

UNIT

19

MOVEMENTS IN ANIMALS



Learning Objectives



After the completion of this lesson, students will be able to:

- ◆ know about the movements of different animals.
- ◆ differentiate between movement and locomotion.
- ◆ recall the types of movements.
- ◆ know about human body and its movements.
- ◆ summarise the significance and types of joints.
- ◆ identify the components of the skeleton.
- ◆ understand muscle movements and its types.

Introduction

There are so many movements that happen in our bodies. Sit absolutely still and observe the movements taking place in your body. You must be blinking your eyes from time to time. There will be movements in your body as you breathe. Different parts of your body move while you remain at the same place. There are different ways how animals move from place to place. For example, a cow uses its legs to walk, a snake uses its whole body to slither or crawl, a bird uses its wings to fly, a fish uses its fins to swim and human uses legs to walk. Walking, crawling, flying and swimming - these are only a few ways in which animals move from one place to another. Let us learn in detail how these movements take place.

19.1 Movement and Locomotion

Although both movement and locomotion sound similar in their meaning, there are

few interesting differences between the two terms. Movement is generally defined “*as the act of changing the place or position by one or more parts of the body*”. Movement helps to perform necessary functions such as pumping of blood to different parts of the body in an organism. Movement can be both **voluntary** and **involuntary**. For example, walking is a voluntary movement, while breathing is an involuntary movement.

The movement of an organism from one place to another is known as locomotion. Locomotion helps an organism to find food, avoid harsh weather conditions, escape from their predator etc. Walking, running and swimming are few examples for different types of locomotion. In this process, there is the action of appendages such as limbs, wings, flagella and cilia. In most of the aquatic animals such as fish, whales, and shark, the locomotion results from a series of wave-like muscle contractions. Table 19.1 gives the differences between locomotion and movement.