

## Soil Erosion and Conservation

### SPECIFIC OBJECTIVES

The students learn about

- soil, its formation and composition
- importance of soil and its conservation
- soil erosion and its effects
- soil pollution, its causes and effect

### TEACHING AIDS

**Pictures/animation** on the formation of soil, erosion of soil by wind and water; **picture/model** of layers of soil, deforestation, effects of soil erosion; **pictures/animation/model** on afforestation, terrace farming, dams, embankments, soil pollution, farmers spraying pesticides, barren land due to soil pollution.

### LESSON PLAN

- The teacher will start the chapter with 'Warm Up' section by giving a brief idea of soil and soil erosion. Teacher will help students to fill in the blank.
- Now, teacher will discuss about soil and its importance to the living beings.
- With the help of teaching aids, teacher will explain the formation of soil (as given in the chapter).
- Showing picture/model, teacher will explain the three layers of soil and their features (as given in the chapter).
- Now, teacher will discuss about soil erosion, and with the help of teaching aids, will explain the processes of soil erosion by wind and water (as given in chapter).
- Teacher will discuss soil erosion due to human activities such as deforestation, over ploughing, overgrazing by cattle, leaving bare land after harvest (as given in chapter).
- To check the understanding of students, teacher will ask them to solve 'Checkpoint 1'.
- By showing pictures/animation on barren land, landslide, siltation, etc., teacher will explain the effects of soil erosion.
- With the help of pictures/animation/models on afforestation, terrace farming, dams and embankments, teacher will discuss the ways to conserve soil.
- With the help of teaching aids, teacher will discuss about soil pollution, its causes and effects.

- Now, teacher will ask students to solve 'Checkpoint 2'.
- At last, teacher will sum up the chapter by going through the points given under the head 'At One Go' and make students revise the new terms given under the head 'Remember These Terms'.
- Teacher will also help students to solve the questions given under the head 'Check Your Study'.

## BOOST UP

- If possible, teacher should display the samples of soil from its different layers.
- To explain the role of plants in preventing soil erosion, teacher should demonstrate the activity given in the chapter.
- Teacher should discuss the ways to reduce soil pollution.

## EXPECTED LEARNING OUTCOMES

The students

- know about soil, its formation and composition.
- understand the importance of soil and need to conserve it.
- know about soil erosion and its effects.
- know about soil pollution, its causes and effects.

## EVALUATIVE QUESTIONS

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

1. What is soil?
2. Why is soil important to us?
3. What are the three layers of soil?
4. Name the factors that cause soil erosion.
5. Which human activities cause soil erosion?
6. Name the ways for conservation of soil.
7. What is the effect of soil pollution?