Function: The muscular system is responsible for movement. It allows us to move our bodies, manipulate objects, and perform various actions.

Types of Muscles: There are three types of muscles: skeletal muscles (voluntary), smooth muscles (involuntary), and cardiac muscles (involuntary).

Skeletal Muscles: These muscles are attached to bones and enable voluntary movements like walking, running, and lifting weights.

Smooth Muscles: Smooth muscles are found in the walls of internal organs, such as the digestive tract and blood vessels. They control involuntary processes like digestion and blood flow.

Cardiac Muscles: Cardiac muscles are specific to the heart and are responsible for pumping blood throughout the body. They work involuntarily and continuously.

Muscle Contraction: Muscles contract when stimulated by nerve impulses. This contraction generates force and causes movement.

Muscle Groups: Muscles are organized into groups based on their function. Examples include biceps and triceps in the upper arm.

Muscle Maintenance: Regular exercise is essential for maintaining muscle health and strength. It helps prevent muscle atrophy (wasting) and maintains overall fitness.

Muscle Injuries: Muscles can be strained, torn, or injured if subjected to excessive force or overuse. Rest and rehabilitation are important for recovery.

Muscle Disorders: Conditions like muscular dystrophy and myasthenia gravis can affect the muscular system, leading to weakness and disability.