

# 3

## The Skeletal System

### LESSON PLAN

#### SPECIFIC OBJECTIVES

The students learn about

- ✧ human skeletal system, its parts and functions
- ✧ joints, their types and working
- ✧ muscles, their types and working

#### TEACHING AIDS

**Pictures/charts/models** showing cell, many cells making a tissue, tissues making an organ, organs making an organ system; skeletal system, skull, backbone, ribs, limbs and girdles, types of joints, muscles and their working (as given in the chapter)

#### LESSON PLAN

- ✧ Teacher will start the chapter with ‘Gear Up’ section by asking some simple questions on the picture shown in this section and help students to explain their answers.
- ✧ With the help of teaching aids, teacher will explain the cell and its role in making human body.
- ✧ Teacher will explain how same types 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 define what the skeleton is and what makes the skeletal system.
- ✧ With the help of teaching aids, teacher will explain the parts of skeletal system, number of bones in each part and their functions. Teacher will also discuss the name of organ that each part protects.
- ✧ With the help of teaching aids, teacher will explain the functions of skeletal system (as given in chapter).
- ✧ Now, teacher will discuss about joints and how they are held in our body.
- ✧ With the help of teaching aids, teacher will define the type of joints and explain how they work.
- ✧ Now to check the understanding of students about the topics, teacher will ask them to solve ‘Check Point 1’.

- ✧ Now, teacher will discuss about muscles, their functions and how they are held in the body.
- ✧ With the help of teaching aids, teacher will discuss about types of muscles, their mode of working and the organs in which they are found.
- ✧ With the help of teaching aids, teacher will explain the working of muscles.
- ✧ Now, teacher will ask students to solve 'Check Point 2'.
- ✧ The teacher will sum up the chapter by going through the points given under the head 'Wrap up now'.
- ✧ Finally, the teacher will help students to solve all the exercises given under the head 'Practice Time'.

### **BOOST UP**

Teacher should encourage students to

- ✧ take food that keeps their bones and muscles strong.
- ✧ learn the names of bones and their location in the body so that they can identify them.

### **EXPECTED LEARNING OUTCOMES**

The students know about

- ✧ human skeletal system, its parts and functions; total number of bones in each part and whole body.
- ✧ joints found in body, their types and working.
- ✧ body muscles, their types and working.

### **EVALUATIVE QUESTIONS**

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

1. What are skeleton and skeletal system?
2. How many bones are found in facial region?
3. What is ribcage?
4. Which bone is called breast bone?
5. What are floating ribs?
6. What are limb bones?
7. Which organs are protected by pelvic girdle?
8. Which joint moves in one direction only?
9. Which muscles are also called skeletal muscles?
10. What are muscles made of?