

# Contractile and Inert Structures of the Musculoskeletal System

## Contractile Structures

Structure	Function
Skeletal Muscle	Produces force and movement through contraction
Tendons	Transmit force from muscle to bone
Musculotendinous Junction	Transition area between muscle and tendon
Motor Units	Neural control of muscle contraction

## Inert (Non-Contractile) Structures

Structure	Function
Joint Capsule	Encloses joint, provides stability
Ligaments	Connect bone to bone, stabilize joints
Articular Cartilage	Reduces friction in joints
Meniscus	Shock absorption, load distribution in knee
Labrum	Deepens socket in hip and shoulder joints
Intervertebral Disc	Absorbs shock, allows movement in spine
Bursa	Reduces friction between moving structures
Fascia	Surrounds and separates muscles
Bone	Provides structural support
Synovium	Produces synovial fluid
Dura Mater	Protects spinal cord and nerve roots
Peripheral Nerves	Transmit sensory and motor signals