

8

The Cell

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ cell and discovery of cell
- ✧ concept of cell theory
- ✧ unicellular and multicellular organisms
- ✧ diversity in shape and size of cells
- ✧ cell structure
- ✧ differences between animal and plant cells

TEACHING AIDS

Pictures/charts/models/animations on Robert Hooke's microscope, *Amoeba*, *Paramecium*, *Hydra*, a typical cell, plant and animal cell.

LESSON PLAN

- ✧ The teacher should start the chapter with Gear Up and ask students the questions given in this section.
- ✧ Now, the teacher should define a cell, its discovery, cell theory and how to study a cell.
- ✧ The teacher should discuss types of organisms on the basis of number of cells, i.e., unicellular and multicellular organisms.
- ✧ The teacher should discuss about diversity in shape and size of cells by demonstrating Activity 1.
- ✧ The teacher should explain cell structure and cell organelles.
- ✧ The teacher should discuss the differences between plant and animal cells by demonstrating Activities 2 and 3.
- ✧ Now, the teacher will ask students 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 all 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 encourage students to collect pictures and learn the names of unicellular and multicellular organisms.
- ✧ The teacher should explain the significance of development of microscope in the discovered and study of cells.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ cell, its discovery and cell theory.
- ✧ differences between unicellular and multicellular organisms.
- ✧ diversity in shape and size of cells.
- ✧ structure of a cell and its organelles.
- ✧ differences between animal and plant cells.

EVALUATIVE QUESTIONS

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

1. Define cell. Who discovered it?
2. Mention the differences between unicellular and multicellular organisms.
3. Mention the shape and size of muscle and nerve cells.
4. In which cells is cell wall found?
5. Why are mitochondria called powerhouse of the cell?
6. Mention two functions of nucleus.
7. What are chloroplasts?