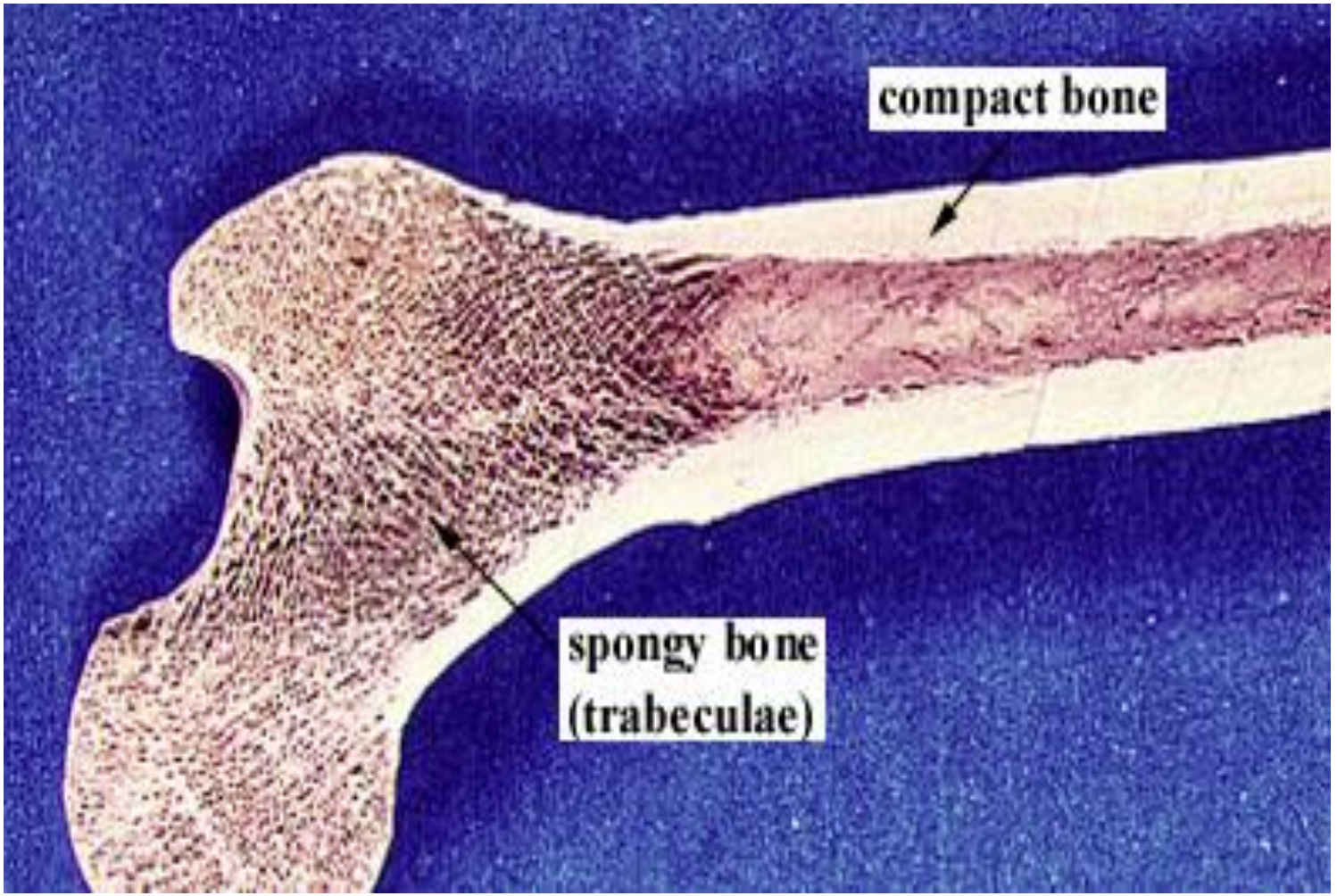
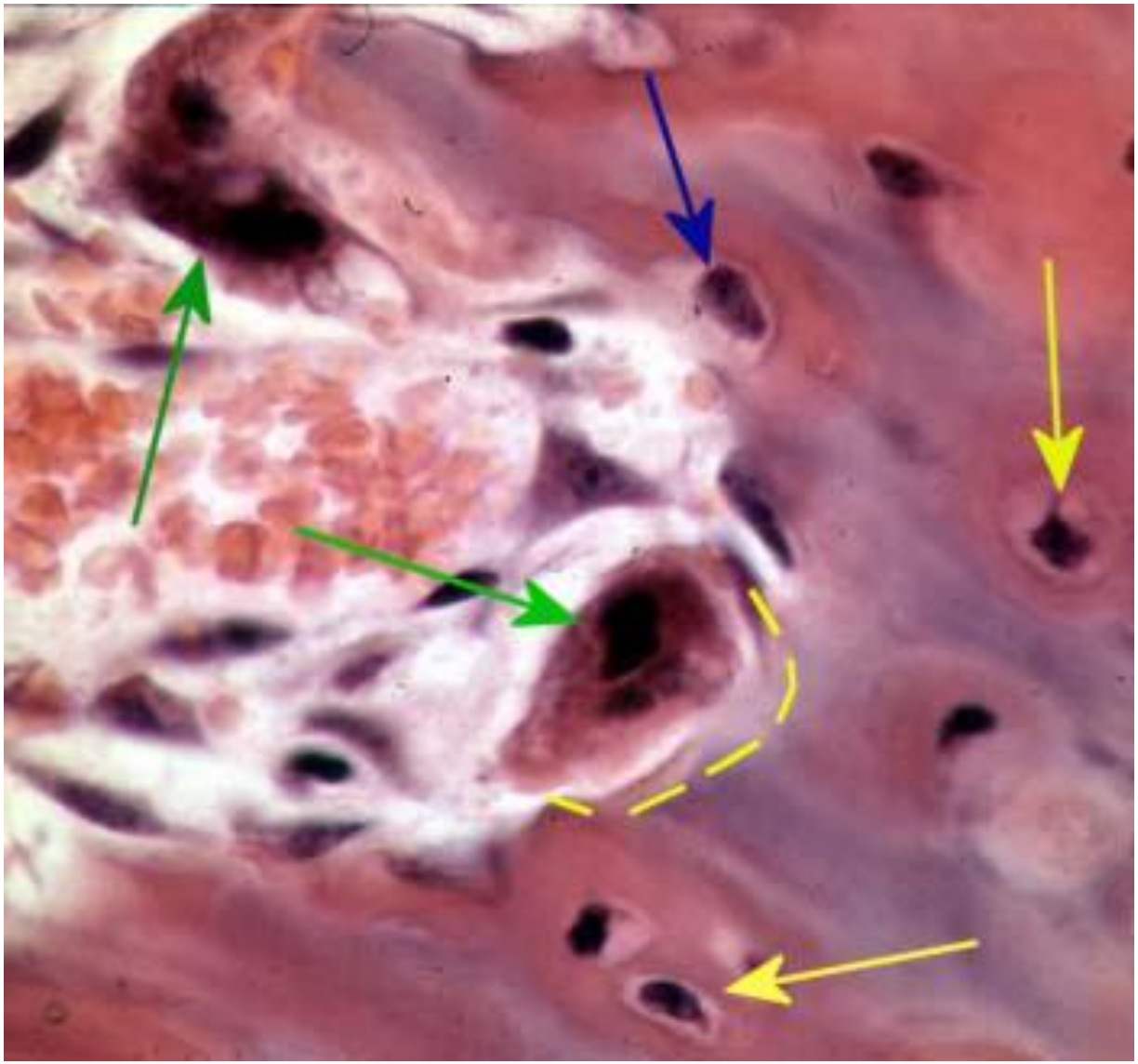
# Osteology Review Slides

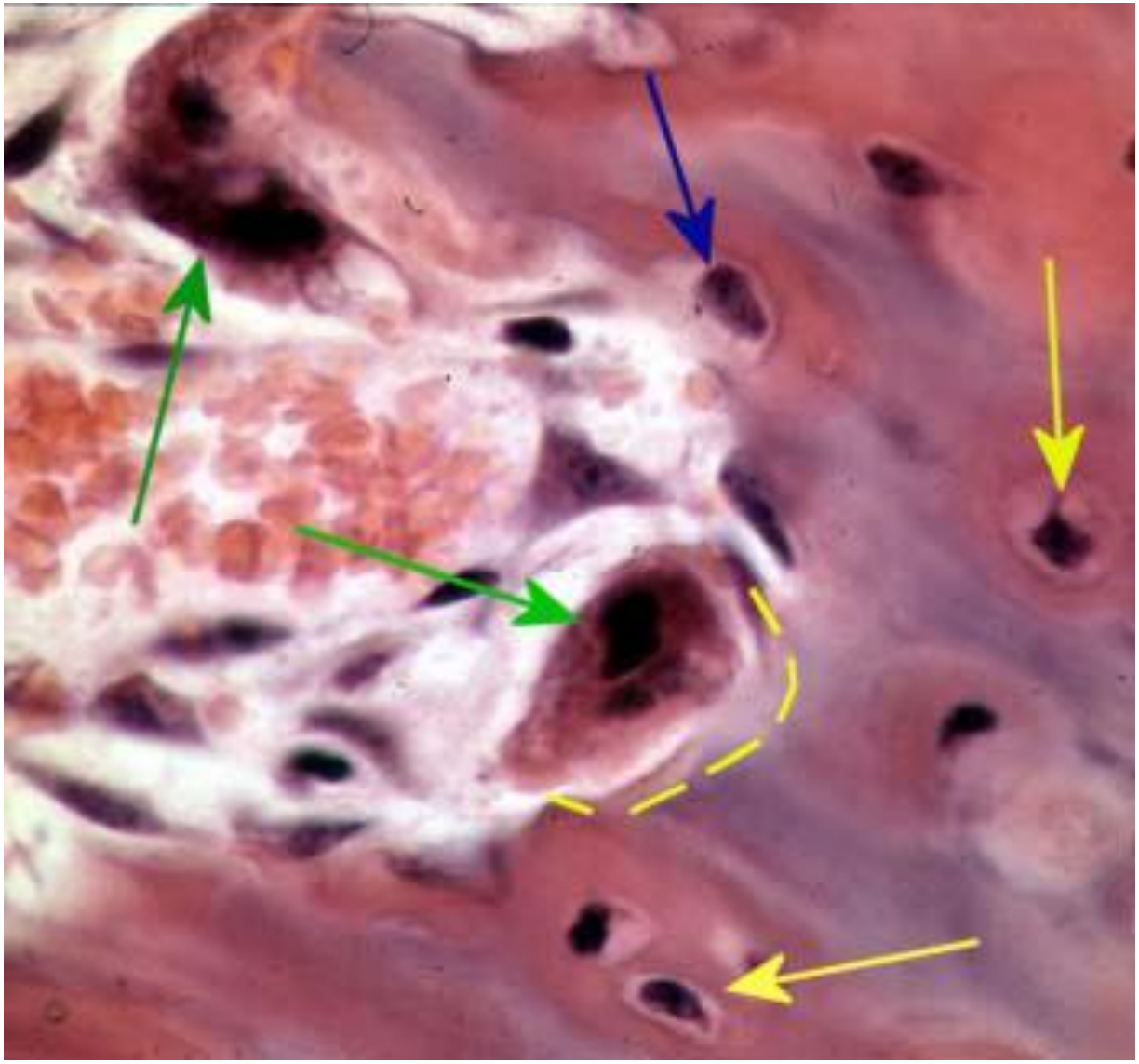


# Identify: Osteocytes, Osteoblast and Osteoclasts

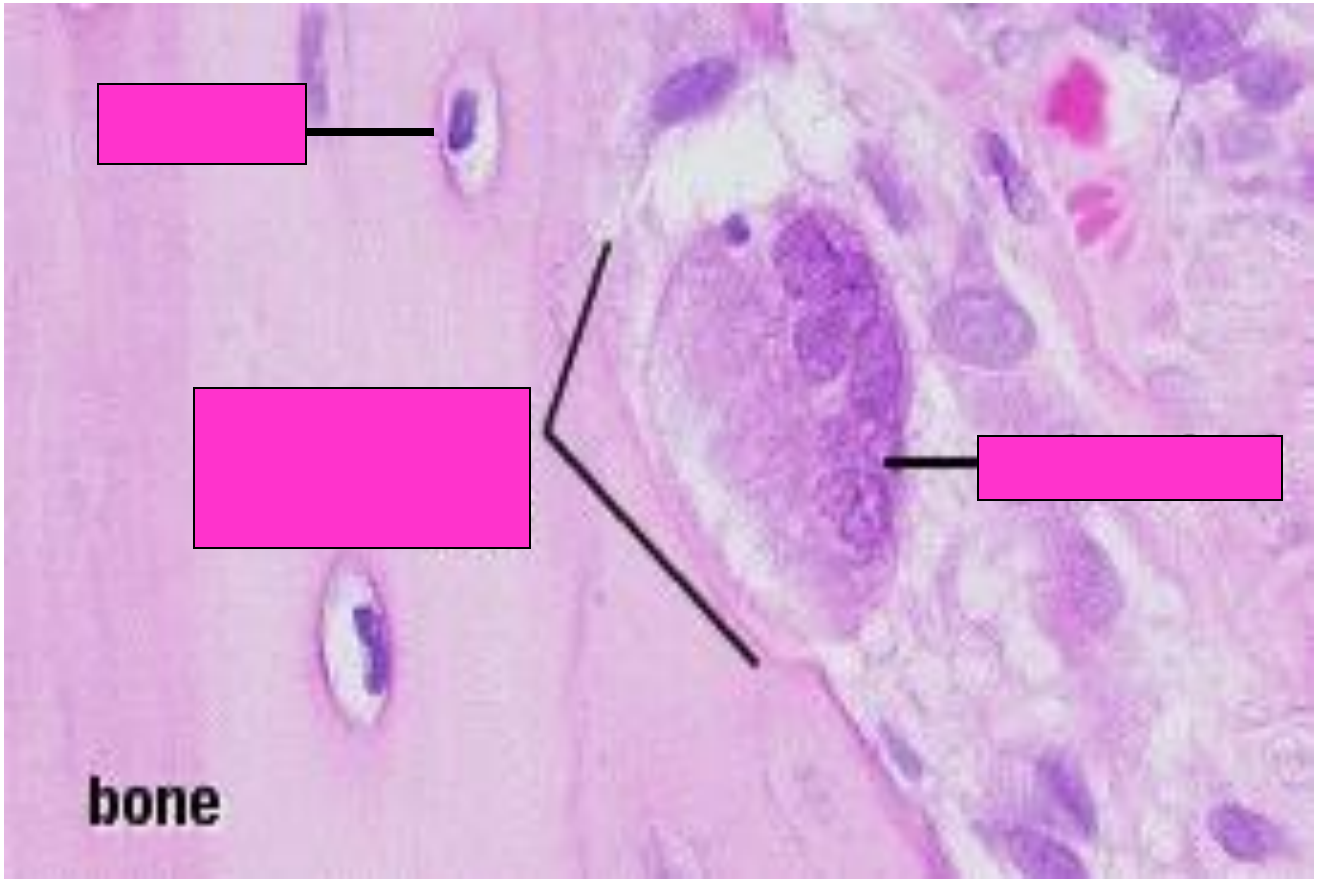


# Identify: Osteocytes, Osteoblast and Osteoclasts

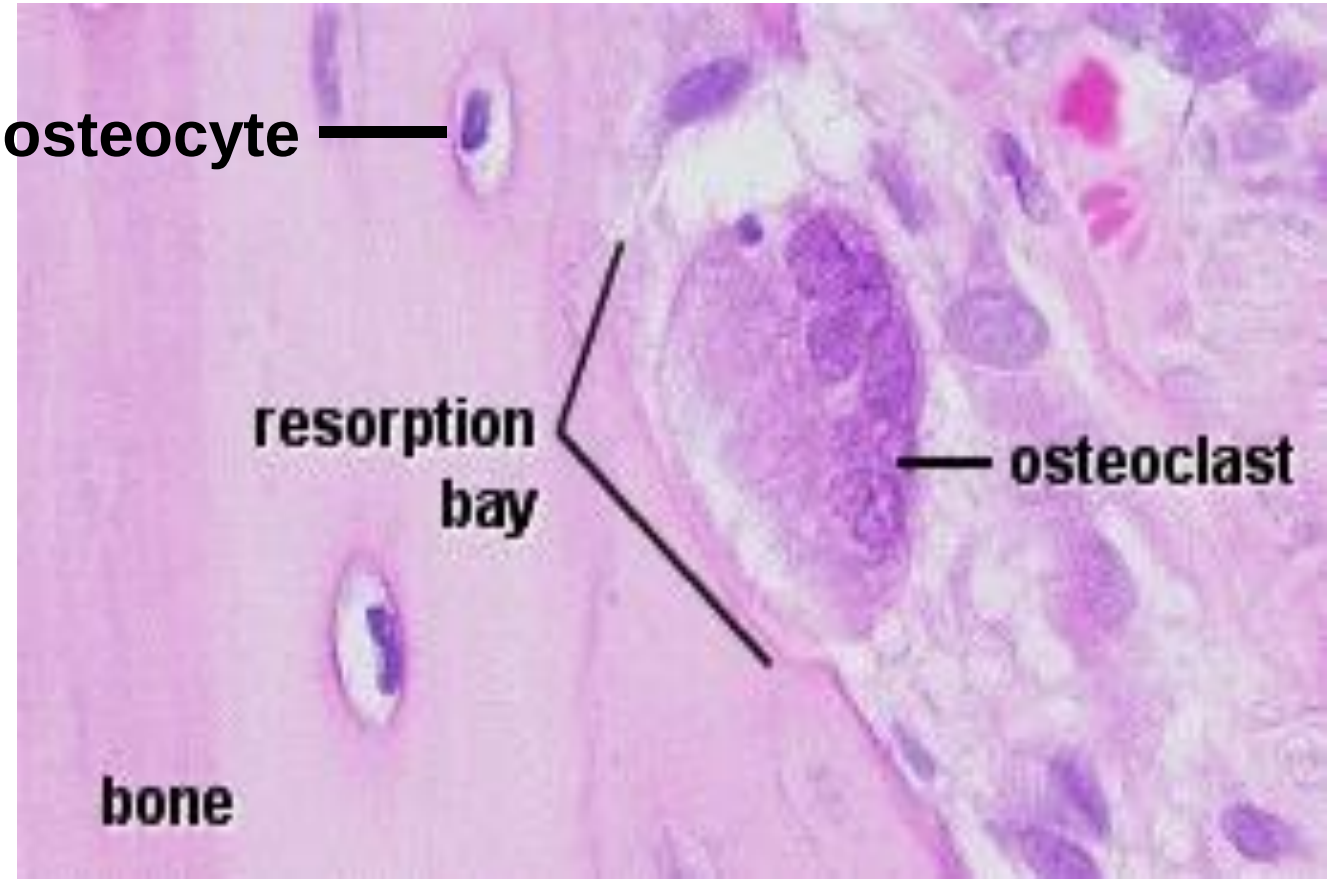
Yellow arrows indicate **osteocytes** – notice how they are surrounded by the pinkish bone matrix.
Blue arrow shows an **osteoblast** in the process of becoming an osteocyte.
Green arrows indicate **Osteoclasts**



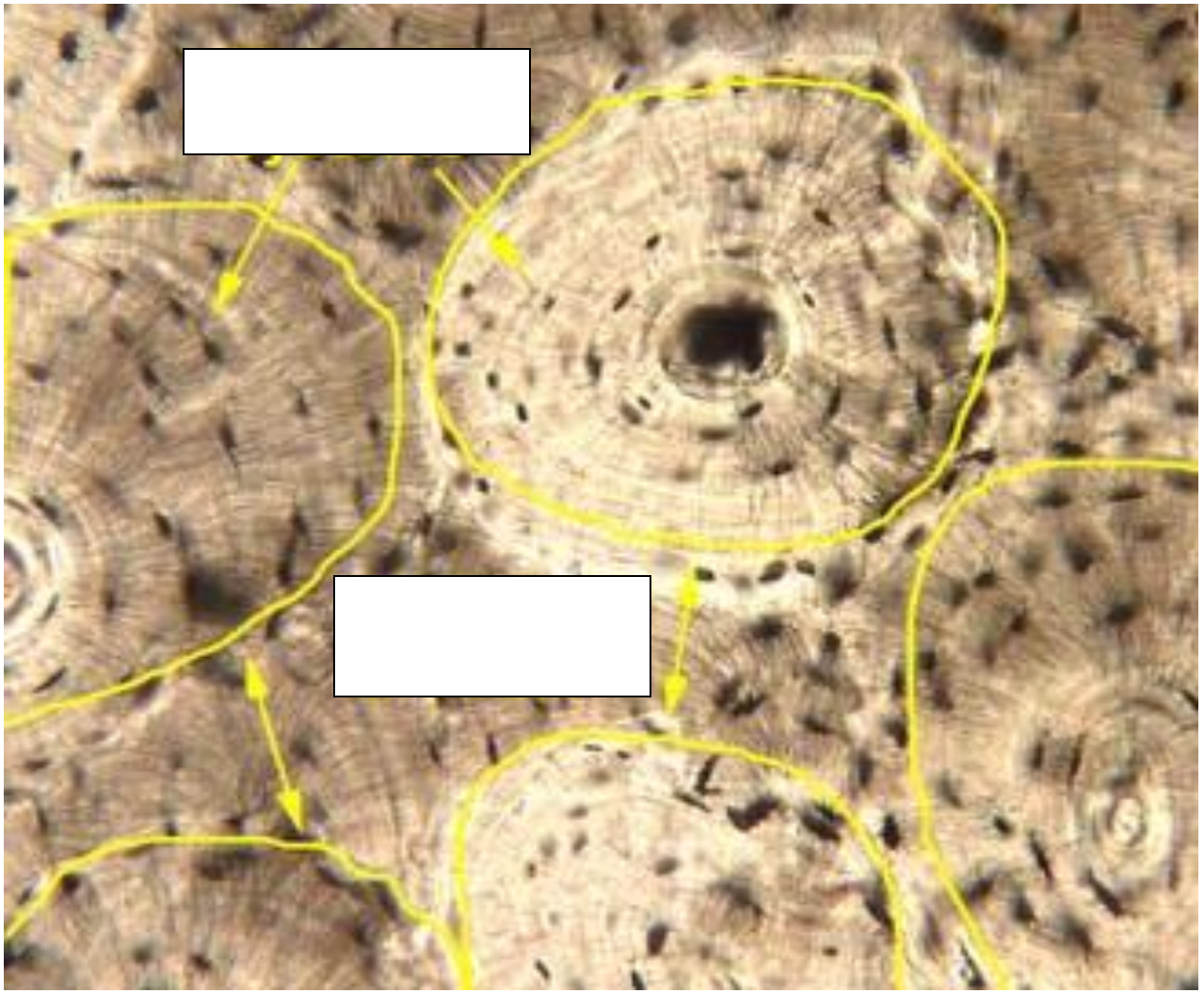
# Identify: Osteoclast, Osteocyte, Resorption bay



# Identify: Osteoclast, Osteocyte, Resorption bay



# Identify: Osteons (Haversian systems) and Interstitial Lamellae



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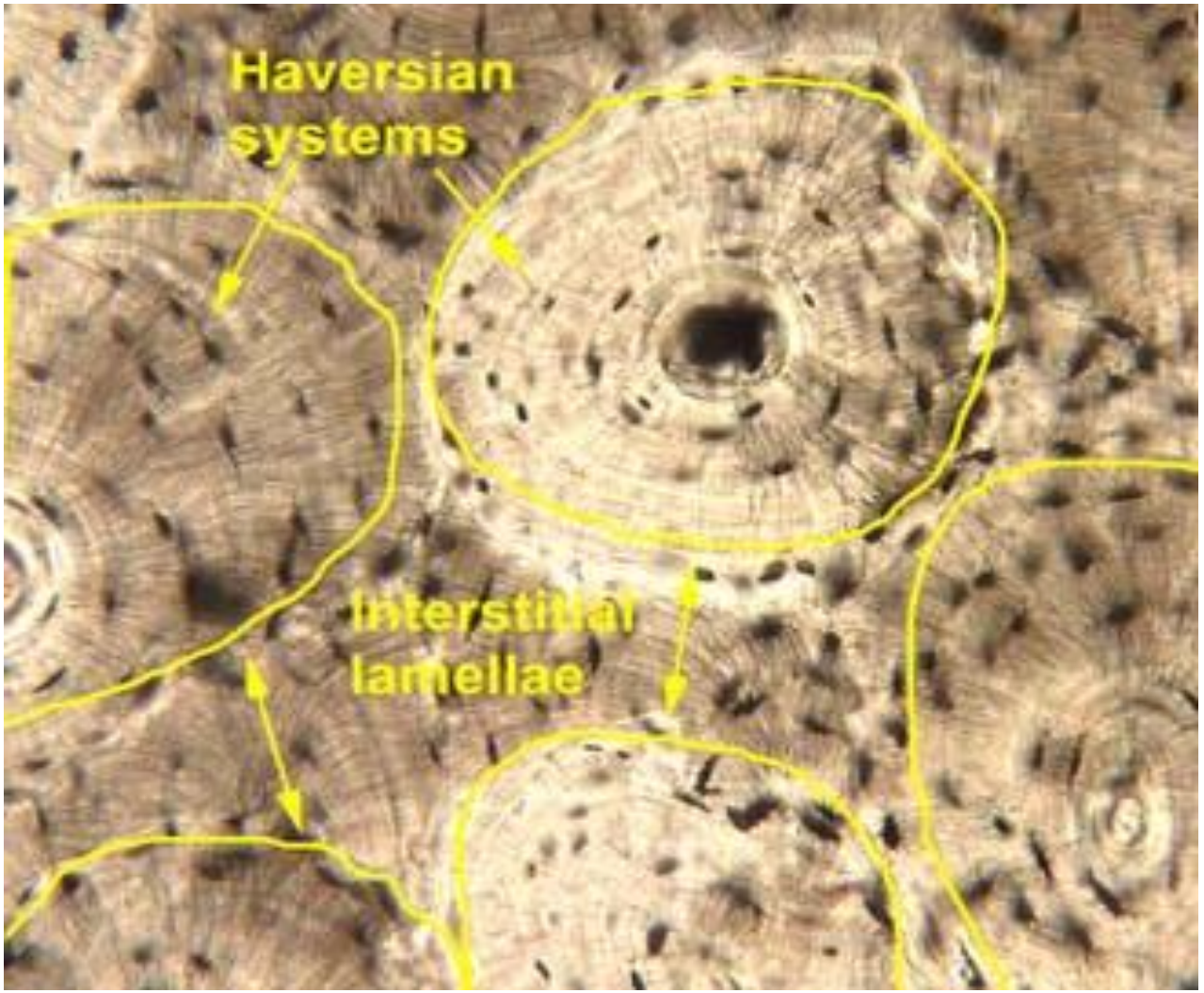
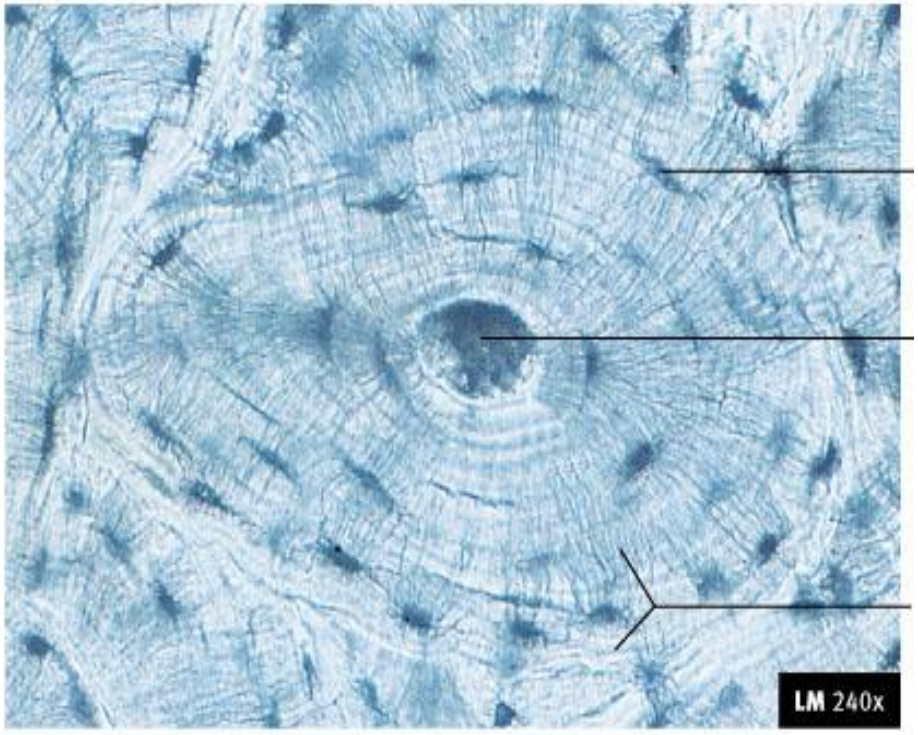
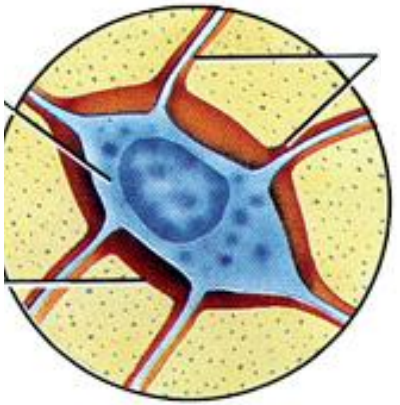
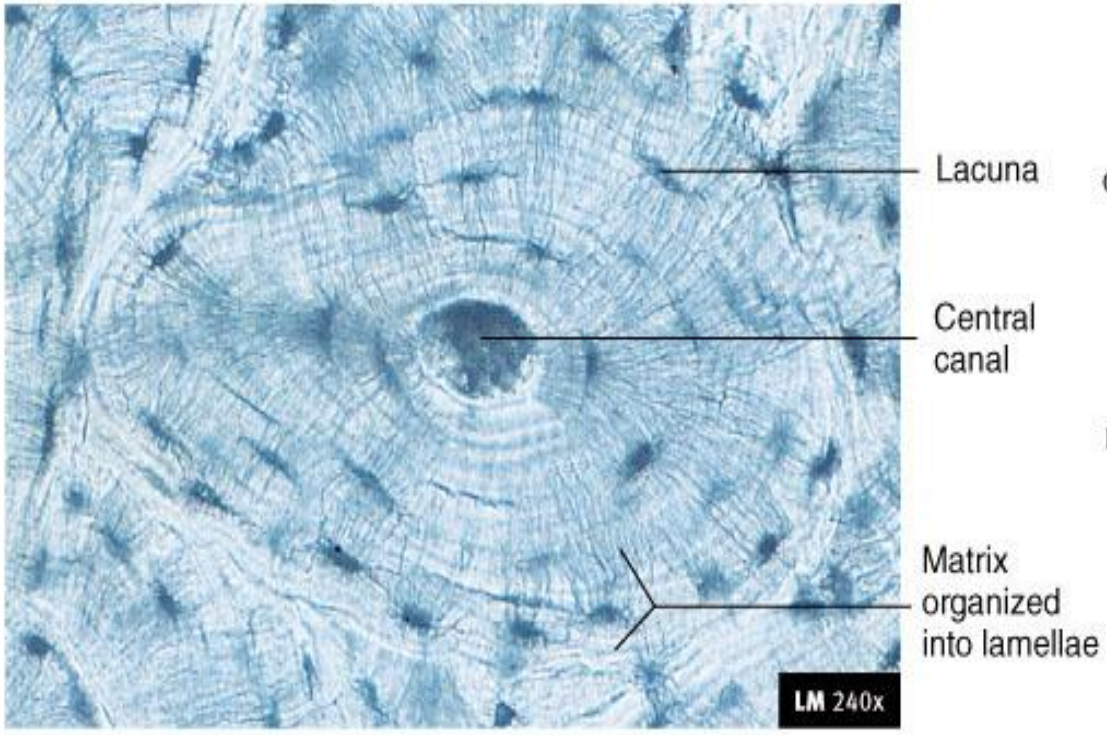


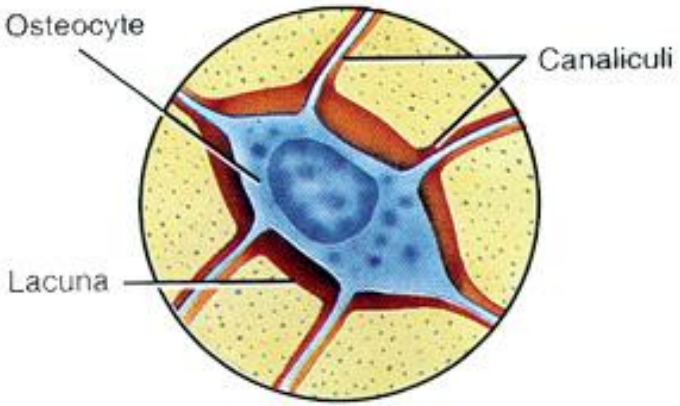
# Identify: Lacuna, Osteocyte, Central Canal, Lamellae



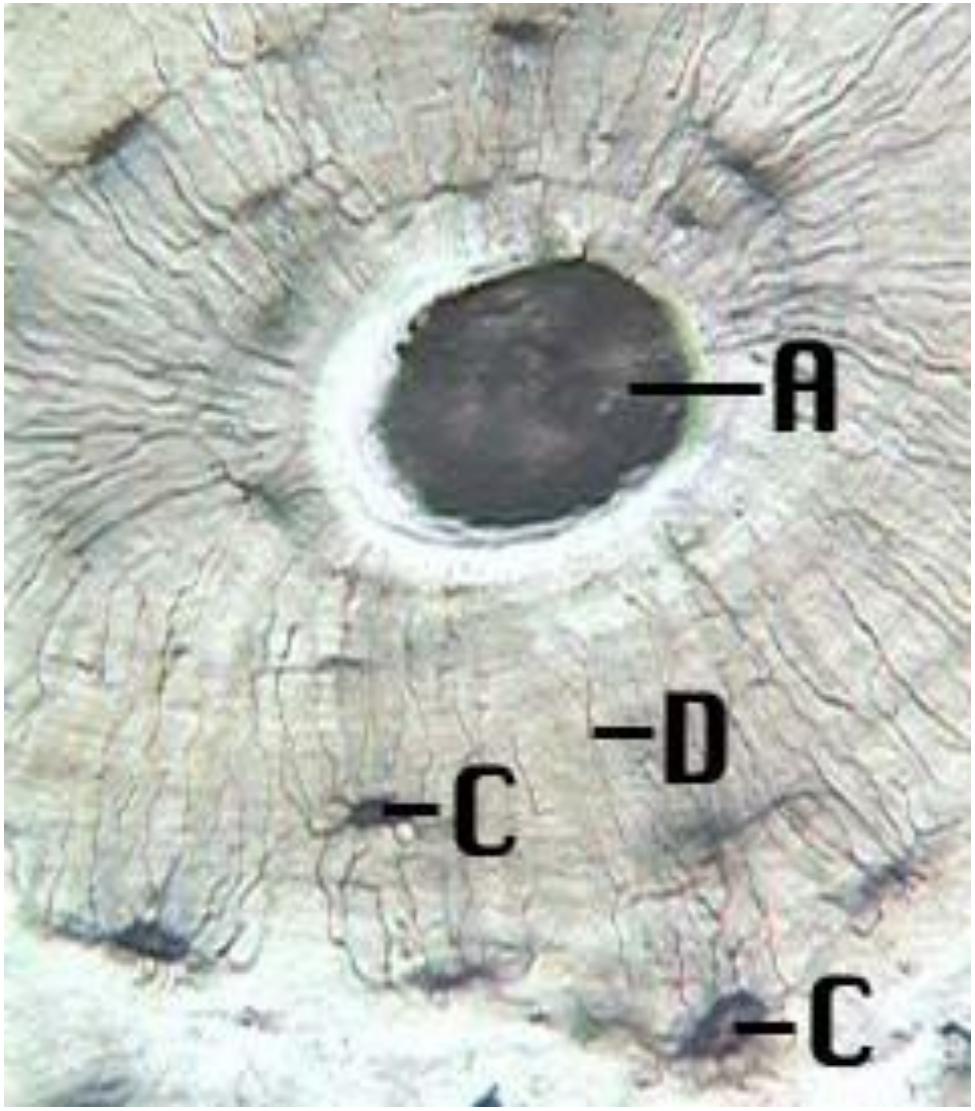



# Identify: Lacuna, Osteocyte, Central Canal, Lamellae



Identify: Central Canal, Canaliculi, Osteocyte within Lacuna

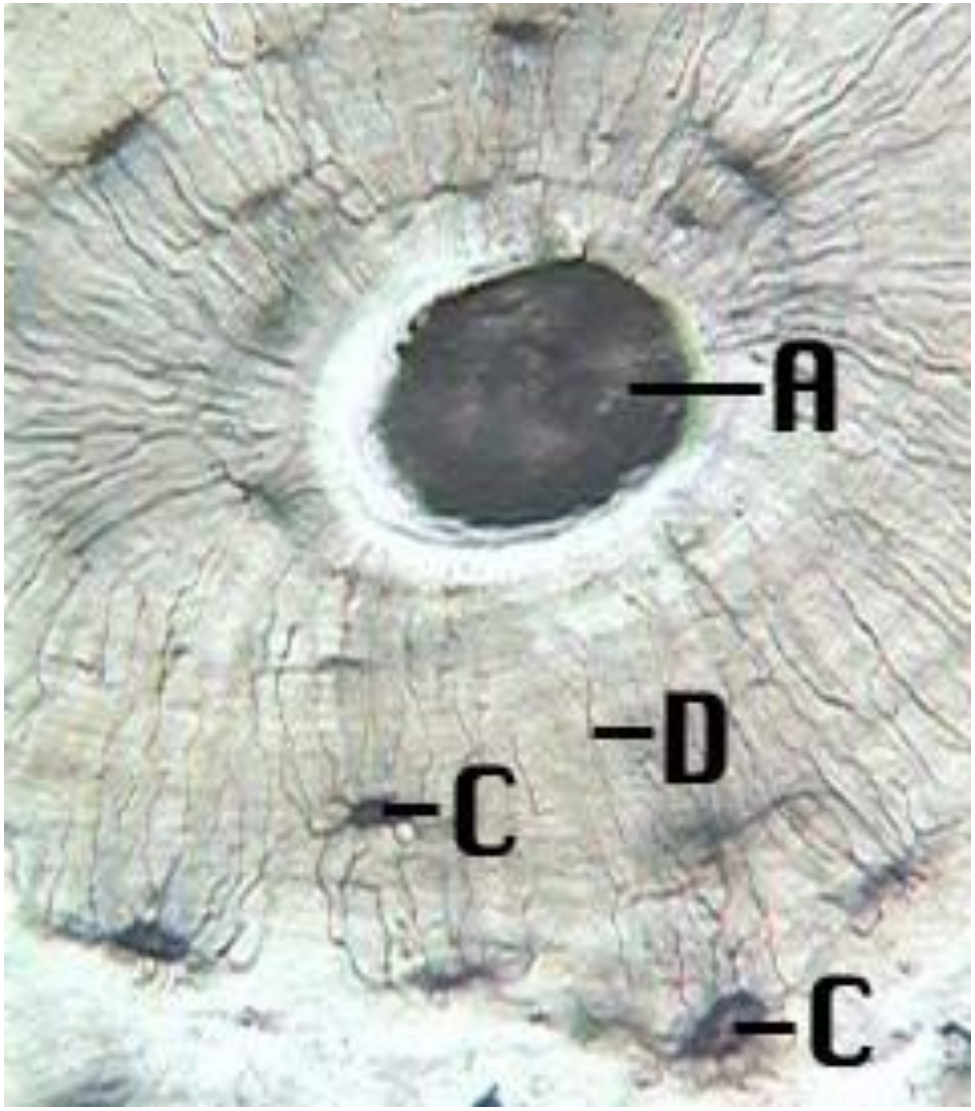


# Identify: Central Canal, Canaliculi, Osteocyte within Lacuna

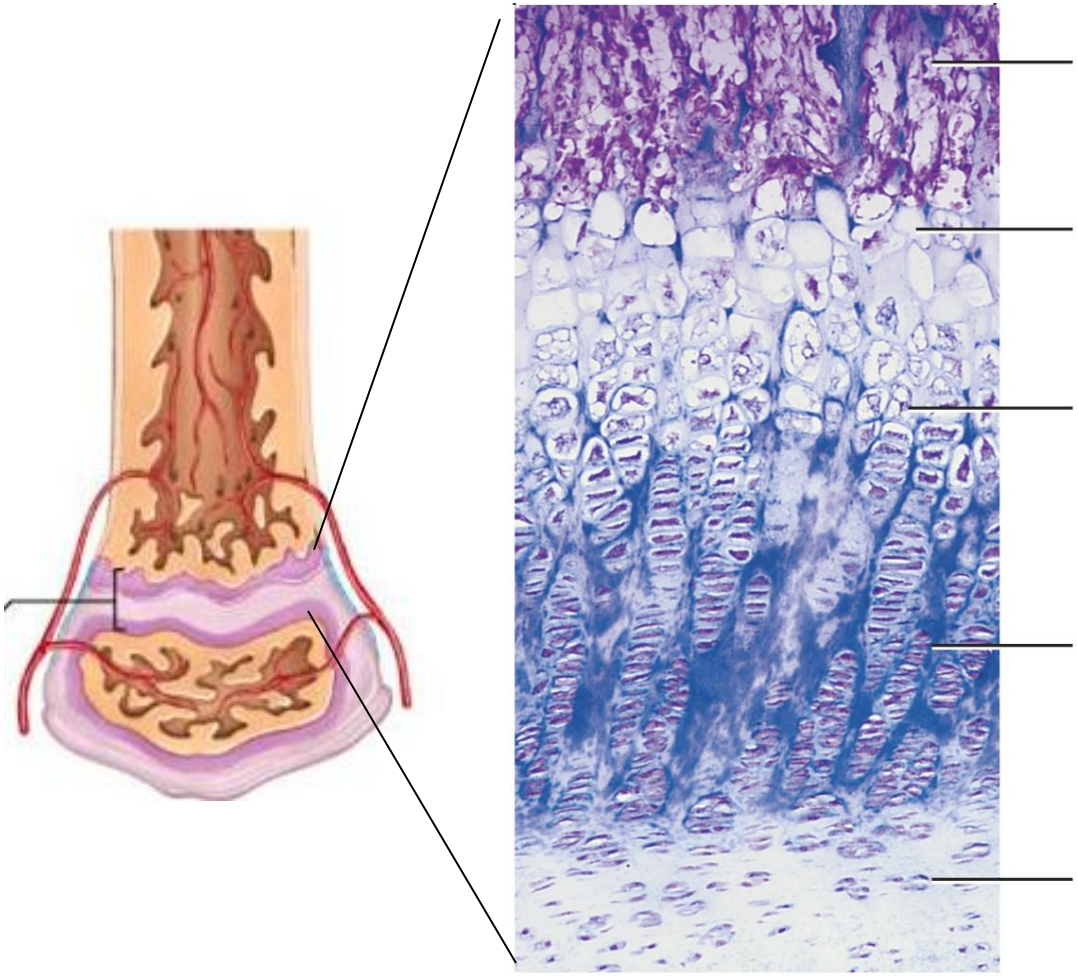
A = Central Canal

D = Canaliculi

C = Osteocyte contained within Lacunae

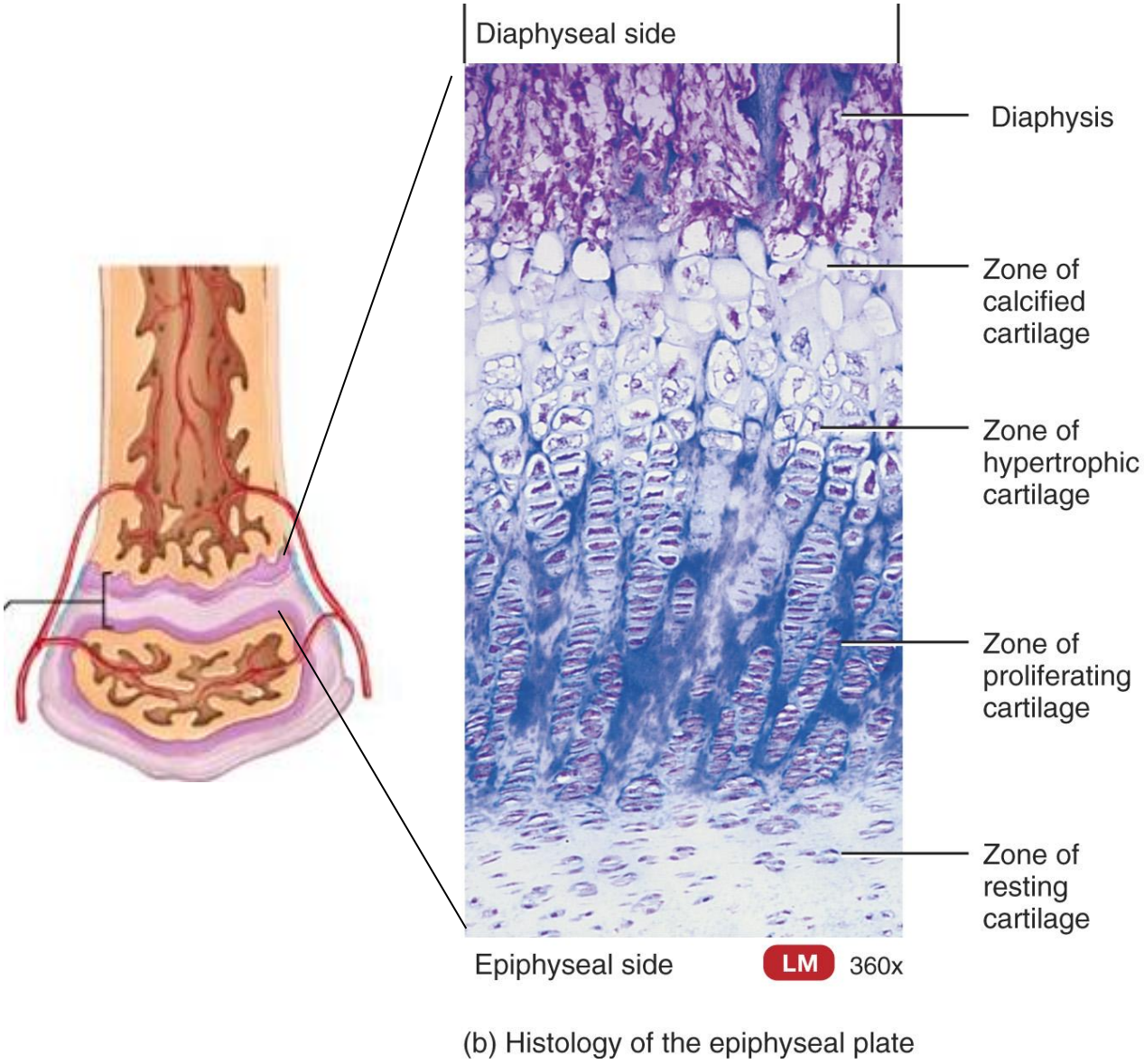


# Identify: Epiphyseal Plate, Diaphyseal Side, Epiphyseal Side, Diaphysis, Zones of Calcified Cartilage, Hypertrophic Cartilage, Proliferating Cartilage, Resting Cartilage



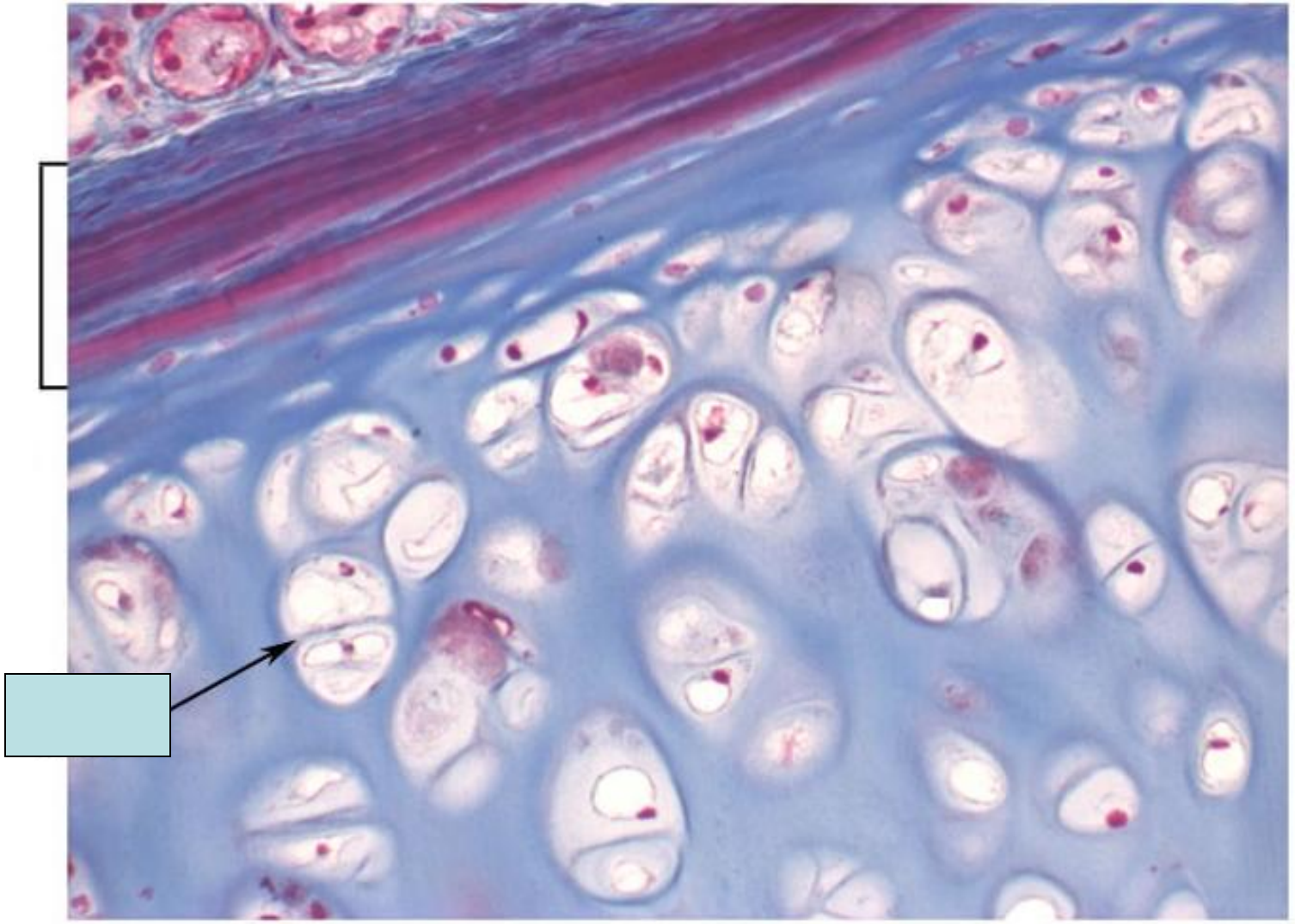
# Identify: Epiphyseal Plate, Diaphyseal Side, Epiphyseal Side, Diaphysis, Zones of Calcified Cartilage, Hypertrophic Cartilage, Proliferating Cartilage, Resting Cartilage

Epiphyseal Plage



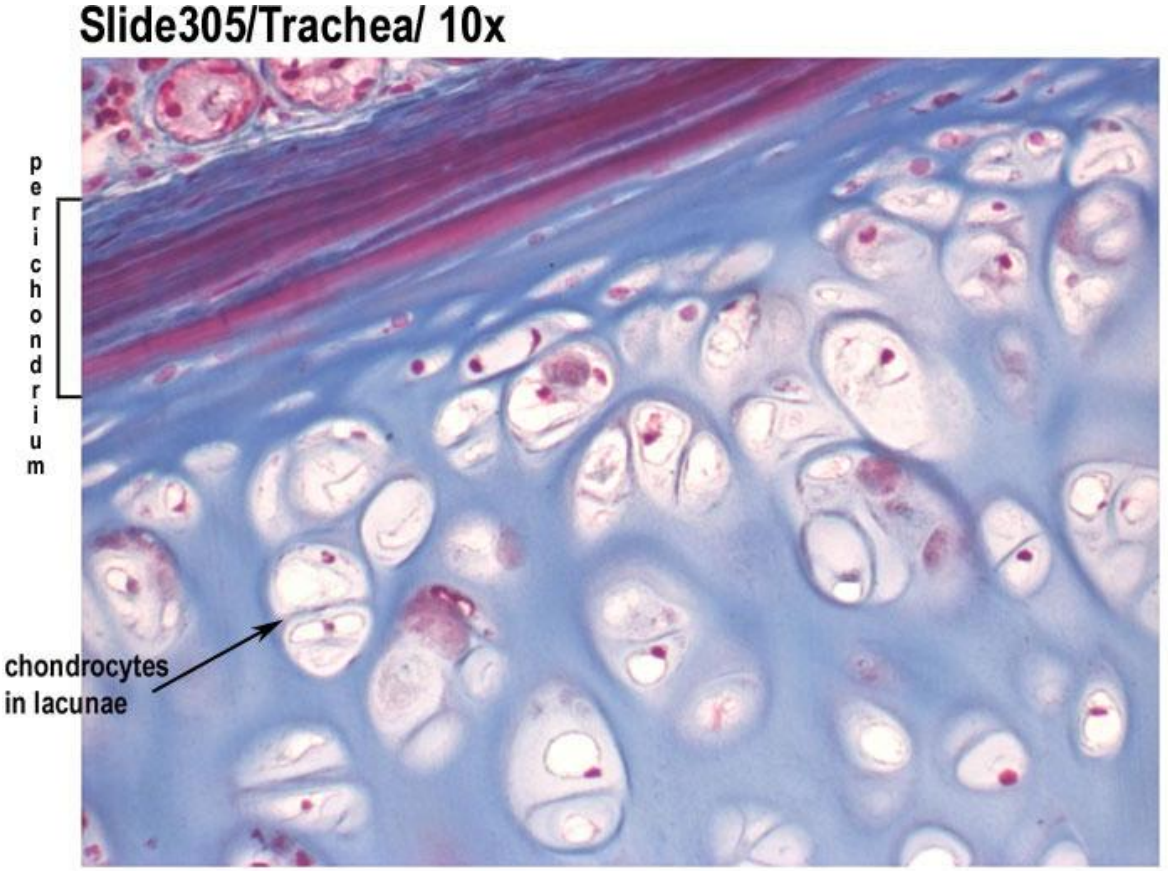

(b) Histology of the epiphyseal plate

Identify: Perichondrium, Chondrocytes, Lacunae
What is the difference between the periosteum and the perichondrium

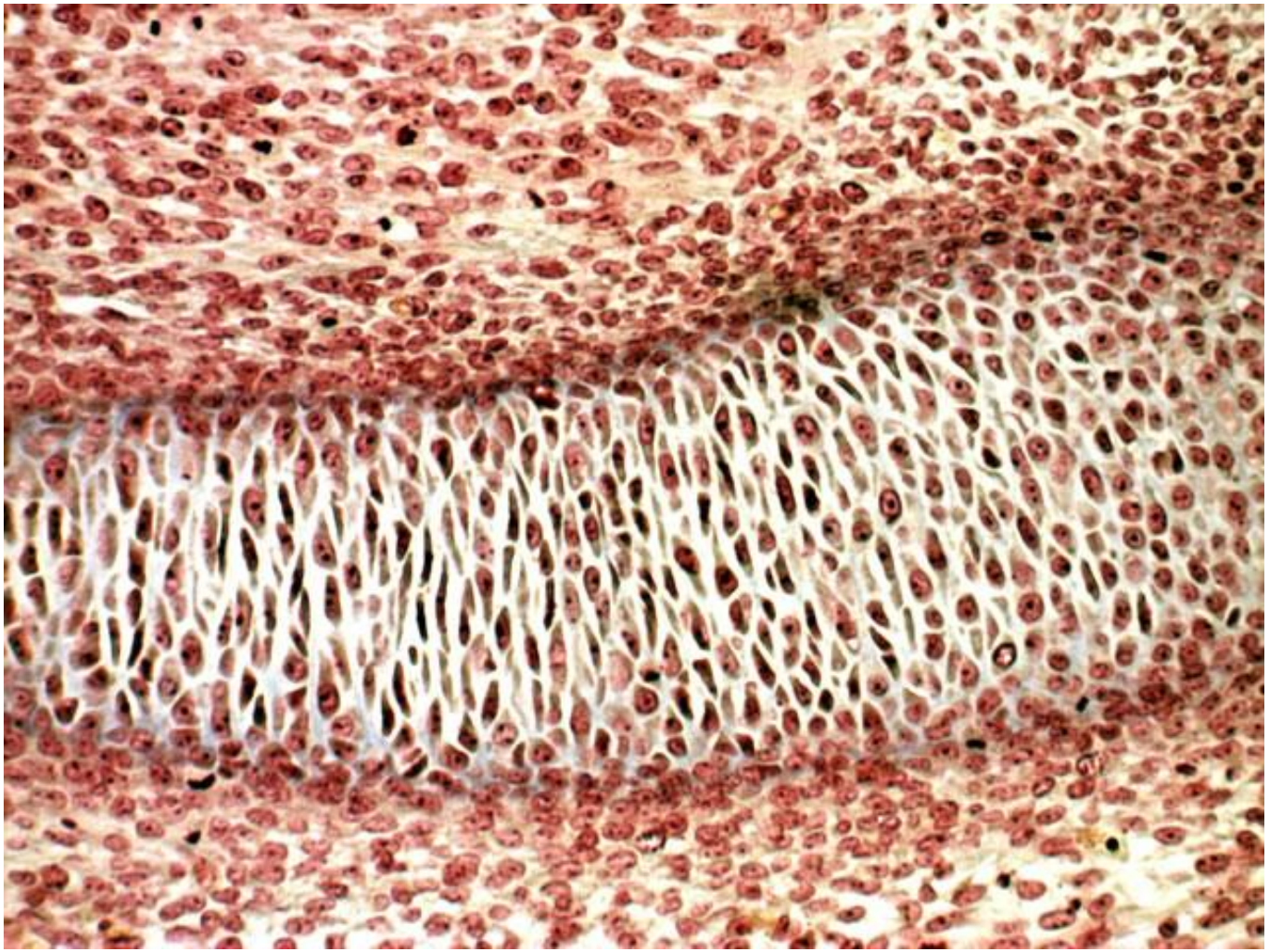


# Identify: Perichondrium, Chondrocytes, Lacunae
# What is the difference between the periosteum and the perichondrium

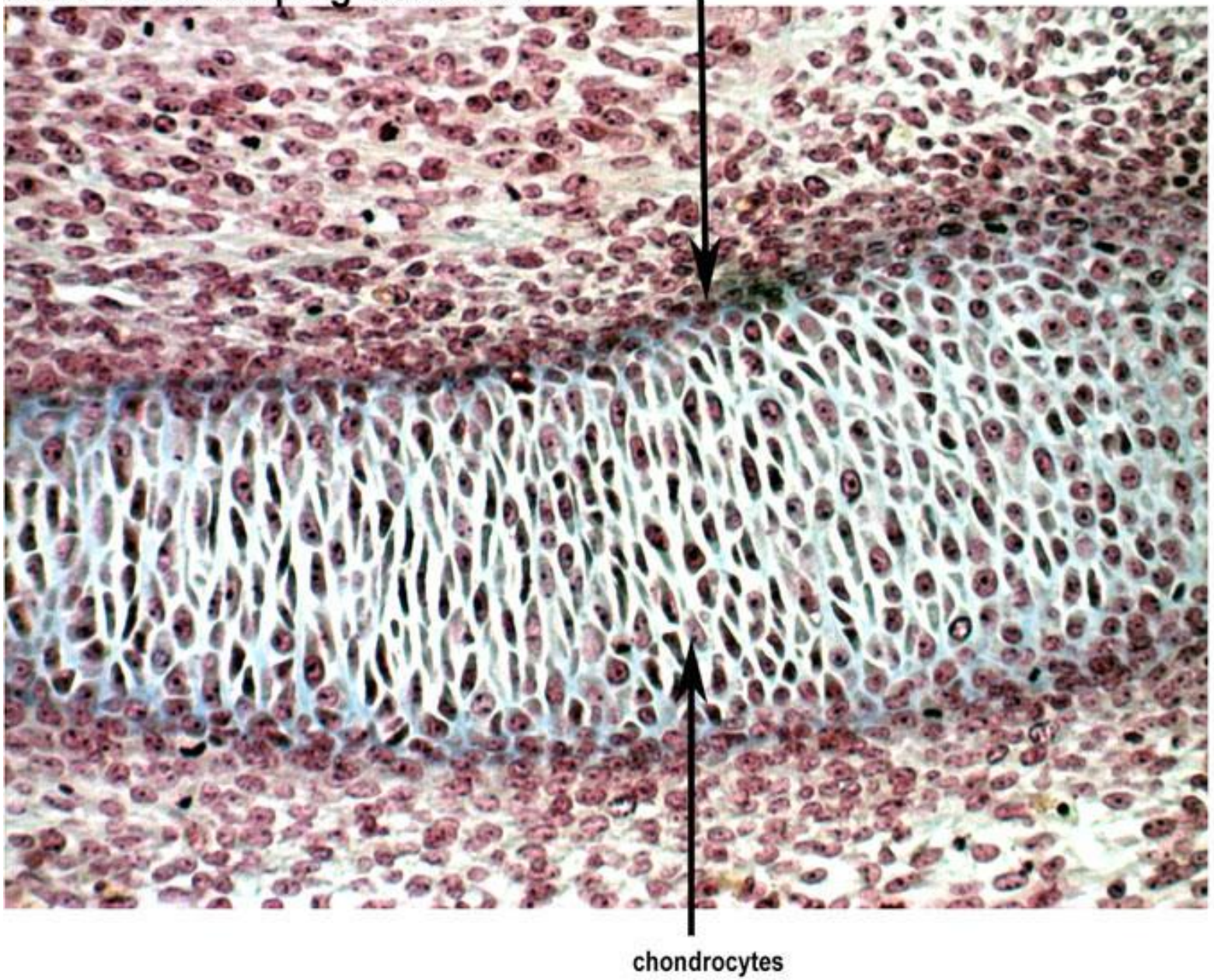
Periostem covers and delimits bone and contains osteoblast progenitors, whereas perichondrium covers and delimits cartilage and contains chondroblast progenitors



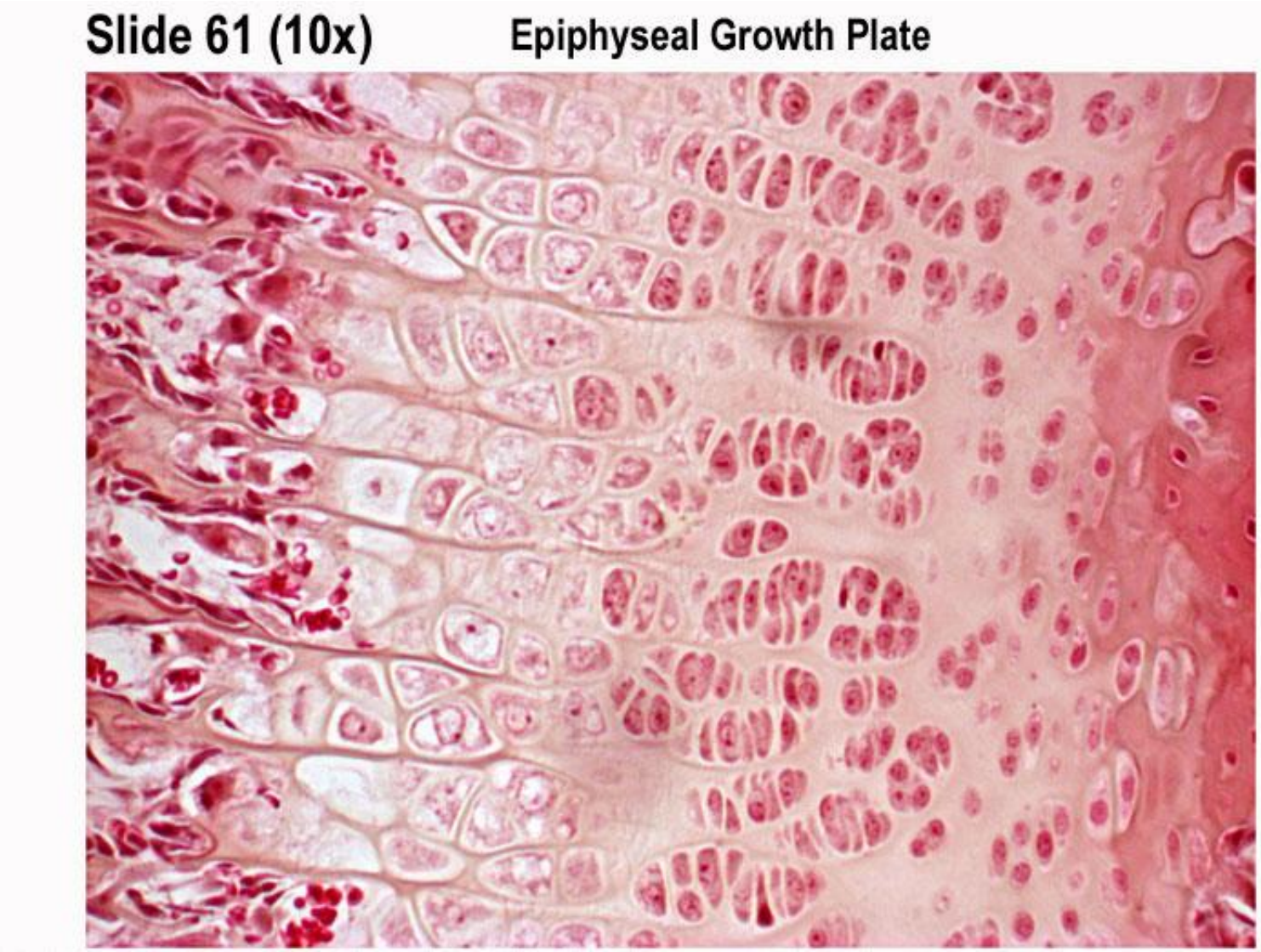
This is a slide taken early in the process of endochondral bone formation. This is a cartilage model of bone, consisting primarily of chondrocytes which have differentiated from mesenchyme. Identify the flattened cells surrounding the cartilage which comprise the perichondrium and the chondrocytes



# Slide 56/Developing Bone/10x



# Identify: Zones of Cartilage degeneration, Hypertrophic/Calcification, Proliferation, Resting Cartilage



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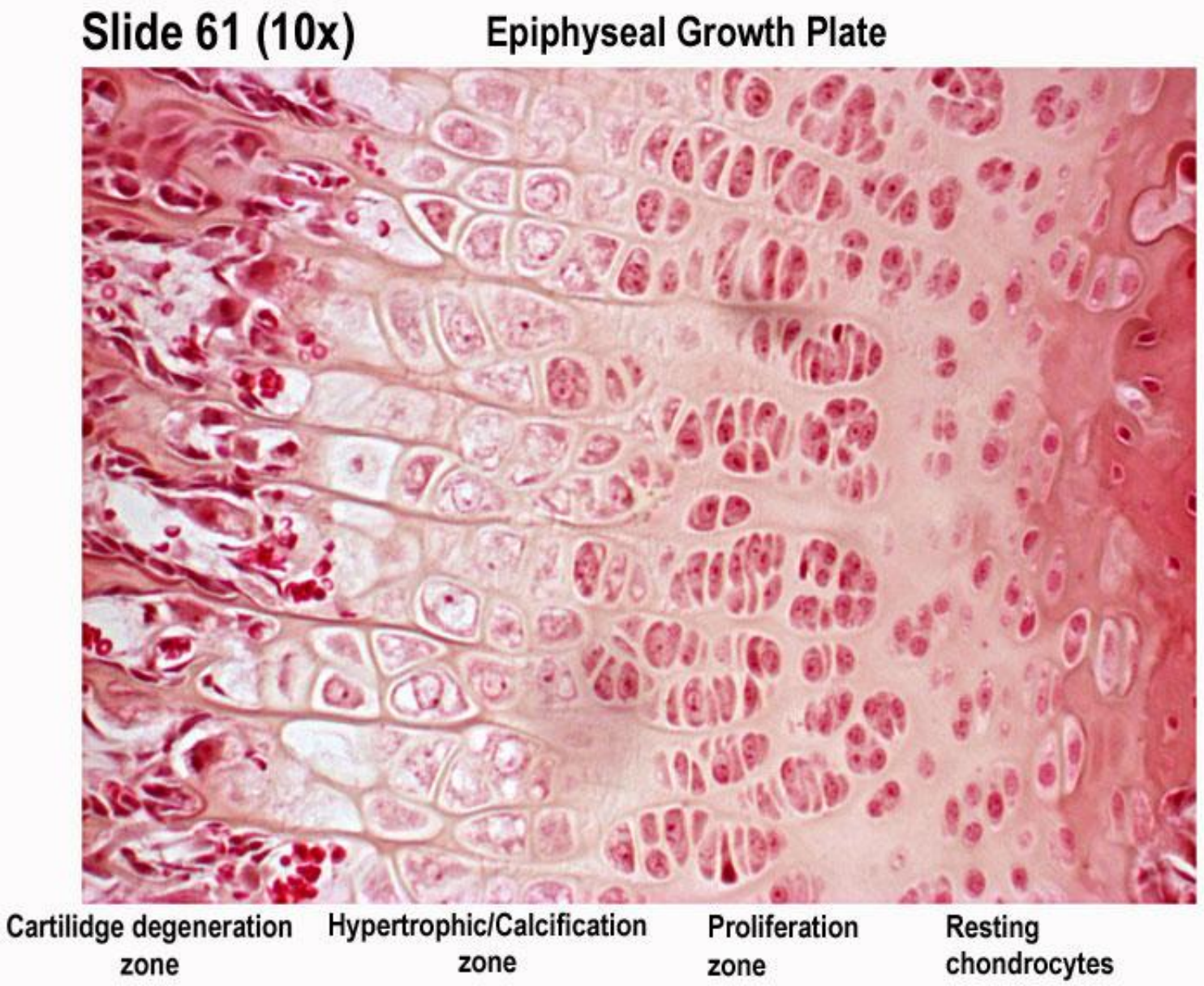
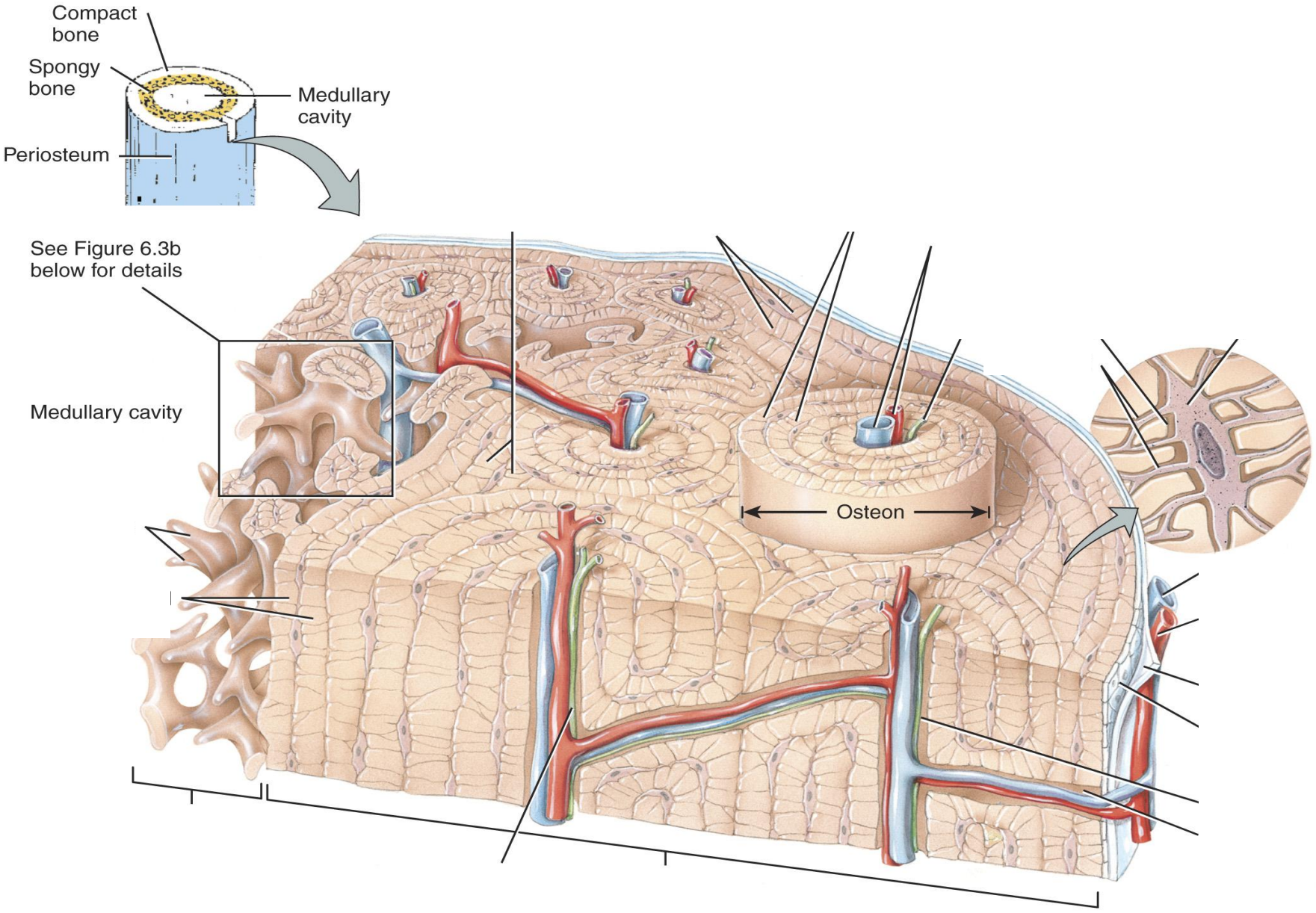


# Identify: All Structures



# Identify: All Structures