

## LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ waste and its types, i.e., biodegradable and nonbiodegradable waste
- ✧ harmful effects of waste accumulation
- ✧ waste disposal – dealing with the waste
- ✧ practising the 4Rs principle
- ✧ plastic – a boon or a curse
- ✧ role of an individual and various agencies in waste management

TEACHING AIDS

**Pictures/charts/models/animation** on biodegradable and nonbiodegradable wastes; birds flying over waste; dustbins for compostable and recyclable wastes; garbage dumping truck; landfilling site; composting; 4Rs principle; reuse and recycling of paper and nonbiodegradable waste and plastic; plastic menace; people and NGOs involved in waste management.

LESSON PLAN

- ✧ The teacher will start the chapter with Gear Up section discussing the questions given in the section.
- ✧ The teacher should define waste and tell about its main types by performing Activity 1.
- ✧ Teacher should explain that different wastes take different periods of time to rot.
- ✧ Teacher should discuss the harmful effects of waste accumulation.
- ✧ The teacher should discuss the preparation of compost and vermicompost with the help of Activities 3 and 4.
- ✧ Teacher should discuss the 4Rs principle.
- ✧ The teacher should discuss recycling of paper with the help of Activity 5.
- ✧ Teacher should explain the importance and harms of plastic in everyday life.
- ✧ Teacher should discuss the role of Municipal Corporation or Government Agencies and Nongovernmental Organisations (NGOs) in waste management.
- ✧ Students should also be asked 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 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 should call students of the class one-by-one and ask them to write one biodegradable waste and one nonbiodegradable waste on the board.
- ✧ Teacher should discuss the difference between domestic waste, community waste, municipal solid waste (MSW), garbage and rubbish.

### **EXPECTED LEARNING OUTCOMES**

The students understand and know the

- ✧ biodegradable and nonbiodegradable waste.
- ✧ harmful effects of waste accumulation.
- ✧ ways to dispose off waste.
- ✧ 4Rs principle, i.e., reduce, reuse, recycle and recover.
- ✧ advantages and disadvantages of plastics.
- ✧ role of NGOs, Municipal Corporation and Government Agencies in the management of waste.

### **EVALUATIVE QUESTIONS**

The teacher may ask the following questions for evaluating the learning and understanding of students:

1. What is meant by waste?
2. What is the difference between biodegradable and nonbiodegradable wastes?
3. How are diseases diarrhoea and cholera caused?
4. What is meant by landfilling?
5. What is the difference between composting and vermicomposting?
6. How can paper be reused?
7. Why is plastic considered as a boon as well as a curse?