Science

5

Our Body

1	SPECIFIC OBJECTIVES	_ ,
	The students learn about	
I	O human body as a wonderful machine	
	O cell, tissues, organs and organ systems	
l	O different organ systems of human body	

TEACHING AIDS

Picture of a body cell (as given in the chapter), tissue, any of the organs and related organ system; **Picture/animation/model** of any machine (fan, TV, bicycle, car, etc. showing parts); **Picture/chart/model/animation** on skeletal system, muscular system, digestive system, respiratory system, circulatory system, excretory system and nervous system.

LESSON PLAN

- O Teacher will start the chapter with 'Warm Up' section and ask the students to fill in the blanks.
- O Now, teacher will compare the structure of human body with that of a brick wall and explain that as a wall is made of many bricks, our body is made of many small cells.
- O Teacher will show the picture of a cell and explain that body cells are very tiny and cannot be seen with the naked eye.
- O With the help of pictures, teacher will explain that body cells together make a tissue and many tissues make an organ and different organs together form an organ system.
- O Now, teacher will display the picture/animation/model of any machine or can give the example of classroom fan and explain that as its different parts work together to run it, different organ systems in our body work together. Hence, and our body works like a machine.
- O Now, teacher will explain that we perform different functions. Each function is carried out by a special organ system. So our body has different organ systems.
- O Teacher will show the pictures/chart/model of each of the organ systems with its name.
- O Now, teacher will explain the structure and function of each of the organ systems (using teaching aids).

Skeletal System

- Teacher will tell students that our body has 206 bones.
- Teacher will explain that skeletal system is made of hard bones which give shape to our body. It saves our soft organs such as skull protects brain, ribcage protects heart and lungs, etc.

Muscular System

- Teacher will explain that our body has 600 muscles. These muscles make muscular system and cover whole of the skeletal system.
- Teacher will explain that muscular system helps us do activities such as walking, running, eating, etc.

Digestive System

- Teacher will explain that we get energy from the food with the help of digestive system.
- Teacher will show the organs of digestive system in pictures, charts, model, etc. and explain that they change the food into its simpler form so that our body can use it and get energy.

Respiratory System

- Teacher will explain that we breathe air in and out with the help of respiratory system.
- Teacher will show organs of respiratory system in pictures, charts, model, etc. and explain
 how air enters the nose and reaches the lungs. Similarly, how air from lungs reaches the
 nose and is breathed out.
- O Now, to test the understanding of students about the topics, teacher will ask to solve 'Checkpoint 1'.

Circulatory System

- Teacher will explain that in our body blood moves with the help of circulatory system.
- Teacher will show organs of circulatory system in pictures/chart/model and explain that heart is the main organ of circulatory system that pushes the blood into blood vessels.
- Teacher will show the path how blood moves from heart to body parts and from body parts to heart.

Excretory System

- Teacher will explain that excretory system expels the waste from the body.
- Teacher will show in pictures/chart/model that kidneys are the main organs of the excretory system and will also show the path how kidneys throw out wastes in the form of urine.
- Teacher will also explain that lungs and skin also expel waste in the form of breathed out air, i.e., carbon dioxide and sweat respectively.

Nervous System

- Teacher will explain that nervous system makes us aware about our surroundings.
- Teacher will show in pictures/chart/model the organs of nervous system and the five sense organs. Teacher will explain that brain is the main organ of nervous system.
- Teacher will explain that sense organs take the message from outside and send it to the brain and the brain in turn, sends messages to sense organs to work properly.

Reproductive System

- Teacher will give an idea of the function of reproductive system in producing young ones.
- Now, teacher will ask to solve 'Checkpoint 2'.
- At last, teacher will make students revise the new terms given under the head the 'Remember These Terms' and sum up the chapter by going through the points given under the head 'At One Go'.
- Teacher will also help students to solve all the exercises given under the head 'Check Your Study'.

BOOST UP

- O Teacher should display animation on the working of all the organ systems.
- O Students can be encouraged to keep all their body organs healthy by following a healthy lifestyle.

EXPECTED LEARNING OUTCOMES

The students

- O understand about human body that it is formed of tiny cells which make tissues, organs and organ systems.
- O know about different organs of the body
- O know about different organ systems of the body
- O know about the function of each of the organ systems.

EVALUATIVE QUESTIONS

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

- 1. What are the tiny structures which our body is made of?
- **2.** What is a tissue?
- 3. How many bones are there in our body?
- **4.** How many muscles are there in our body?
- **5.** What is the function of teeth?
- **6.** What are the main organs of respiratory system?
- 7. What are the main organs of nervous system?
- **8.** Which organ pumps blood in the body?
- **9.** Name the sense organs of the body.
- 10. Which system in the body produces babies?