

**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, electron microscope; *Amoeba*, *Paramecium*, *Hydra*, a plant cell and an animal cell.

**LESSON PLAN**

- ❖ Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- ❖ Now, teacher will define a cell and discuss its discovery.
- ❖ Teacher will explain cell theory and how to study a cell.
- ❖ Teacher will discuss types of organisms on the basis of number of cells, i.e., unicellular and multicellular organisms.
- ❖ Now, teacher will define tissues, organ and organ system.
- ❖ Teacher will ask students to solve Check Point 1.
- ❖ Teacher will discuss about diversity in shape and size of cells in organisms.
- ❖ Teacher will explain cell structure, cell organelles and their functions.
- ❖ Then, teacher will discuss the differences between plant and animal cells by demonstrating activities given in the chapter.
- ❖ Now, teacher will ask students to solve Check Point 2.

- ✧ Teacher will make students revise the new terms given under the head 'Know These Terms'.
- ✧ Finally, teacher will help students to solve the questions given in exercises under the head 'Practice Time' and 'Think Zone'.

### BOOST UP

- ✧ Teacher should demonstrate and explain activities given in the chapter.
- ✧ Teacher should discuss the information given under the head 'Something More'.
- ✧ Teacher should discuss the conversation of Annu and Mannu given in between the topics.
- ✧ Teacher should discuss the facts given in the table.
- ✧ Teacher should encourage students to watch Discovery, National Geographic and Animal Planet channels to know more about plants and animals.
- ✧ Teacher should encourage students to collect pictures and learn the names of unicellular and multicellular organisms.
- ✧ Teacher should explain the significance of development of microscope in the discovery 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, its organelles and their functions.
- ✧ 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. Who gave cell theory?
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?