

The Skeletal System

3

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 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 by asking some simple questions related to bones.
- ❖ With the help of teaching aids, teacher will explain the functions of bones.
- ❖ 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.
- ❖ 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 'Checkpoint 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 '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 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 encourage students to take food that keeps their bones and muscles strong.
- ❖ Teacher should encourage students to 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.
- ❖ know about joints found in body, their types and working.
- ❖ know about 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?