

SPECIFIC OBJECTIVES

- The students learn about
- ❖ soil, its formation and composition
 - ❖ importance of soil
 - ❖ soil erosion and its effects
 - ❖ soil pollution, its causes and effect
 - ❖ soil conservation

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 by giving a brief idea of soil and soil erosion.
- ❖ 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.
- ❖ Showing picture/model, teacher will explain the three layers of soil and their features.
- ❖ To check the understanding of students, teacher will ask them to solve 'Checkpoint 1'.
- ❖ Now, teacher will discuss about soil erosion, and with the help of teaching aids, will explain the process of soil erosion by wind and water.
- ❖ Teacher will discuss soil erosion due to human activities such as deforestation, over ploughing, overgrazing by cattle, leaving bare land after harvesting crops.
- ❖ By showing pictures/animation on barren land, landslide, siltation, etc., teacher will explain the effects of soil erosion.
- ❖ With the help of teaching aids, teacher will discuss about soil pollution, its causes and effects.
- ❖ Teacher will define soil conservation and with the help of pictures/animation/models on afforestation, terrace farming, dams and embankments, teacher will discuss the ways to conserve soil.

- ❖ Now, teacher will ask students to solve 'Checkpoint 2'.
- ❖ At last, teacher will make students revise the new terms given in 'Science Vocabulary' and sum up the lesson by going through the points given in 'Wrapping it up'.
- ❖ Now, teacher will help students to solve the questions given in 'Exercises'.

BOOST UP

- ❖ Teacher should encourage students to carry out activities given in the chapter.
- ❖ Teacher should discuss the conversation of Annu and Mannu given in bubbles in between the topics.
- ❖ Teacher should discuss the information given in the 'Knowledge Desk' at various places in the chapter.
- ❖ Teacher should help students to find the answers of questions given in 'Think Zone' and encourage to do activities or projects given in 'Beyond the Text'.
- ❖ If possible, teacher should display the samples of soil from its different layers.
- ❖ 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.
- ❖ soil conservation and ways to conserve soil.

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. What are the causes of soil erosion?
5. Which human activities cause soil erosion?
6. What are the ways for conservation of soil?
7. What is the effect of soil pollution?