

**LESSON PLAN****SPECIFIC OBJECTIVES**

The students will learn about

- ✧ soil—an important natural resource
- ✧ layers of soil
- ✧ components of soil
- ✧ formation of soil
- ✧ types of soil
- ✧ uses and properties of soil
- ✧ soils and crops
- ✧ soil erosion and its effects
- ✧ soil pollution

**TEACHING AIDS**

**Pictures/charts/models/animations** on layers of soil; composition of soil; sandy soil, clayey soil, loamy soil; soil erosion; deforestation, etc.

**LESSON PLAN**

- ✧ The teacher should start the chapter with ‘Gear Up’ and discuss questions given in this section.
- ✧ Now, the teacher should describe the soil as an important natural resource.
- ✧ The teacher should explain the different layers of soil by demonstrating Activity 2.
- ✧ The teacher should describe the components of soil.
- ✧ Teacher should demonstrate the presence of air and water in soil with the help of Activities 3 and 4.
- ✧ The teacher should describe the formation of soil, different types of soil, their features and uses of soil.
- ✧ Now, teacher should describe various properties of soil.
- ✧ The teacher should explain the calculation of absorption of water by the soil and the percolation rate of water in the soil by demonstrating Activities 5 and 6.

- ✧ The teacher should describe the relation between different types of soil and crops.
- ✧ Teacher should discuss soil erosion and its effects along with soil pollution and need to take care of soil.
- ✧ The teacher should ask the students to solve 'Check Points' 1, 2 and 3.
- ✧ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ✧ The teacher will help the students to solve all the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

### **BOOST UP**

- ✧ The teacher may boost up the students to know more about soil by making them to carry out Activity 1 in the class.
- ✧ Students should be encouraged to calculate the amount of water absorbed and the percolation rate of different soil samples.
- ✧ Students should be encouraged to study the layers, components and type of soil in their living areas.

### **EXPECTED LEARNING OUTCOMES**

The students know about

- ✧ importance of soil.
- ✧ layers, components and formation of soil.
- ✧ types of soil and their relation with different types of crops.
- ✧ soil erosion and its effects.
- ✧ causes of soil pollution and need to take care of soil.

### **EVALUATIVE QUESTIONS**

The teacher may ask the following questions for evaluating the understanding of students.

1. Why is soil considered an important natural resource?
2. Name the different layers of soil and mention their characteristics.
3. What is meant by humus?
4. Why are earthworms called friends of farmers?
5. Write some uses of soil.
6. Explain the properties of good soil.
7. How is soil erosion caused?