

Chapter One:

- **What is the the process of Intramembranous Ossification?**

- Ossification center appear in the fibrous Connective Tissue Membrane, centrally located mesenchymal cell cluster differentiate into osteoprogenitor eventually osteoblast formation of ossification center.
- Osteoid is secreted within fibrous membrane and calcifies. Trapped osteoblasts become osteocytes.
- Woven bone created and periosteum form, Osteoid is laid down between embryonic blood vessels in a random manner.
- Lamellar bone replace woven bone, just deep to periosteum. Red bone marrow appears.

- **What is the process of Endochondral Ossification?**

- Formation of bone collar around hyaline cartilage model
- Cavitation of hyaline cartilage within cartilage model
- Invasion of internal cavities by the periosteal bud and spongy bone formation
- formation of medullary cavity as ossification continues: appearance of secondary ossification centers in the epiphyses in preparation for stage 5
- Ossification of the epiphyses: when completed hyaline cartilage remains only in the epiphyseal plates and articular cartilage.

Chapter Two:

- What are the three types of joints, what are the -throses names for them, and how moveable are they?
 - Synarthroses: immovable (axial)
 - Amphiarthrosis: slightly movable (axial)
 - Diarthroses: freely movable (appendicular)
- What types of joints are found in the axial skeleton?
 - Temporomandibular, mandible and maxilla
 - Atlanto-occipital, join skull and vertebrae
 - Atlantoaxial, join c1 and c2
 - Intervertebral Disk, in between vertebral disk
- There are four types of joint movements. What are the names of the movements and what direction/how are the limbs moving?
 - Adduction: Medial movement
 - Abduction: Lateral movement
 - Flexion: Creates angles
 - Extension: Creates straight line
- Label the pelvic and thoracic bones.

