
Class - 7th

Chapter - 1

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Task A - Read the chapters

Task B - Write down these Q/A in your fair-note-book.

Q1. What is nutrition?

A. The mode of taking food by any organism and its digestion in the body.

Q2. What are nutrients?

A. The components of food are called nutrients.

Q3. What are components of food?

A. Carbohydrates, Fats, vitamins, proteins, minerals etc. are the components of food.

Q4. What are autotrophs? Give eg.

A. Do it yourself.

Q5. What are heterotrophs? Give eg.

A. Do it yourself.

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Nutrition in Plants

In Class VI you learnt that food is essential for all living organisms. You also learnt that carbohydrates, proteins, fats, vitamins and minerals are components of food. These components of food are called **nutrients** and are necessary for our body.

All living organisms require food. Plants can make food for themselves but animals including humans cannot. They get it from plants or animals that eat plants. Thus, humans and animals are directly or indirectly dependent on plants.



Boojho wants to know
how plants prepare
their own food.

1.1 MODE OF NUTRITION IN PLANTS

Plants are the only organisms that can prepare food for themselves by using water, carbon dioxide and minerals. The raw materials are present in their surroundings.

The nutrients enable living organisms to build their bodies, to grow, to repair damaged parts of their bodies and provide the energy to carry out life processes. **Nutrition** is the mode of taking food by an organism and its

utilisation by the body. The mode of nutrition in which organisms make food themselves from simple substances is called **autotrophic** (*auto* = self; *trophos* = nourishment) nutrition. Therefore, plants are called **autotrophs**. Animals and most other organisms take in food prepared by plants. They are called **heterotrophs** (*heteros* = other).



Paheli wants to know why
our body cannot make food
from carbon dioxide, water
and minerals like plants do.

Now we may ask where the food factories of plants are located: whether food is made in all parts of a plant or only in certain parts? How do plants obtain the raw materials from the surroundings? How do they transport them to the food factories of plants?

1.2 PHOTOSYNTHESIS — FOOD MAKING PROCESS IN PLANTS

Leaves are the food factories of plants. Therefore, all the raw materials must reach the leaf. Water and minerals present in the soil are absorbed by the roots and transported to the leaves. Carbon dioxide from air is taken in