

The Nervous System

4

SPECIFIC OBJECTIVES

The students learn about

- ❖ cell, tissues, organs and organ system
- ❖ nervous system, its parts and their functions
- ❖ reflex action and its importance in the body
- ❖ sense organs of the body, their functions and care

TEACHING AIDS

Pictures/charts/models/animation on structure of cell, many cells making a tissue, tissues making an organ, organs making an organ system; brain, spinal cord, nerves, types of nerves and their working (as given in chapter), reflex action (as given in chapter); structure, functioning and care of sense organs – eyes, ears, nose, tongue, skin (as given in chapter).

LESSON PLAN

- ❖ Teacher will start the chapter by asking some questions based on the general knowledge and personal experience of the students related to nervous system.
- ❖ With the help of teaching aids, teacher will explain the cell and its role in making human body.
- ❖ Teacher will explain how same type of cells together form tissues, tissues form organs and many types of organs form an organ system that in turn forms an organism.
- ❖ Now, teacher will discuss about the nervous system and its functions.
- ❖ With the help of teaching aids, teacher will explain the structure and functions of each part of the nervous system, i.e., brain, spinal cord and nerves (as given in the chapter).
- ❖ With the help of teaching aids, teacher will describe the types of nerves and how they work (as given in the chapter).
- ❖ Now, teacher will introduce the phenomenon of reflex action, its significance to the body and with the help of teaching aids, explain how it takes place.
- ❖ Now, teacher will ask students to solve 'Checkpoint 1'.
- ❖ Now, teacher will discuss the sense organs and their significance.
- ❖ With the help of teaching aids, teacher will explain the structure and functioning of each sense organ. Teacher will also discuss the caring of sense organs for keeping them safe and healthy (as given in chapter).

- ❖ 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'.
- ❖ 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'.
- ❖ Teacher should also discuss the facts given in 'Interesting Information' section.
- ❖ Teacher should discuss that brain is the control centre of body because it controls the functioning of all body organs.
- ❖ Teacher should encourage students to take care of their sense organs for good health.
- ❖ Teacher should revise the bony parts that protect brain, spinal cord, eyes, ear, etc.

EXPECTED LEARNING OUTCOMES

The students

- ❖ understand how cells form tissues, tissues compose organs and several organs together make an organ system.
- ❖ know about nervous system, its parts and their functioning.
- ❖ know about reflex action and its importance.
- ❖ know about sense organs of the body, their functions and how to keep them healthy.

EVALUATIVE QUESTIONS

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

1. What is a cell?
2. What is the nervous system?
3. Which is the biggest part of the brain?
4. Which part controls the balance of the body?
5. Which part of body controls our involuntary actions?
6. Which structures in body connect the brain and spinal cord to all parts of body?
7. What is a reflex action?
8. Name the sense organs of the body.
9. Which nerve carries message from eye to the brain?
10. How does skin help in removing body waste?