



**CLASS: IV**

**Subject: Science**

**Date: 11-06-2020**

**Topic: Adaptations in plants**

**Time Limit: 30 Mins**

***Worksheet No. : 14***

*[Copy the questions following the notes and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]*

***##Good morning children !!!!***

***##I hope you all are doing fine !!!!***

***##Today, we are going to learn the question-answers of the chapter "Adaptations in plants" and we are going to try to solve few questions regarding the same chapter !!!!***

## **Adaptations in plants:-**

### **A. Answer the following questions in one word :-**

1. What is the ability to change in order to survive in natural habitat called?
2. What are the plants living on land called?
3. What are the plants that shed their leaves called?
4. Give an example of an insect-eating plant.
5. Which habitat receives very little or no rainfall?

## **Learning time**

### **B. Learn the scientific reasons for the following statements :-**

#### **1. Desert plants have small leaves or no leaves -**

Ans. Desert plants have small leaves or no leaves in order to minimize the loss of water from their bodies.

#### **2. Mangrove trees have roots above the ground -**

Ans. Mangrove trees grow in marshy regions. The soil in marshy regions has more water and very little or no air. The roots of mangrove trees grow above the soil to breathe.

### **C. Learn the answers of the following questions :-**

#### **1. What are the adaptations of plants that live in deserts?**

Ans. Desert plants like Cactus, Date palm and Acacia show the following adaptations -

- ★ The leaves are reduced to thin and sharp spines to minimize the loss of water.
- ★ The stem, instead of leaves, is modified to store water.
- ★ The stem contains chlorophyll and performs photosynthesis for the plants.
- ★ The roots are spread out and are embedded deep in the soil to absorb water.

#### **2. What are conifers? How do they survive in their habitat?**

Ans. Fir, Pine, Cedar and Spruce are some common examples of trees found in the hilly areas. They usually do not have flowers, instead, they have cones. They are called conifers.

Adaptations of conifers to survive in hilly regions -

- Conifers are tall and conical in shape. The conical shape of the trees helps the snow to slide off the trees easily.
- They have needle-shaped leaves with a waxy coating to protect them from the cold and from strong winds.
- They do not have flowers, instead, they have cones.

### 3. How do plants survive in marshy areas?

Ans. Adaptations of mangrove trees to survive in marshy regions -

- The soil in marshy regions has more water and very little or no air to breathe. Therefore the roots of mangrove plants grow above the clayey soil to breathe.
- Apart from this, stilt roots grow under water from the trunk of the plant to support the plant.

### 4. What are the differences between deciduous and evergreen trees?

Ans.

<u>Evergreen trees</u>	<u>Deciduous trees</u>
1. Some trees in the plains remain green throughout the year. These are called evergreen trees .	1. Some trees shed their leaves in autumn and get new leaves in spring. These trees are called deciduous trees.
2. Mango and Banyan are two common examples of evergreen trees.	2. Peepal, Sheesham and Gulmohar are some examples of deciduous trees.

### D. . Learn the answer of the following long answer questions :-

#### 1. State the differences between the three types of water plants.

Ans.

Floating plants	Fixed plants	Underwater plants
1. These plants float on the surface of water. The roots of these plants are not fixed in the soil at the bottom.	1. The roots of these plants are fixed at the bottom of the pond.	1. These plants are completely submerged in water.

2. These plants have light spongy stems that help them remain light in weight.	2. They have a long hollow stem that is light and flexible. It helps them to remain afloat and move with the water, so that they do not get damaged.	2. These plants have a long and flexible stem which moves along with water.
3. Leaves of floating plants are generally tough because they have to withstand the weather and water movement.	3. The leaves of these plants are broad and flat, so that they get sufficient sunlight and air. They have numerous stomata.	3. The leaves of these plants are thin and tiny. They do not have stomata.
4. Example :-Duckweed, water hyacinth and water lettuce.	4. Example :- Water lily and lotus	4. Example :-Hydrilla, Tape grass and pondweed.

## 2. How are plants in desert regions different from the plants in hilly areas?

Ans. Plants in deserts areas are different from plants in hilly regions.

- Leaves of plants in deserts are reduced to thin and sharp spines to minimize the loss of water, whereas plants in hilly areas have needle-shaped leaves with a waxy coating to protect them from the cold and from the strong wind.
- The stems of plants in deserts, instead of leaves, are modified to store water and these stems contain chlorophyll and perform photosynthesis for the plants. But the trees in hilly areas are tall and conical in shape. The conical shape of the trees helps the snow to slide off the trees easily.
- The roots of plants in deserts are spread out and are embedded deep in the soil to absorb water, whereas the trees in hilly areas do not have flowers, instead, they have cones.

**##This was all for today**

**## See you in the next science class with a new chapter**

**##Stay healthy, Stay safe .**