

Soil and Rocks

SPECIFIC OBJECTIVES

The students learn about

- soil and its formation
- types of soil and features of each type
- different layers of soil
- importance of soil
- rocks and gems, and their uses

TEACHING AIDS

Animation/pictures/charts on different types of soil, layers of soil, rocks and gems; Samples of different types of soil and its components, rocks.

LESSON PLAN

- Teacher will start the chapter asking some questions on soil (considering the class level and previous knowledge of the students).
- Now, teacher will help the students to answer the question asked in 'Warm Up' section.
- Now, teacher will show the sample of soil and make students feel it by touching that it is formed of many things and give a simple brief introduction of soil.
- With the help of teaching aids, teacher will explain the process of soil formation.
- Showing samples/pictures/charts/animation on different types of soil, teacher will explain the types of soil and features of each type.
- For better understanding, teacher can perform the activity given in the chapter.
- Teacher will explain that colour of soil changes from place to place.
- To check the understanding of the topics taught, teacher will ask students to solve 'Checkpoint 1'.
- With the help of teaching aids, teacher will explain different layers of soil.
- To show different components of soil, teacher can perform the experiment as mentioned in the chapter.
- Teacher will emphasise that the components of layers of soil are different from each other.
- Now, teacher will explain the importance of soil to the living beings.

- Teacher will give a brief idea of rocks and gems (considering the class level of students).
- Now, teacher will make students solve 'Checkpoint 2'.
- At last, the teacher will make students revise the new terms given under the head 'Remember These Terms' and sum up the lesson by going through the points given under the head 'At One Go'.

BOOST UP

- Teacher may encourage students to collect samples of soil from different locations.
- Students can be asked to collect different types of stones and use them in some creative work such as model making, decoration, etc.
- Teacher can give a brief idea of soil pollution and ways to stop it in very simple way (considering the class level of students).

EXPECTED LEARNING OUTCOMES

The students

- understand what soil is and how it is formed
- can differentiate between different types of soil
- can identify different layers of soil and their components
- know the importance of soil to living beings
- have a brief idea of rocks and gems

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating his/her students.

1. Where does soil come from?
2. How do rocks get cracked?
3. Which type of soil has more air spaces between its particles?
4. Which type of soil has smallest particles?
5. How many layers does the soil have?
6. What does the top layer of soil contain?