Soil Erosion and Conservation

LESSON PLAN

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

- ♦ Teacher will start the lesson with 'Science Vocabulary' section by telling the meaning/definition of new terms which are used in the chapter.
- ♦ 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).
- \$\to\$ 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 factors affecting it.
- With the help of teaching aids, theacher 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 harvesting crops. (as given in chapter).
- ♦ To check the understanding of students, teacher will ask them to solve 'Check Point 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 'Check Point 2'.
- ♦ The teacher will sum up the chapter by going through the points given under the head 'Wrapping it up'.
- ♦ Finally, the teacher will help students to solve all the questions given in the 'Exercises'.

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?