












RECAP ZONE

-  New plants grow from seeds.
-  A seed has seed coat, seed leaves and a small baby plant inside it.
-  Germination is the process of converting seed into a seedling.
-  Air, water and warmth are necessary for the germination of seeds.
-  The process of scattering seeds away from the mother plant is called dispersal.
-  Seeds are dispersed by wind, water, human beings, animals and birds.
-  Plants can also reproduce through stem, roots, leaves and spores.
-  Fertilisers and manure help the plants to grow well.
-  Pesticides and insecticides protect the plants from being destroyed by pests.



Revision Zone

A. Tick (✓) the correct answer.

1. Which one is a monocot seed?
 (a) Pea (b) Gram (c) Wheat
2. Air, water and are necessary for germination.
 (a) pressure (b) soil (c) sunlight
3. Which one is an underground stem?
 (a) Carrot (b) Radish (c) Potato
4. Which plant reproduce through spores?
 (a) Fungi (b) Rose (c) Sugarcane
5. Which one is a rabi crop?
 (a) Rice (b) Maize (c) Wheat

B. Circle the correct word in the following.

1. The plumule grows into the shoot / root.
2. Warmth makes the seed active / inactive.
3. Rose is grown from the stem cutting / root.
4. Kharif crops are grown in summer / winter.
5. Manure is made from cow dung / chemicals.

C. Give two examples of each of the following:

1. Seeds dispersed by wind
2. Seeds dispersed by water



3. Seeds dispersed by animals
4. Seeds dispersed by explosion

D. Answer the following questions.

1. How does a seed germinate to a new plant?
2. Describe the structure of a seed with a well labelled diagram.
3. Distinguish between kharif crops and rabi crops.
4. Why is dispersal of seeds necessary?
5. Name the steps of agriculture.

HOTS

1. Why do cotyledons shrink and disappear after the seedling develops leaves?
2. Manure is better than fertilisers. Why?



Creative Zone

A. Puzzle

Do you know the world's fastest growing plant on land? Solve this puzzle and read the circled letters downwards.

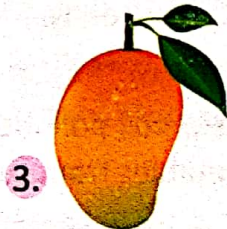


1.



2.

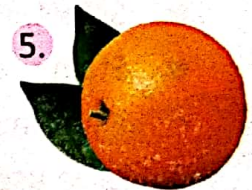
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6.	○					



3.



4.



5.



6.

B. Field Trip

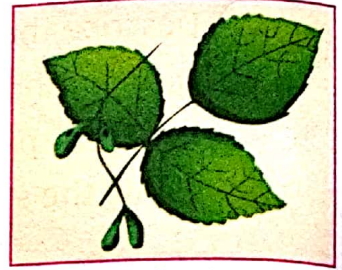
Request your teacher to take you to the school garden and arrange a meeting with the gardener. Ask him the following questions and note down the answers in your note pad.

- * The names of the plants grown in the garden.
- * Season in which each of the plant was grown.

- * Name of the fertilisers used to grow the plants.
- * Name of the pesticides used to protect the plants.
- * Time taken by the plants to grow.

C. Become a Leaf Expert

Collect different leaves for a few days. Wrap every leaf in a wet cloth and take it home. Put each leaf in a newspaper and place a heavy book on it. You can put each leaf under your mattress or a trunk. Take out the leaves after a week. Paste them on different papers. Bind these papers in the form of a book. This book is called herbarium. Thus you can become an expert of leaves.



herbarium

D. Divide the class into four groups. Each group should have two different kinds of seeds or seedlings. Each group can then choose a small area to plant these seeds or seedling. Observe them growing into young plants.

Describe the parts of the plant—leaves, stem, flowers, etc. of your group's plants. Prepare a scrapbook on the plants.

E. Van Mahotsav and Social Forestry are tree plantation programmes. They are organised in rainy season. During these programmes, trees are planted in waste lands, and on road sides. Find out more about these programmes from the Internet.



Van Mahotsav



Values to Learn

A. To prepare a natural insecticide

- * Take few neem leaves.
- * Dry them and grind them into a fine powder.
- * Soak this powder in 1 litre of water for 8 to 10 hours.
- * Strain the liquid and your natural insecticide is ready.
- * You can spray it on your plants now.

- B.
1. Excessive use of pesticides and fertilisers causes soil pollution. These chemicals are also absorbed by plants. Consuming fruits and vegetables from such plants can be harmful for us.
 2. 'Organic food' is grown without chemical fertilisers or pesticides. Read more about such food. The next time you visit a supermarket, look for the section selling organic food. Make a poster to share the information you have collected with others. Display it in your school.