

Worksheet
Subject – Science
Class – IV
Chapter – Adaptations in Plants

Synopsis :-

Plants grow all over the world depending on the conditions of soil, temperature and rainfall. This is what we call “Adaptations in Plants”.

❖ Plants that grow on land are called **Terrestrial Plants**. **Terrestrial Plants** are adapted to different regions on lands such as **mountains**, **plains**, **deserts**, **coasts** and **marshy areas**.

A) **Plants of cold climate :-** Plants like the pine, fir, spruce and cedar grow in mountainous or hilly areas. These plants are cone shaped. They have needle-like leaves which are covered with a waxy coating which prevents damage to the leaves from snow.

B) Plants of plains :-

❖ Trees like the oak, mango, peepal and banyan grow in the plains. These trees can bear the heat of summer but in winter they shed their leaves to protect themselves against the cold. Hence they are called deciduous trees.

C) Plants in desert areas :-

❖ Plants like the cactus, prickly pear and date palms which need very little water to survive grow in the desert areas. These plants are also called xerophytes .

D) Plants of hot and damp climate :-

❖ Plants like the coconut, teak , sugarcane and rubber trees grow in hot and damp climate. These plants have lot of leaves but they do not shed them.

E) Plants of marshy areas :-

❖ Plants that grow in marshy or swampy areas are called mangroves. As the soil in swampy areas is filled with water the roots of mangroves do not get air to breathe. So they have developed breathing roots which grow above the soil to breathe.

❖ Plants that grow in water are called Aquatic plants. Aquatic plants are of three types (a) Floating Plants (b) Fixed Plants (c) Underwater Plants.

- (a) Water hyacinth and the duckweed are examples of floating plants. These light, spongy plants float freely on the surface of the water. Their stems are reduced and roots are poorly developed.
- (b) Some plants like water lily and lotus are fixed plants. They have a long hollow and flexible stem to reach the surface of the water and withstand water currents.
- (c) Pond weed and tape grass are examples of underwater plants. They have thin, narrow leaves with no pores. They breathe through their body surface.

❖ Plants such as mushrooms and moulds are non green plants. They live on other plants, so they are called Parasites.

❖ Venus flytrap and the pitcher plant are called insectivorous plants as they eat insects for food.

❖ Cereal grains belong to the grass family of the plant kingdom.

❖ Grass is also used as food for animals like cows, sheep and horses.

A) Fill in the blanks :-

1. Plants that grow on land are called _____ plants.
2. The first plants on Earth were the _____ plants which lived in the sea over _____ billion years ago.
3. Plants which grow in water are called _____ plants.
4. A _____ trap insects.
5. _____ and _____ are examples of fixed plants.

B) Answer the following questions briefly :-

1. How many types of plants are there in the world ?
2. What are terrestrial plants ?
3. What are the different conditions that are essential for the growth of plants ?
4. What are xerophytes ?
5. What are mangroves ?

Science Exercise page 17 and 18.

A) Very short answer type questions :

D) Match the following :

E) State whether the following statements are true or false :

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