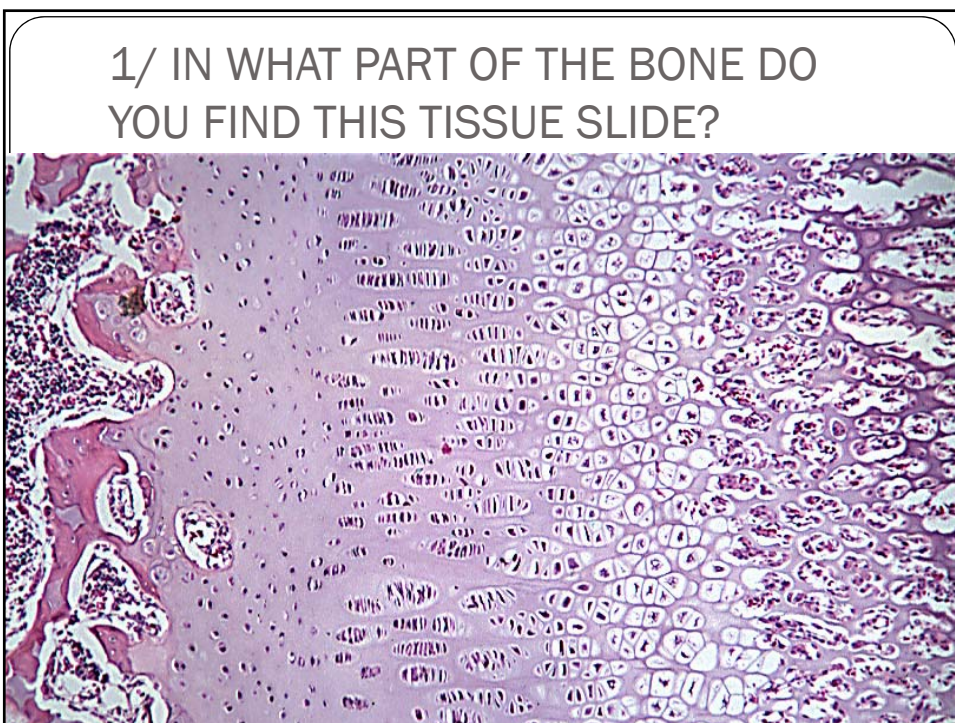
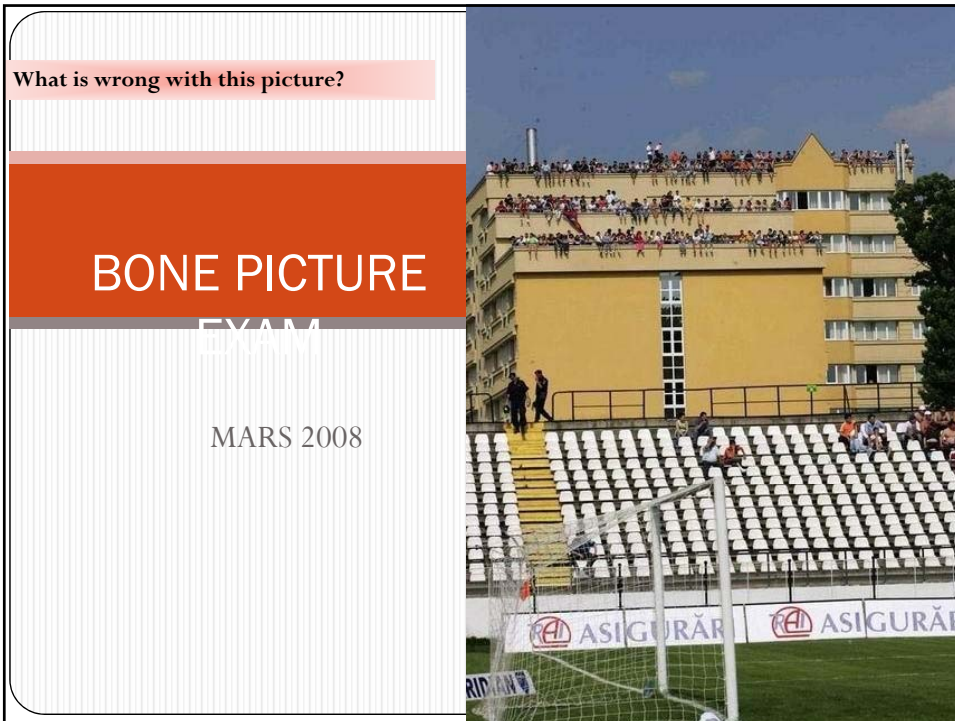
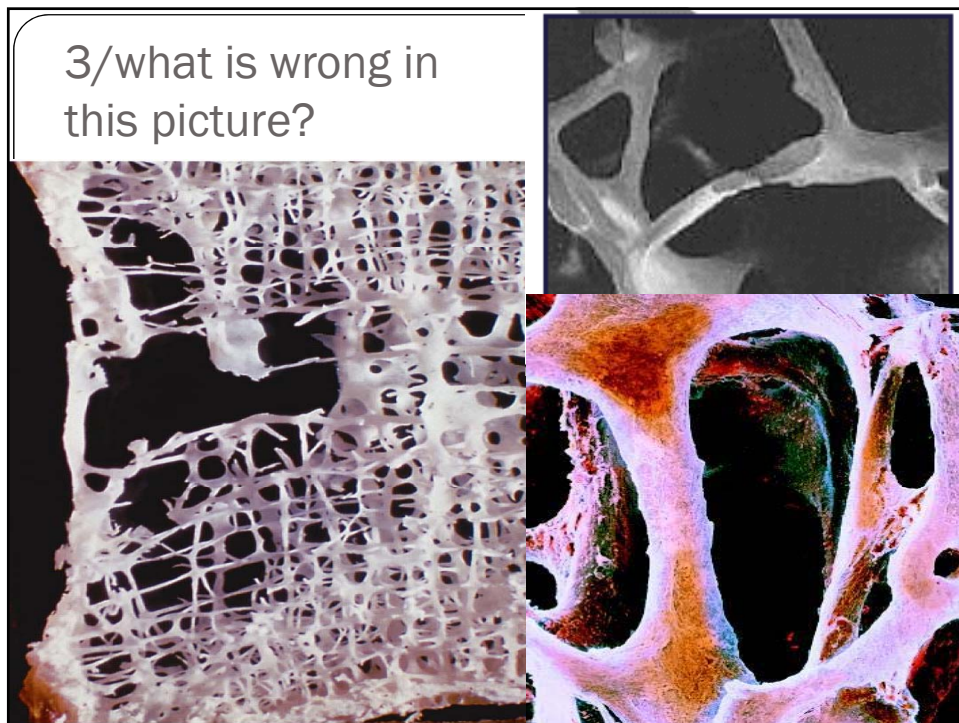
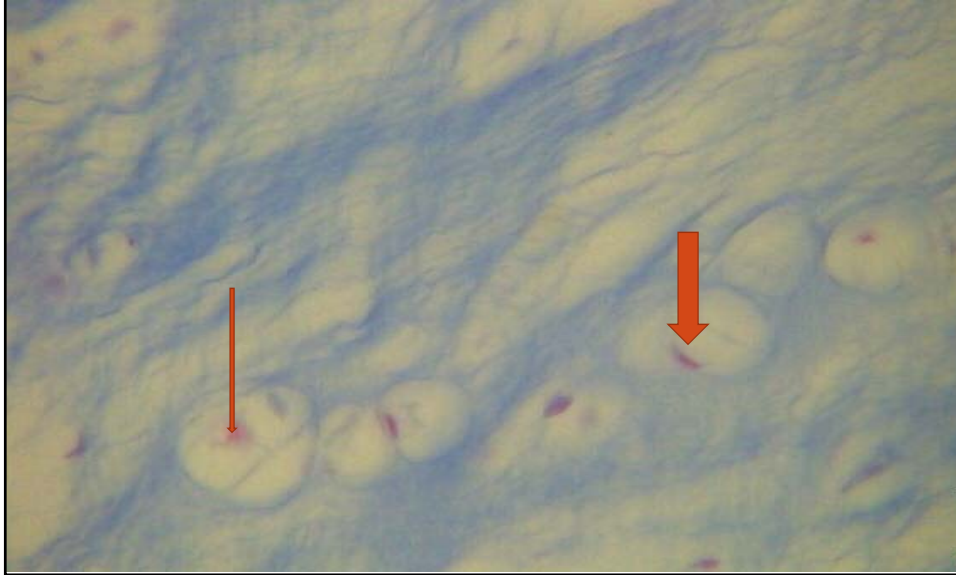


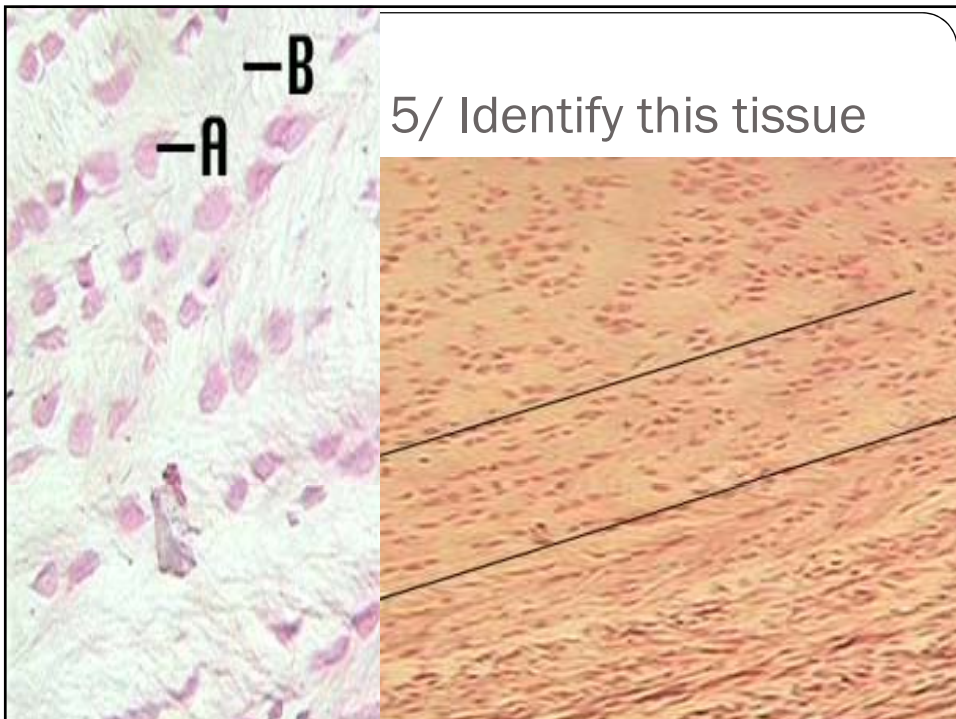


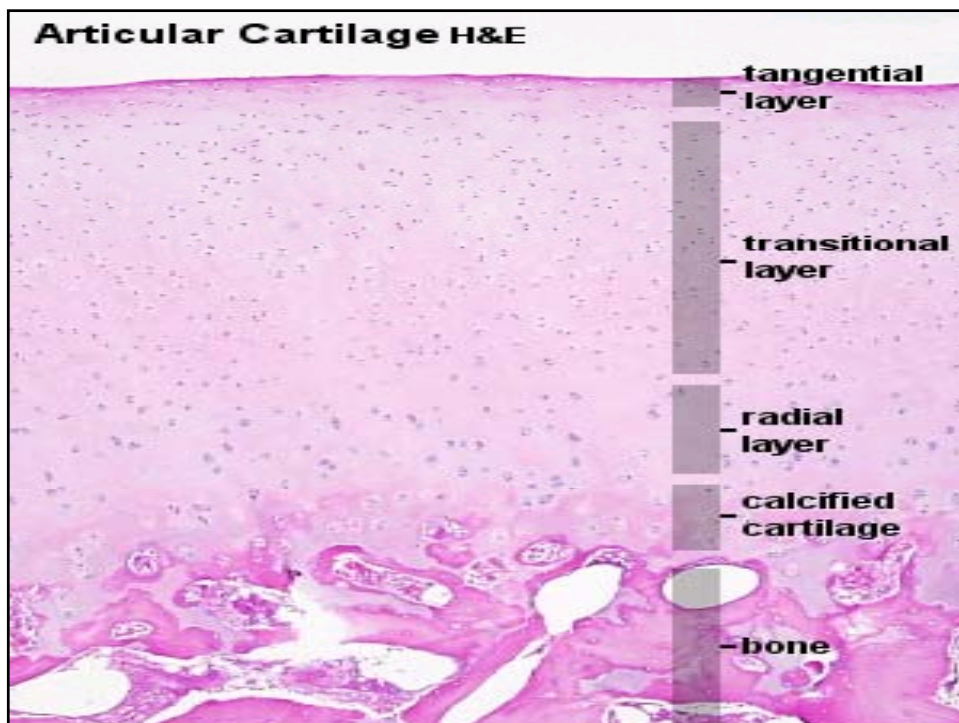


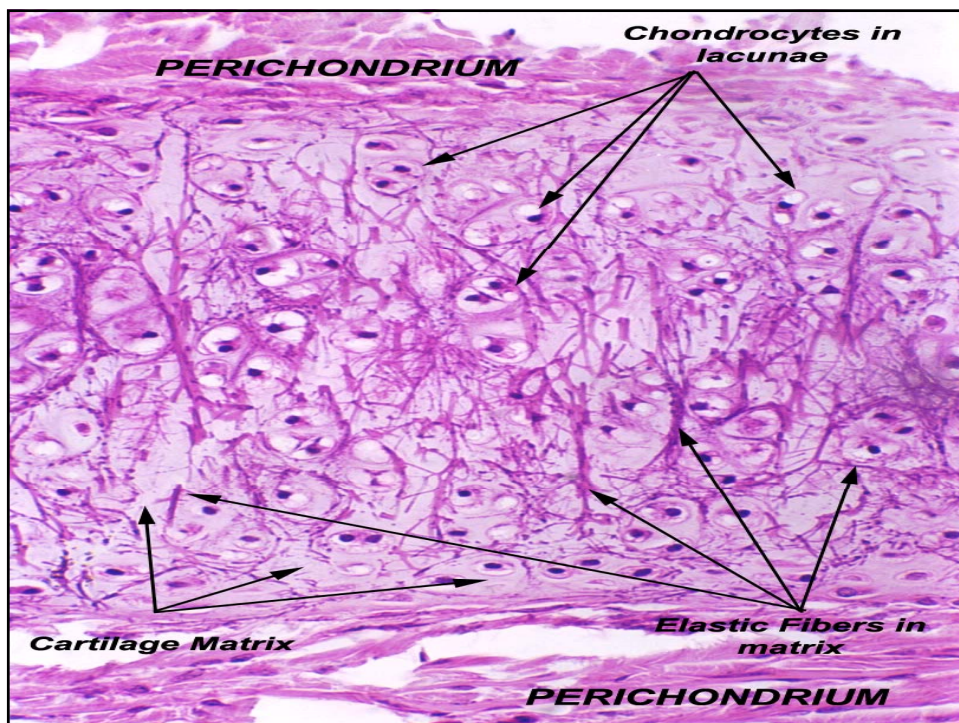
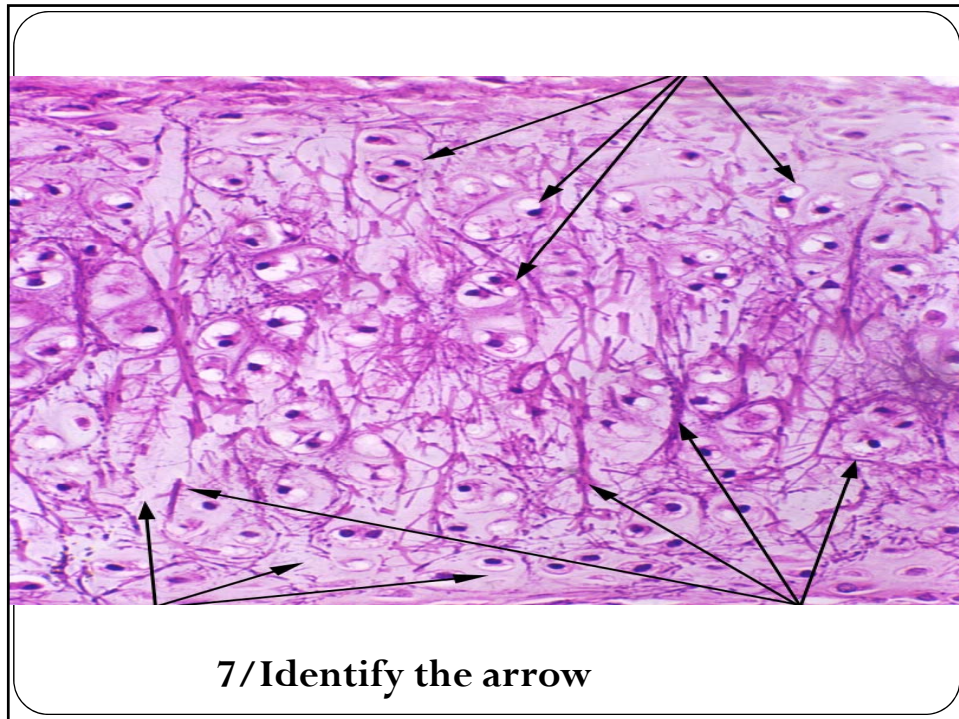
4/ Identify these cells in red?



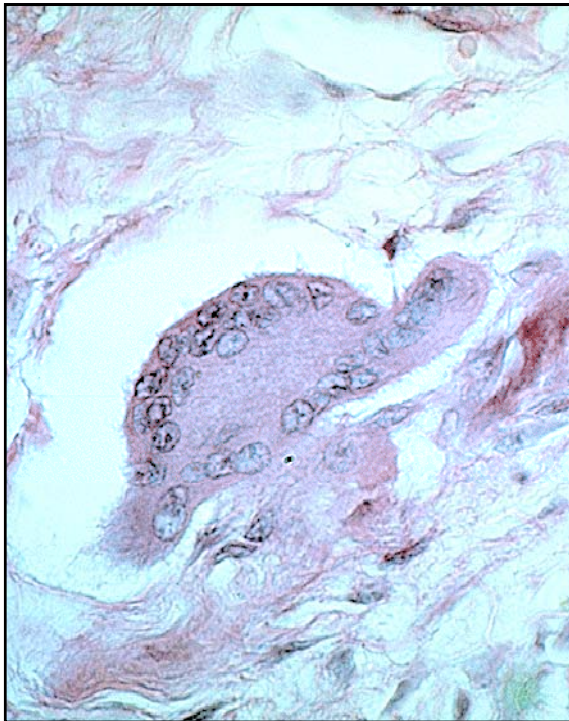
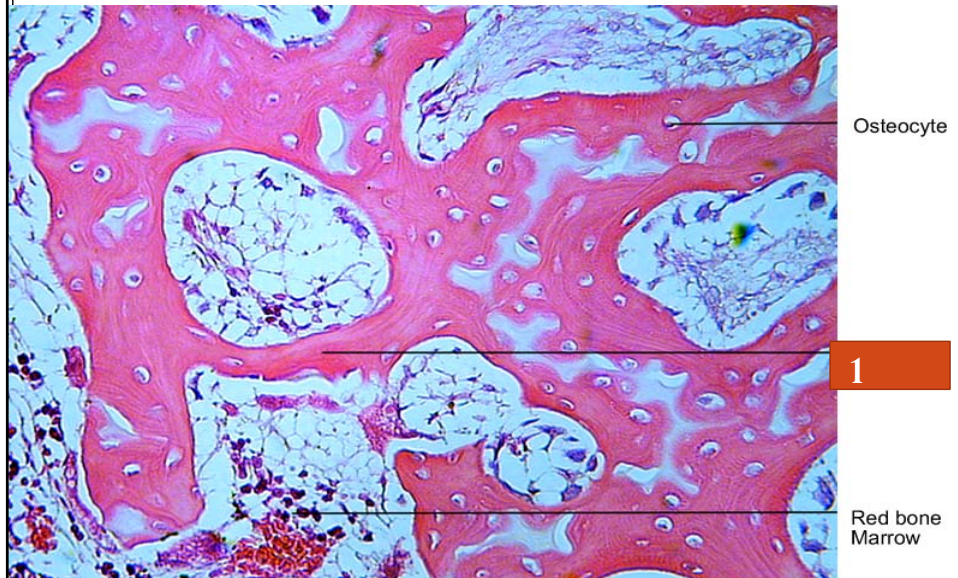
5/ Identify this tissue





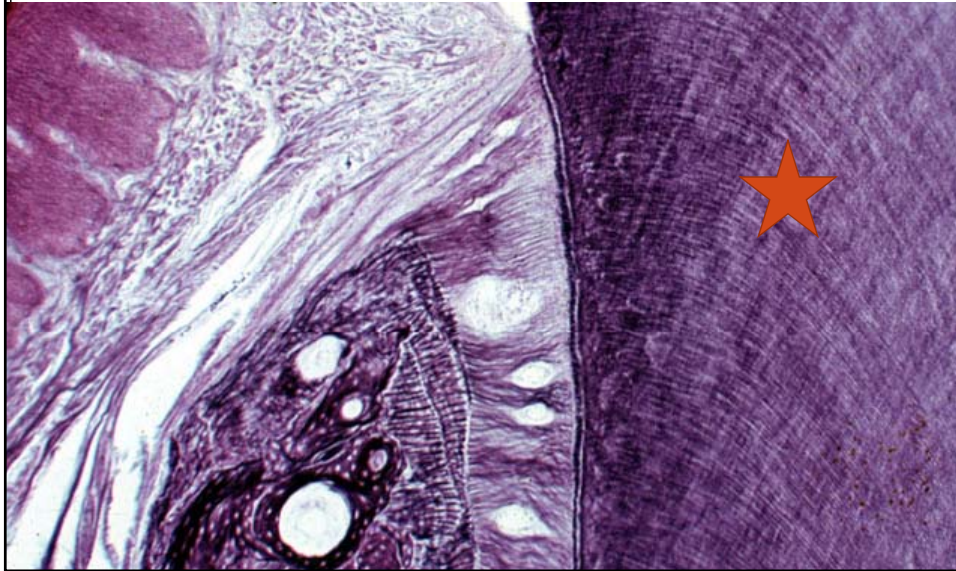


8/ What do you call structure #1

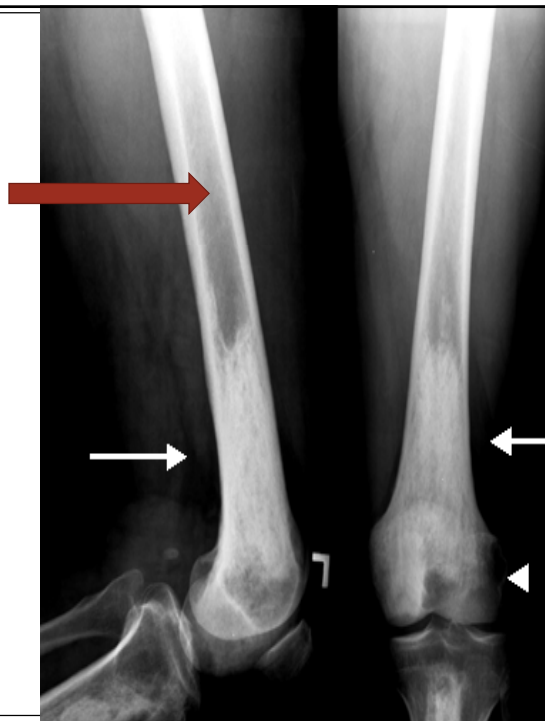


9/ Give a name to this cell

10/ Blue start what do you call this part of the bone



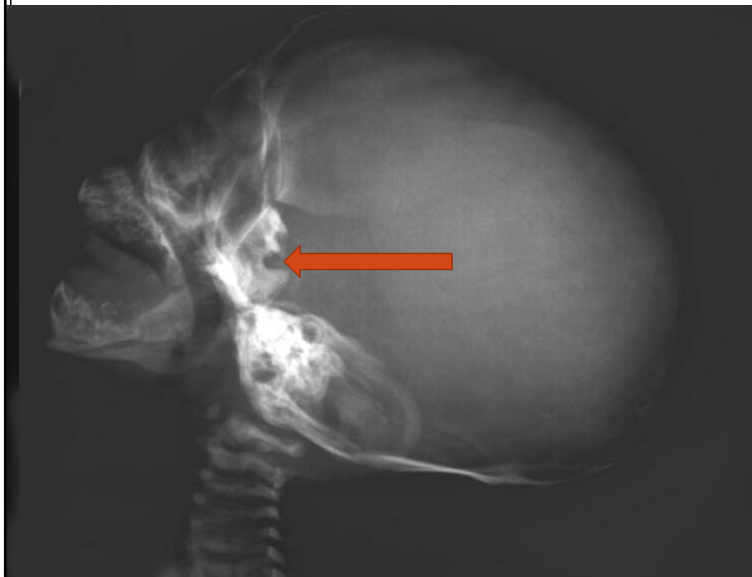
11/ Red arrow name this bone structure

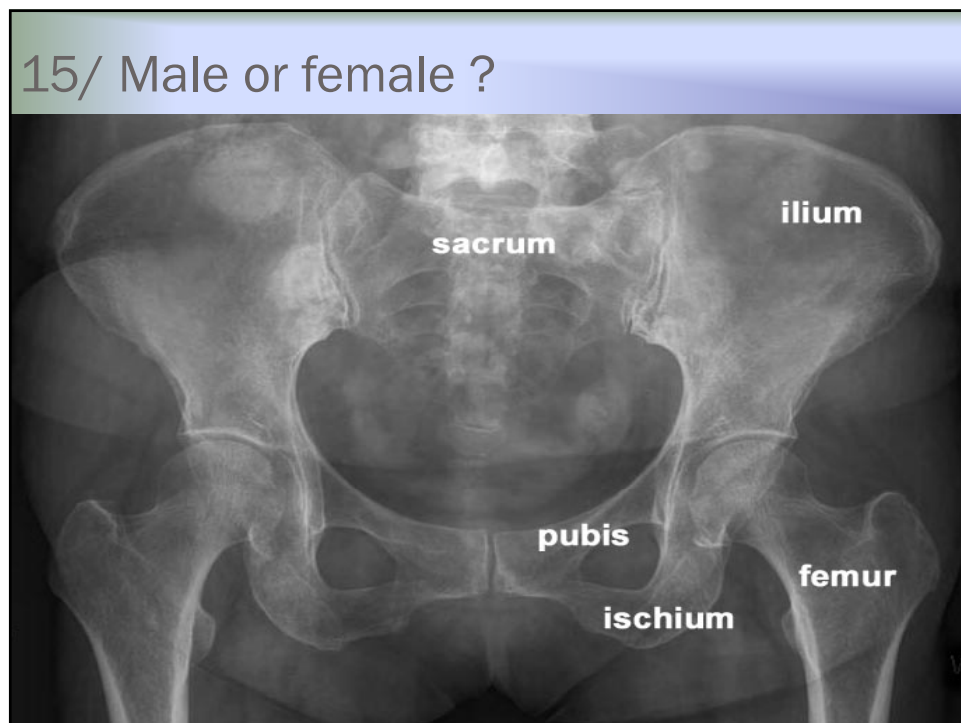
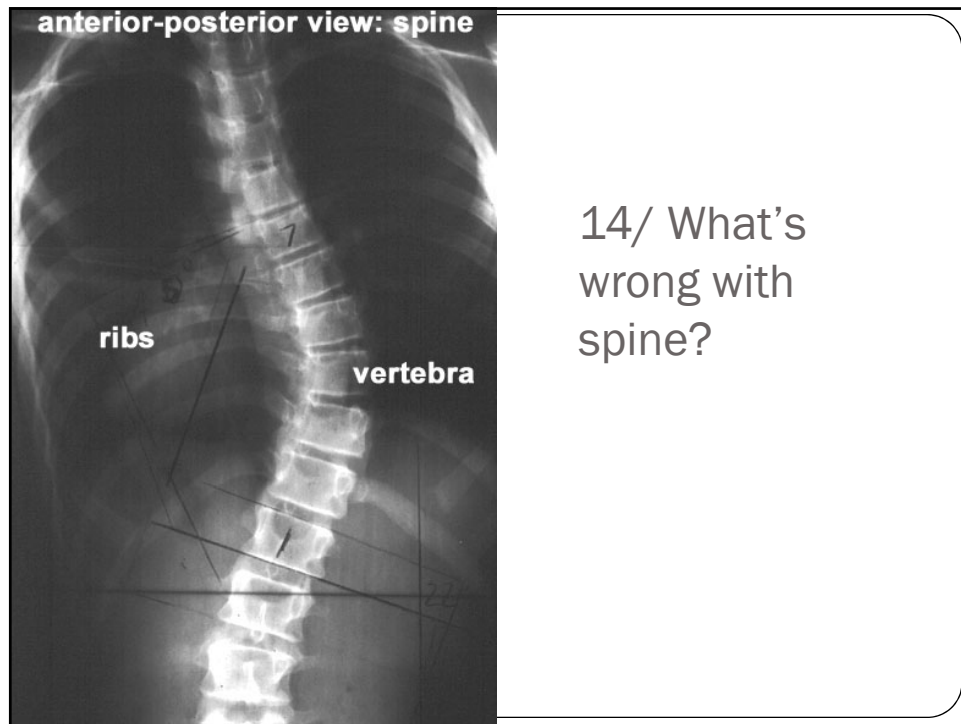


12/ what do you call this part of the bone?



13/What is the name of this structure and could be its function?

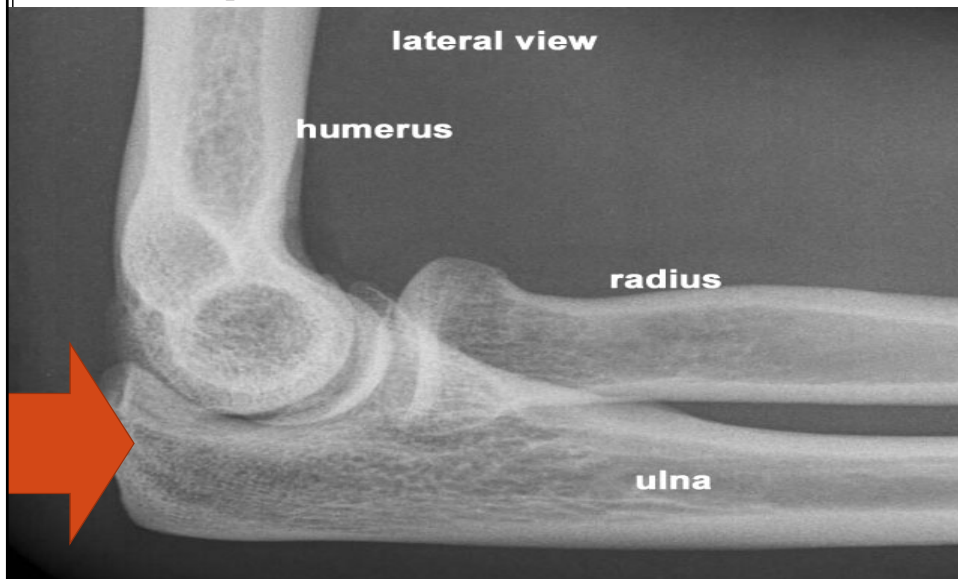




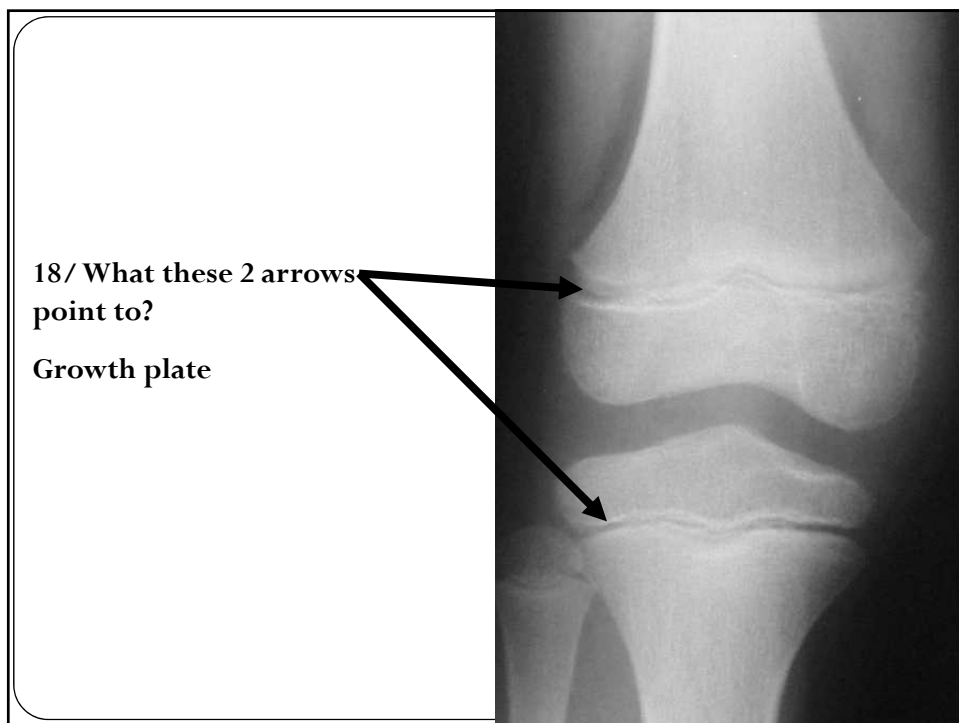
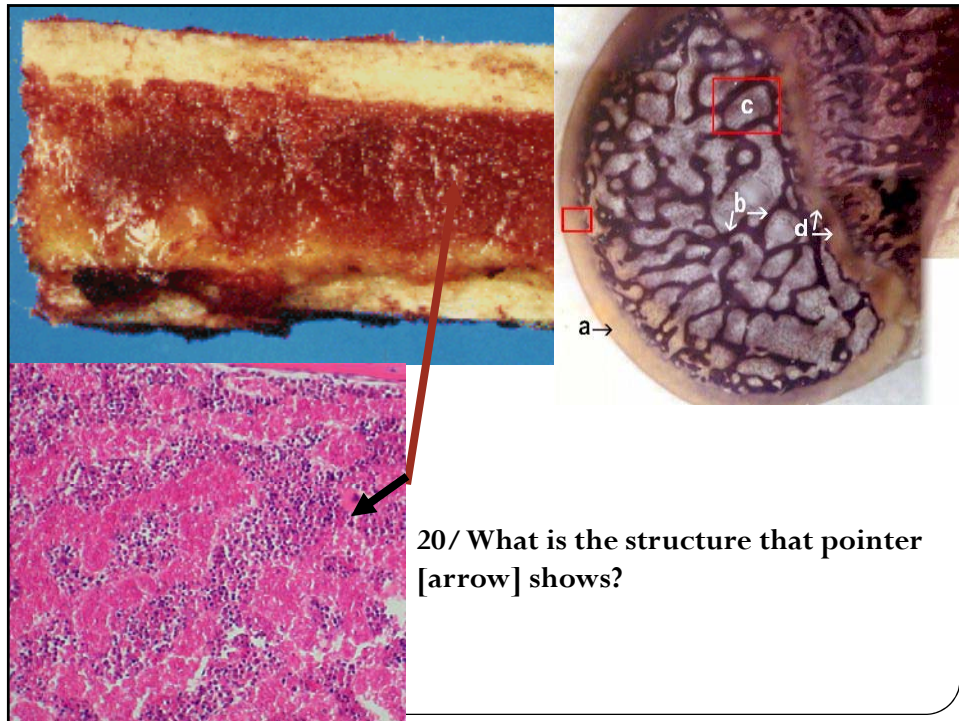
16/ Adult or kid and why?



17/What do you call this area [see arrow]









1/ What is wrong with this x ray?
[be specific in your answers]

2/What is wrong with this person?look carefully we talked about it



3/ What condition lead to this pic?



4/ What is going on in this x ray? [one answer is fine two answers get you an extra point?

But just be specific since we saw it during the lecture

5/ what is wrong here?



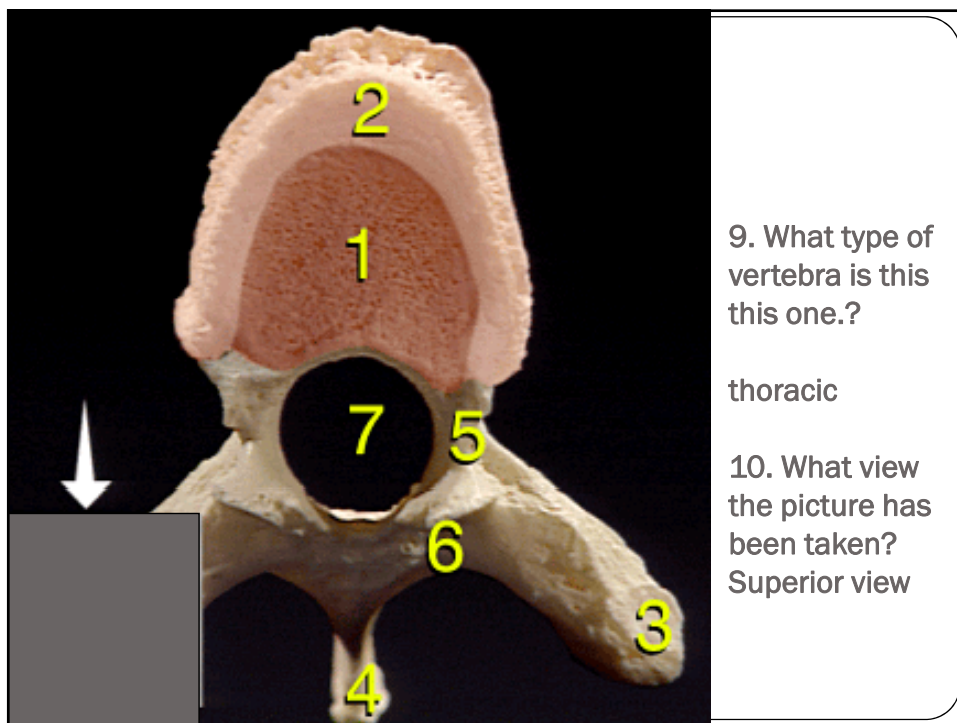
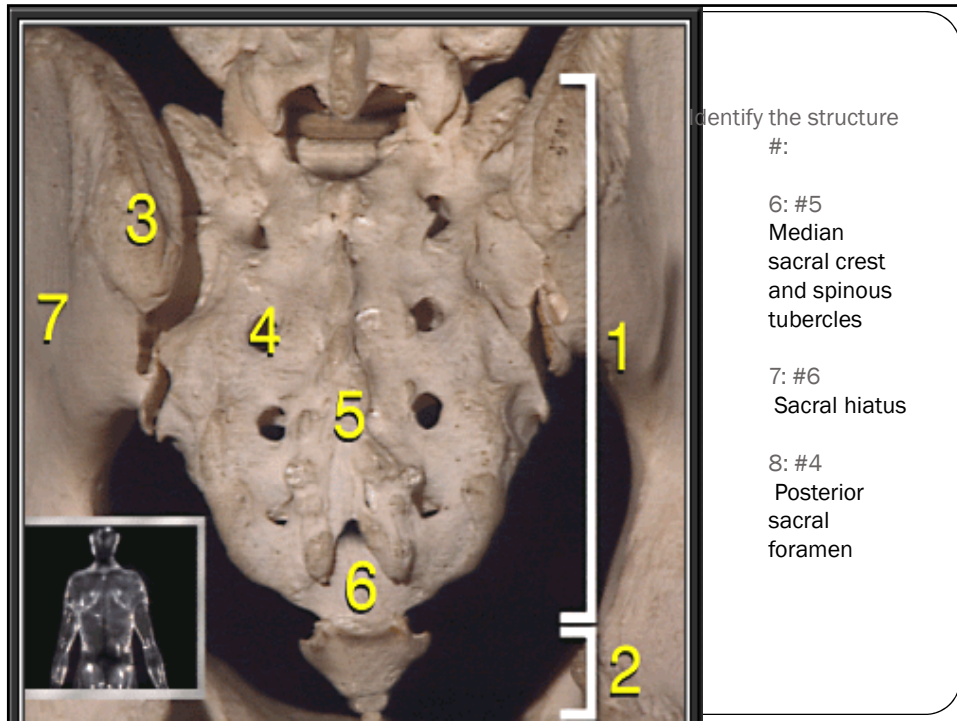
1/ .Name the axial bones? write on the same line

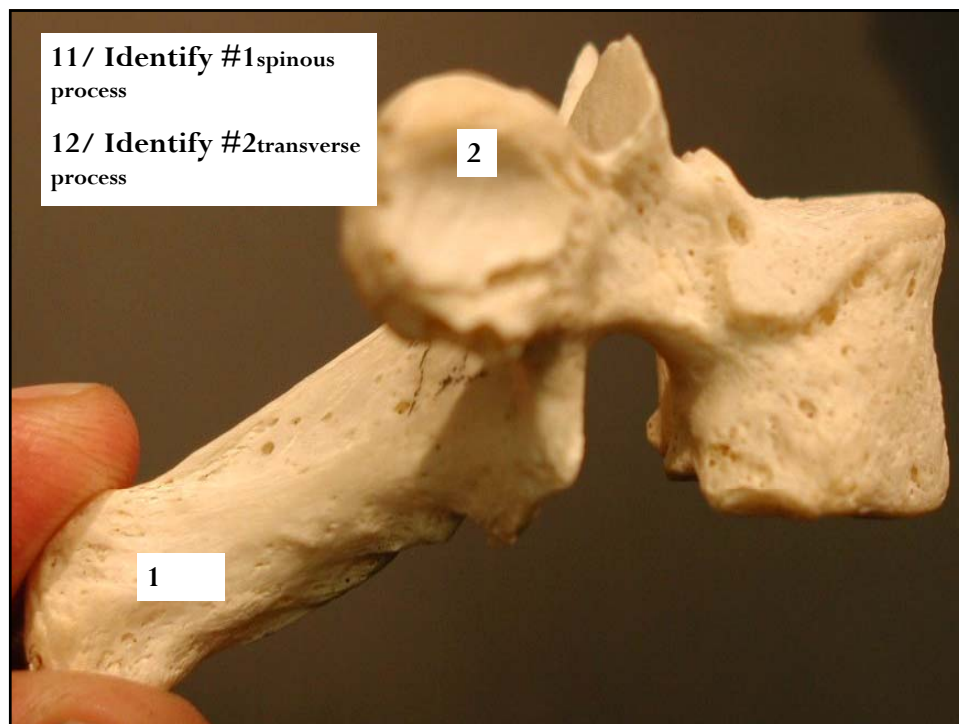
- a. skull bones
- b. auditory ossicles
- c. hyoid bone
- d. vertebral column
- e. sternum
- f. ribs

2/ Define Remodeling of the bone?

Remodeling – bone is resorbed and added by appositional growth as shown

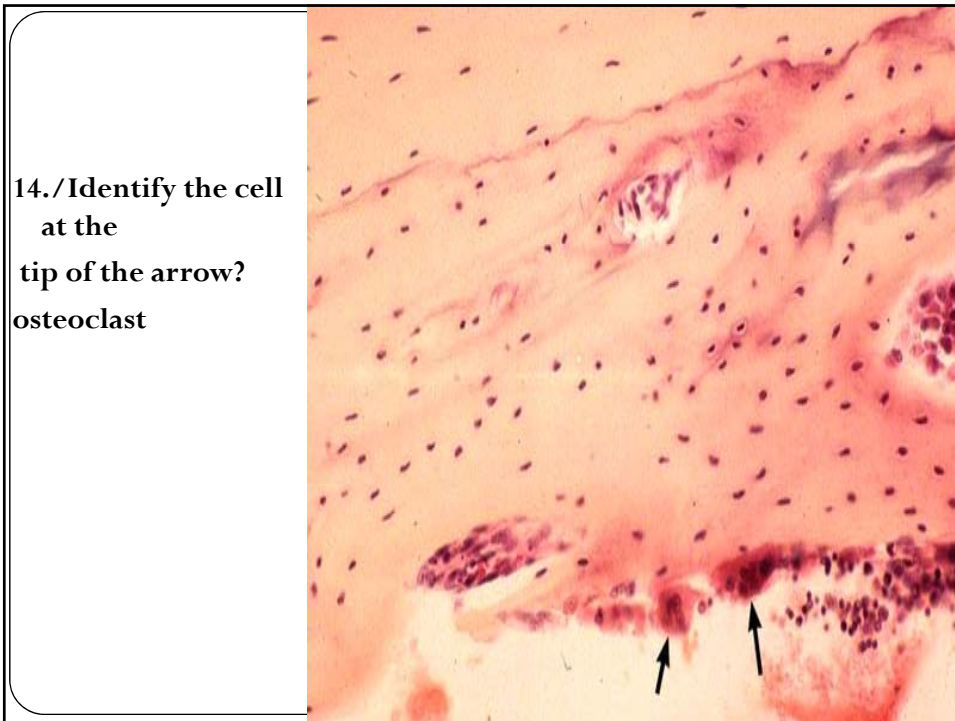






13./What is the purpose of the articular processes of the vertebrae?

Answer: These processes (superior and inferior) allow the vertebral column to flex forward some, but lock the vertebrae if the column is flexed back. In a fourlegged animal, such as a horse, these processes allow the back to remain in place while you ride it.



of cells present?

- i. **osteogenic cells** give rise to osteoblasts
- ii. **osteoblasts** produce the bone tissue matrix
- iii. **osteocytes** maintain the bone tissue
- iv. **osteoclasts** function in bone resorption

16./two [2] major types of bone tissue?

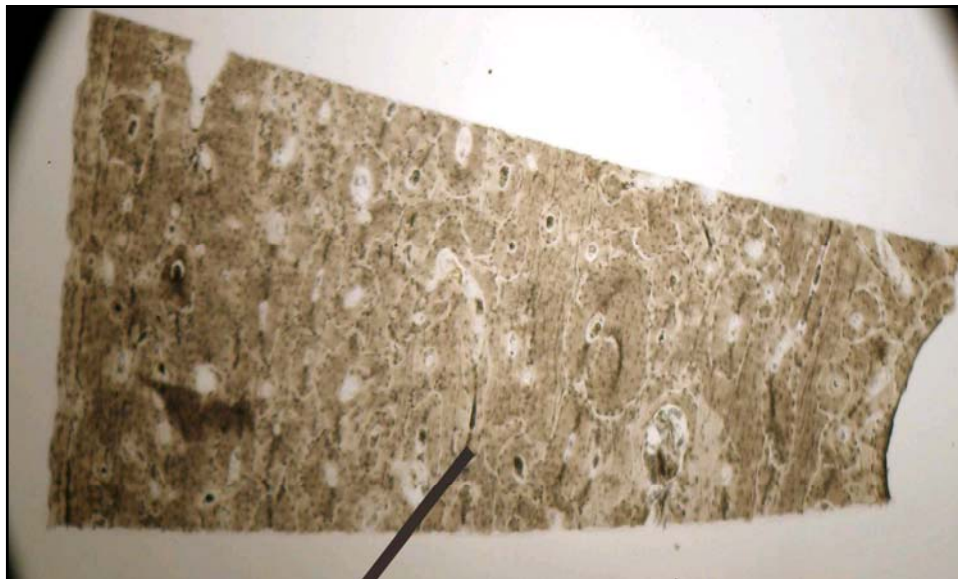
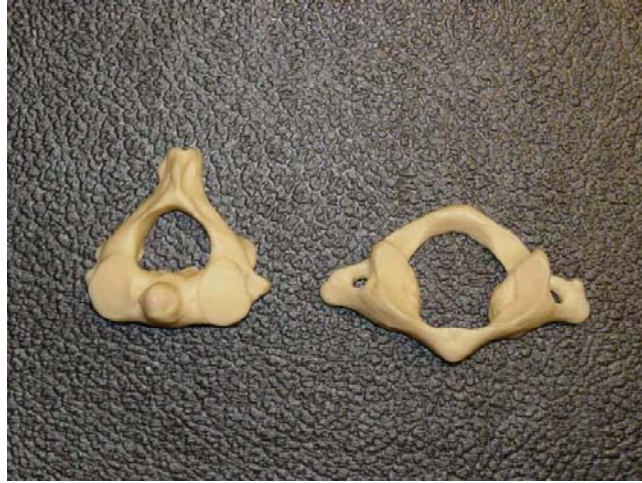
Compact

spongy

17./Functions of the Skeletal System

- i. support
- ii. protection
- iii. assistance in movement
- iv. mineral storage and release
- v. site of blood cell production:
hemopoiesis, which occurs in **red bone marrow**
- vi. triglyceride storage in **yellow bone marrow**

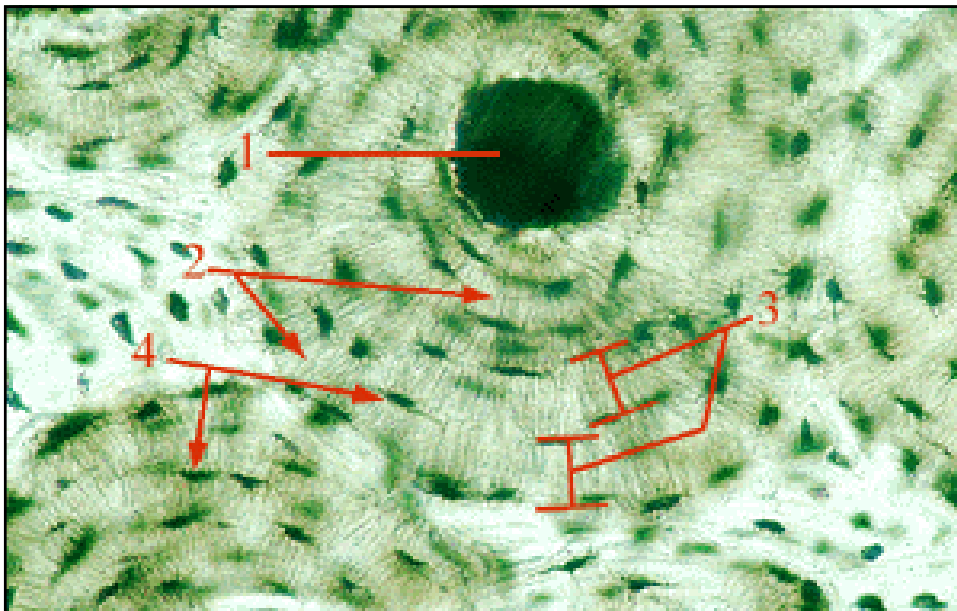
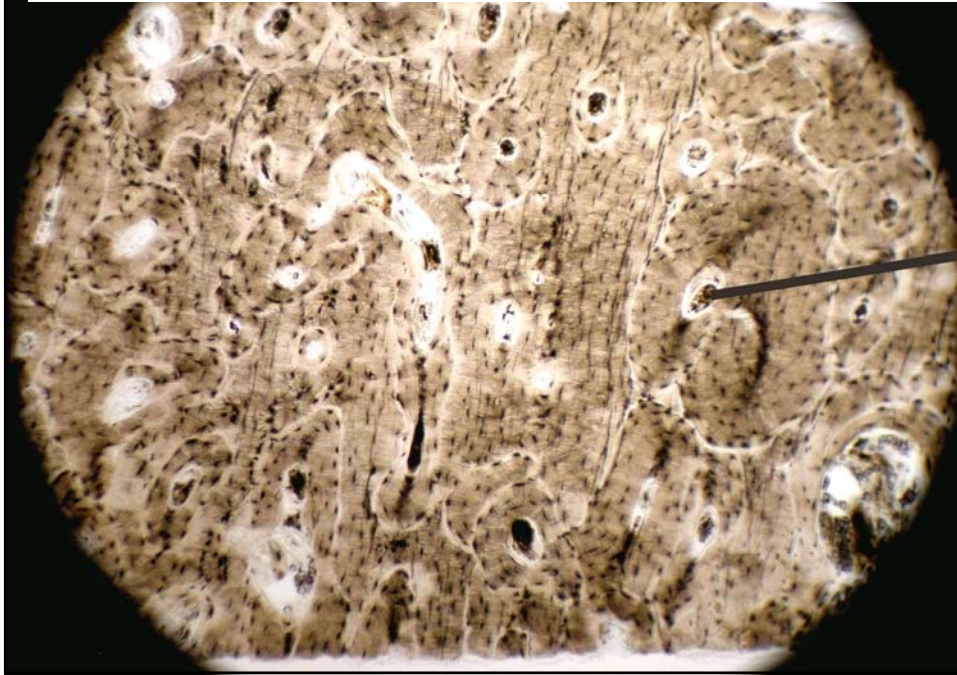
18/ Identify these 2 bones?atlas axis



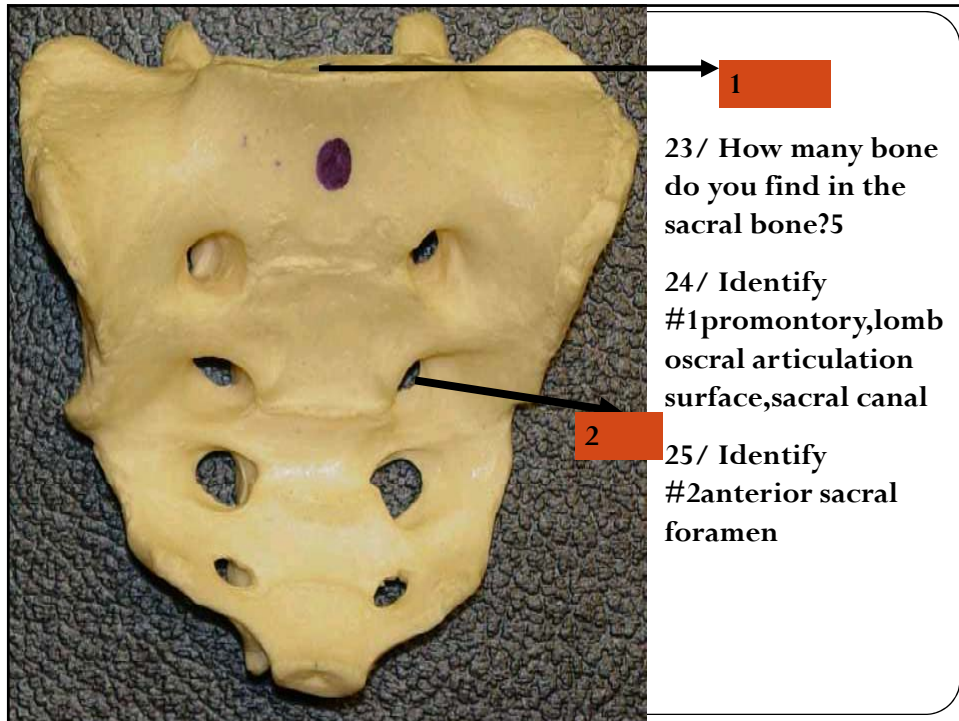
19/ Identify the structure of this tissue where the pointer is?

20/ What cut has be done to view this tissue this way?

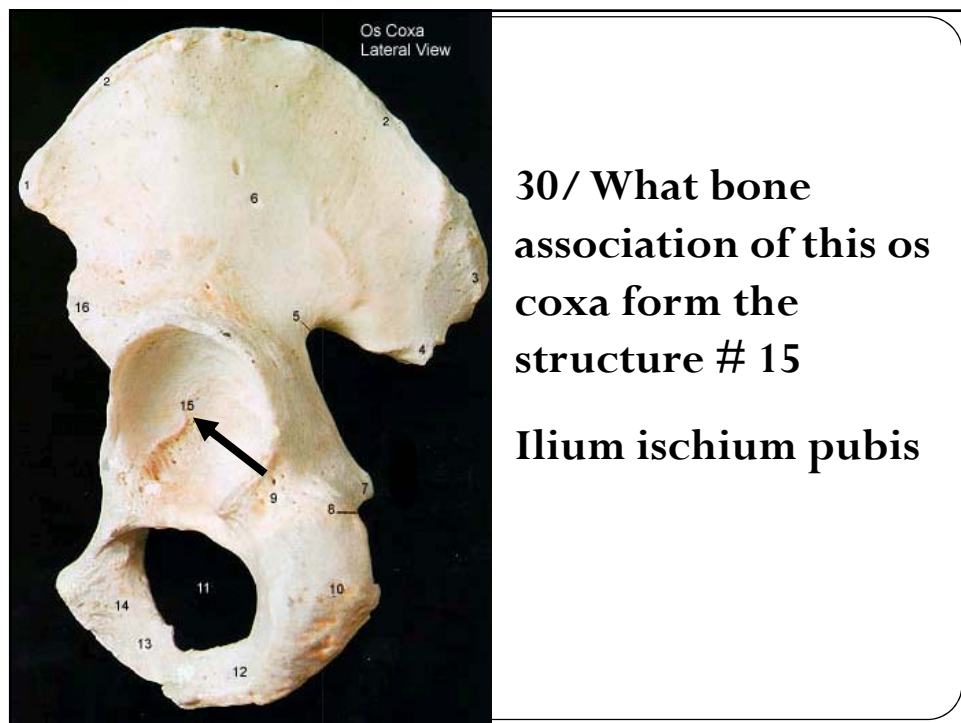
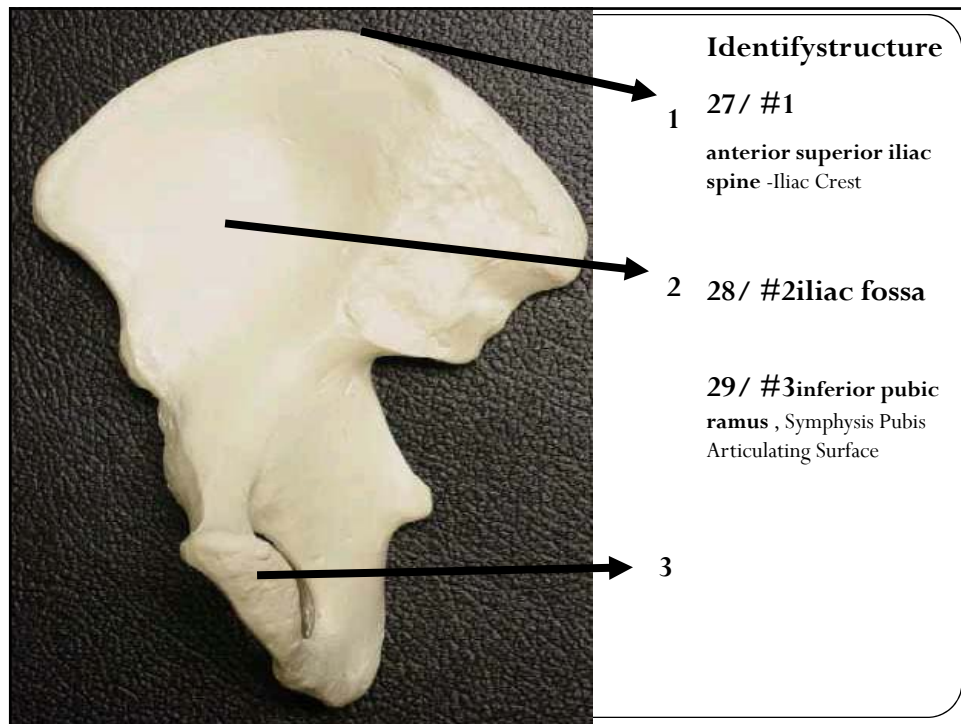
21/ Identify the structure under the pointer ?

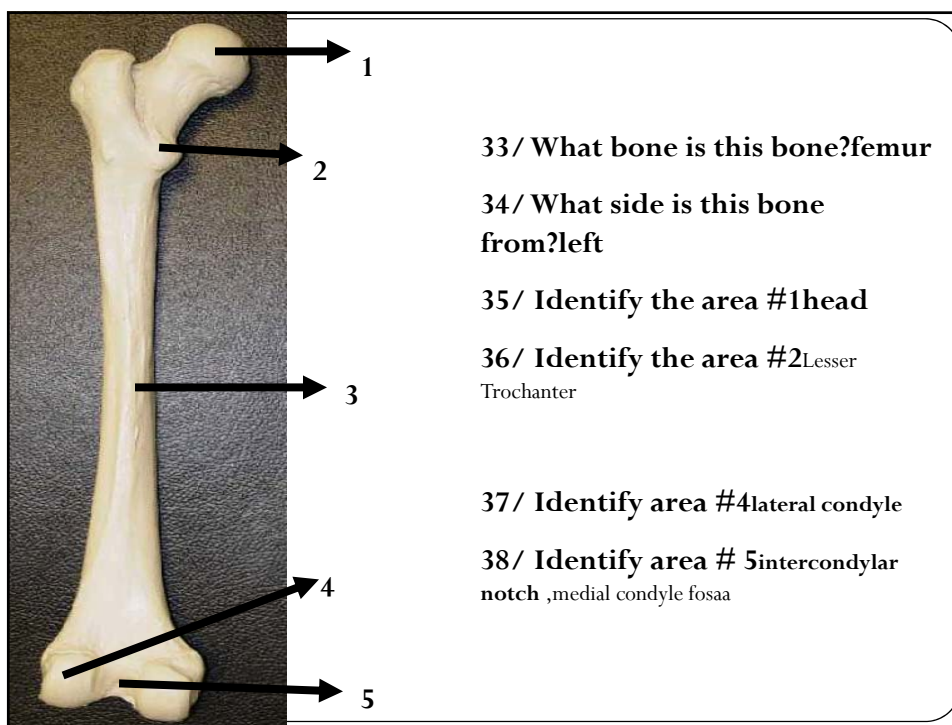
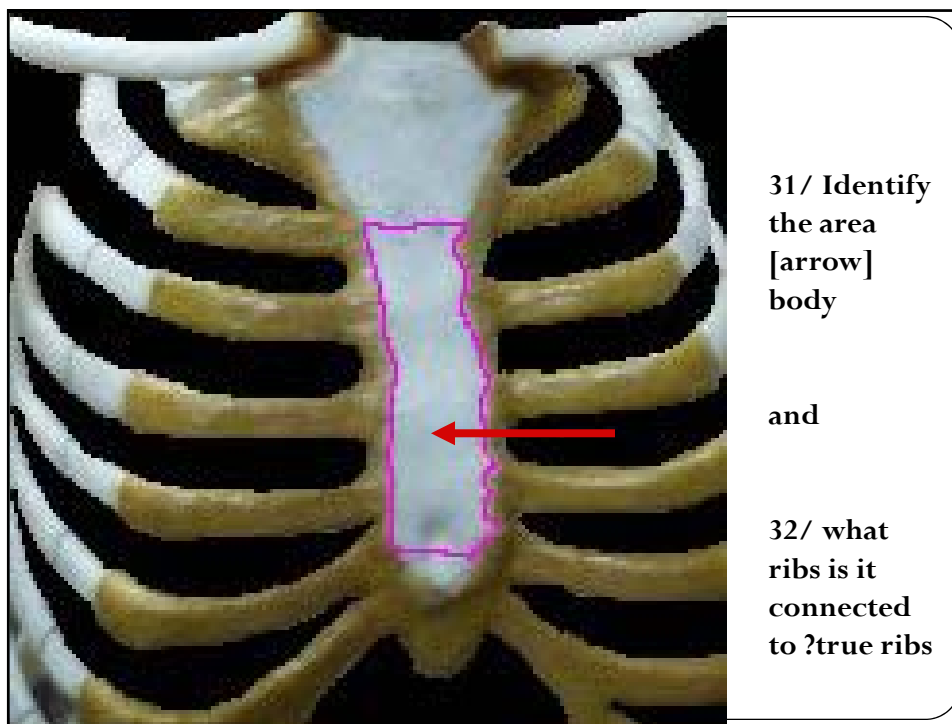


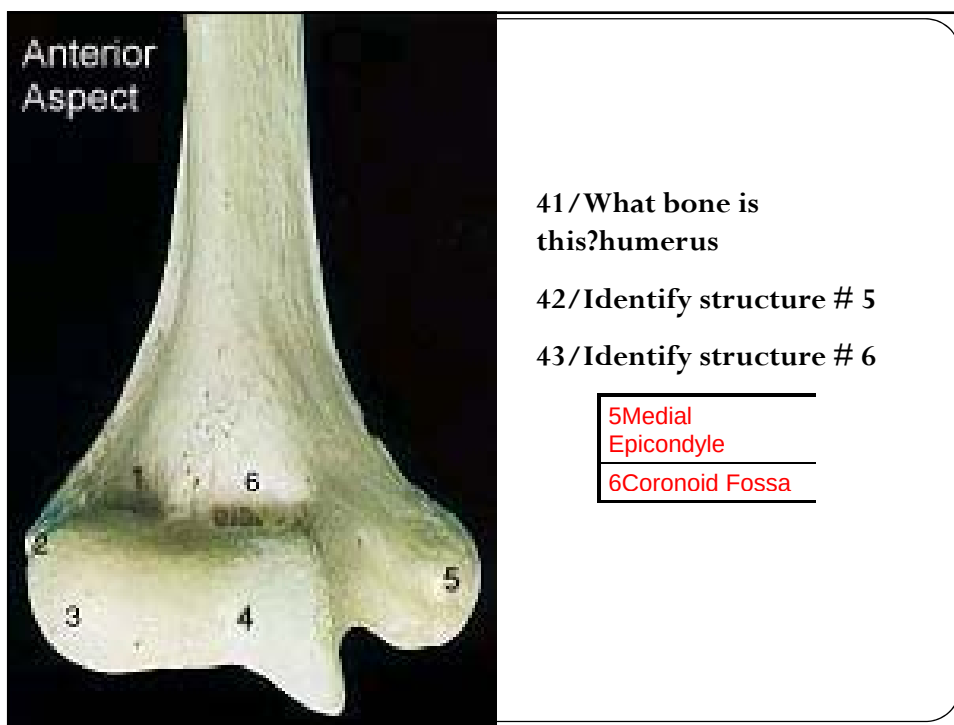
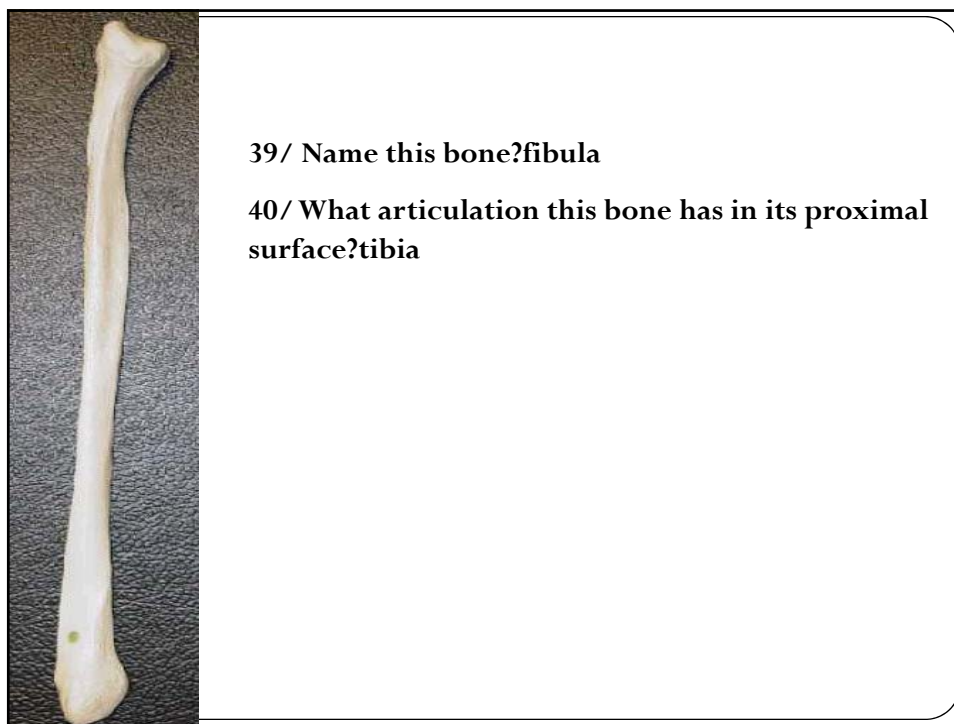
22/ Identify the structure 1,2,3,4

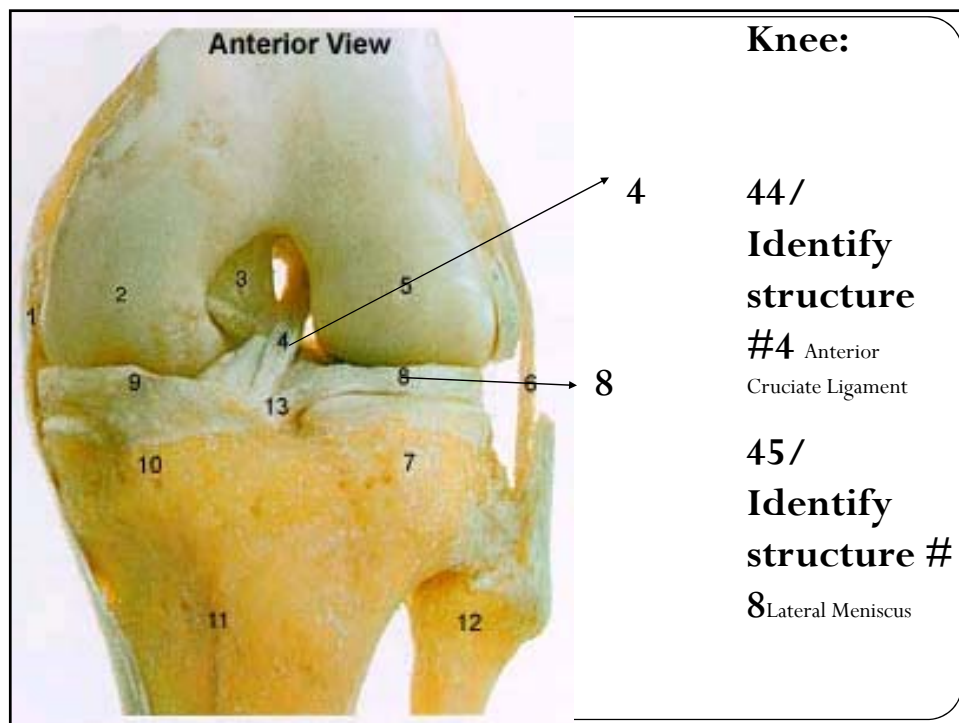
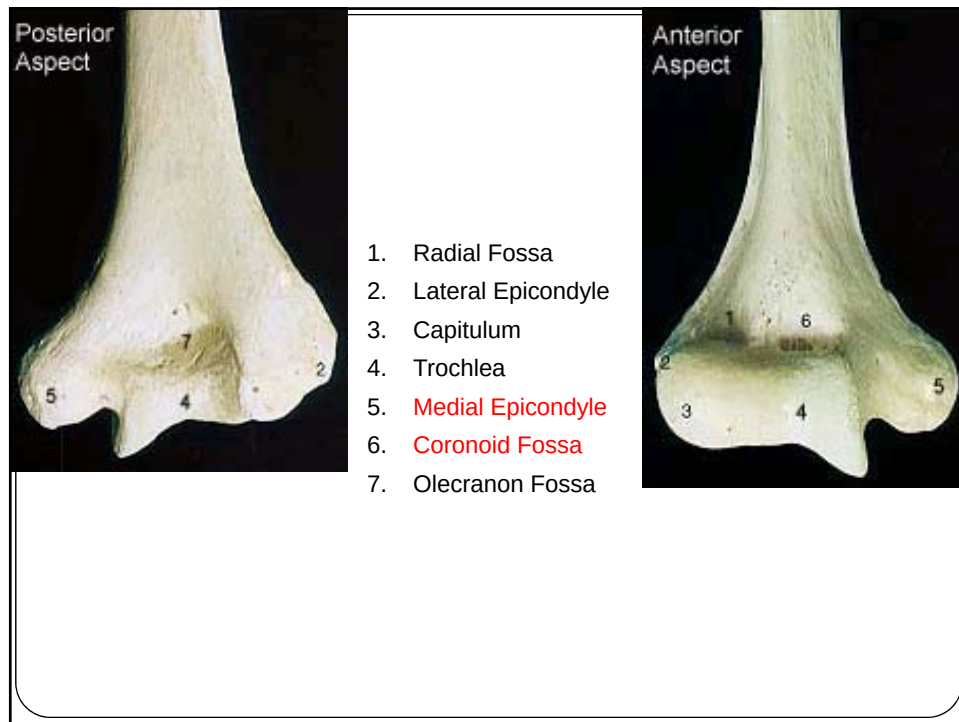


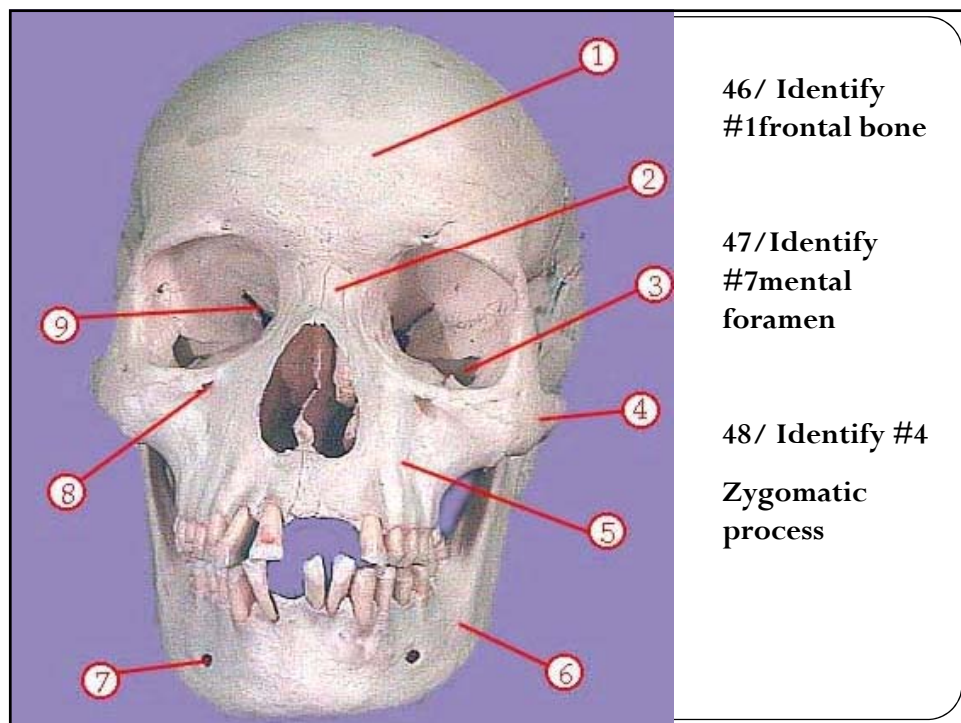
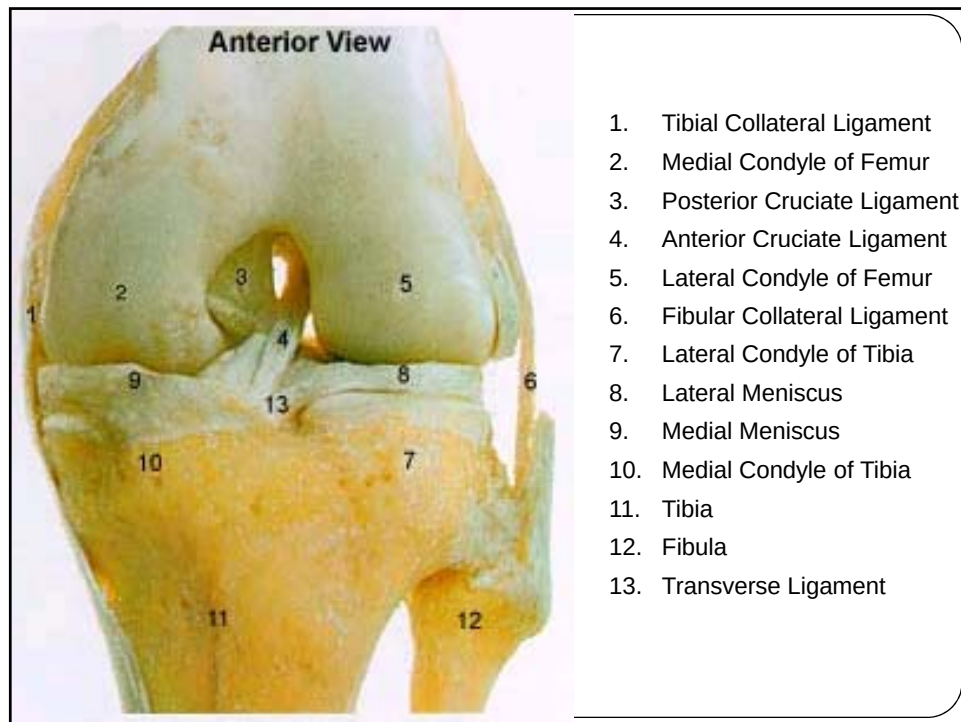
26/How many vertebra do you find in the spine? Be specific

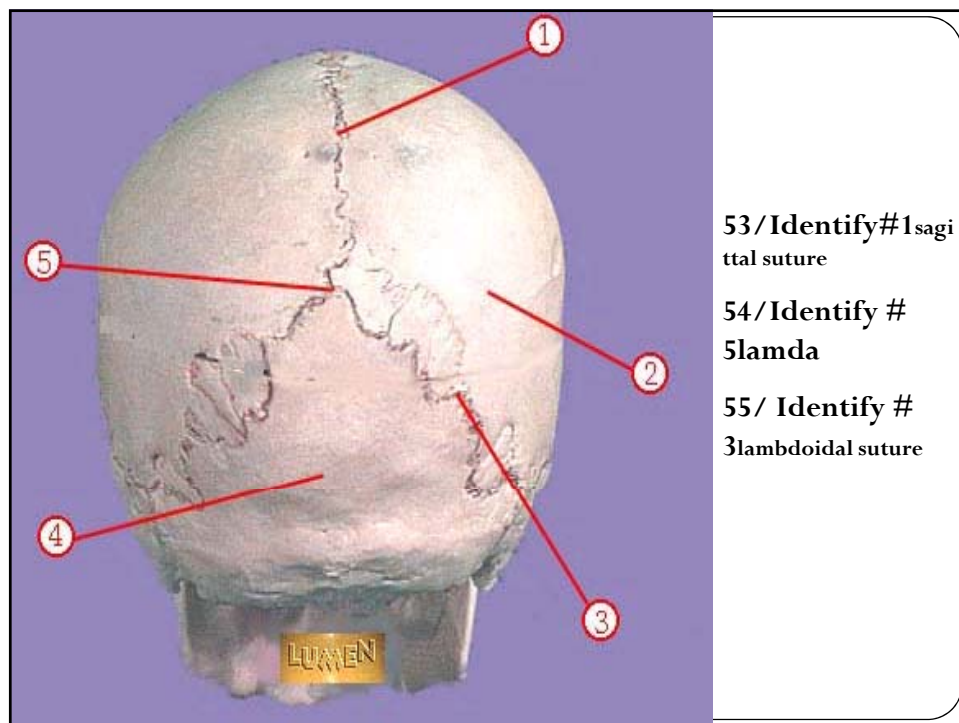
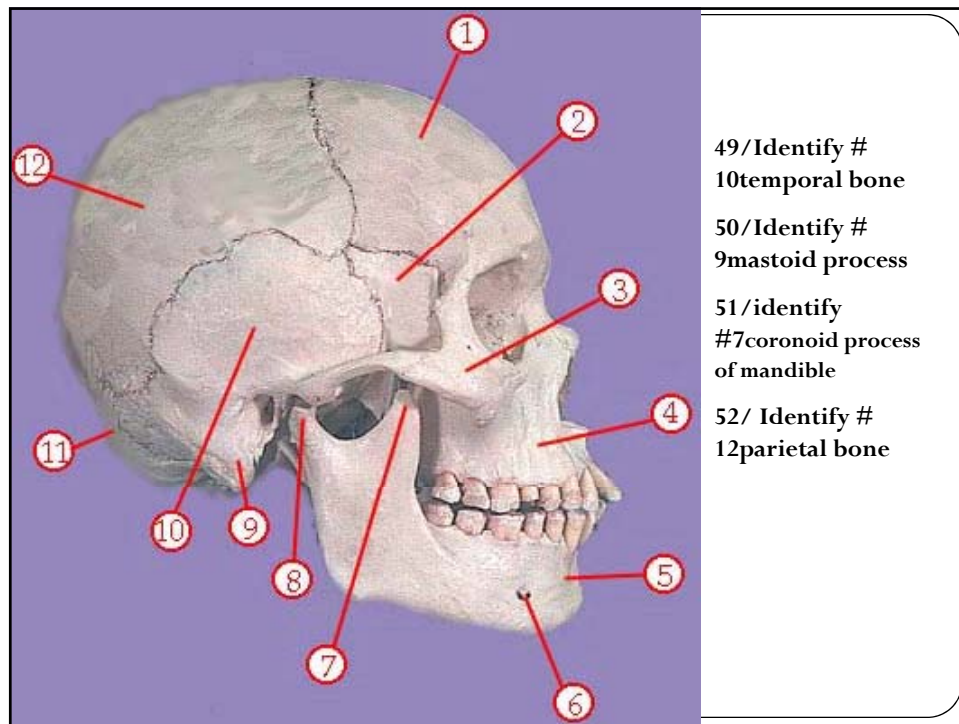


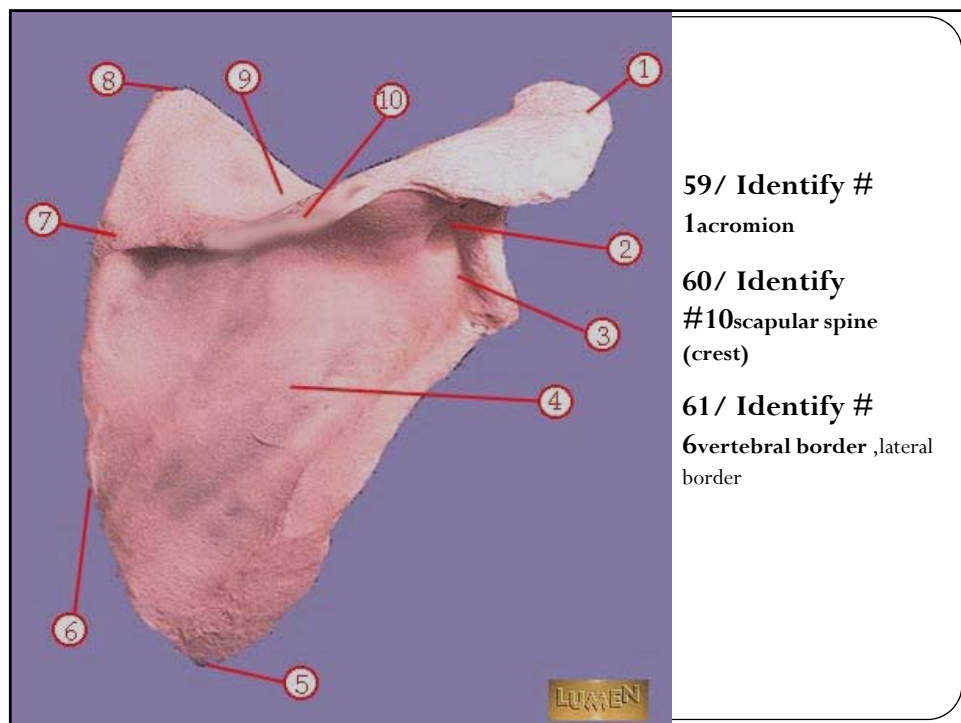
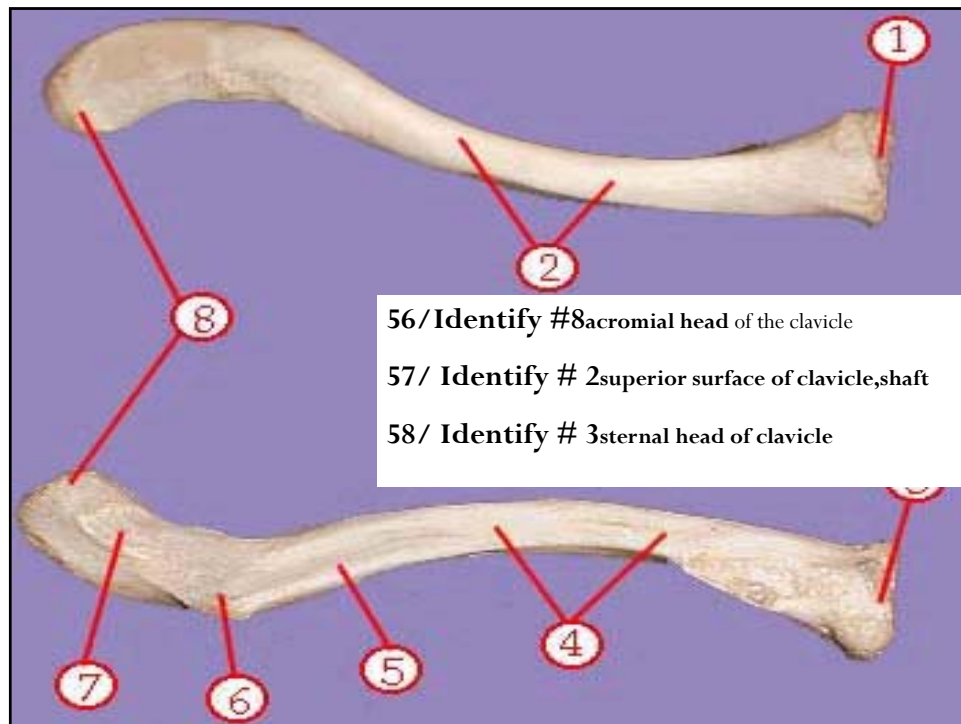


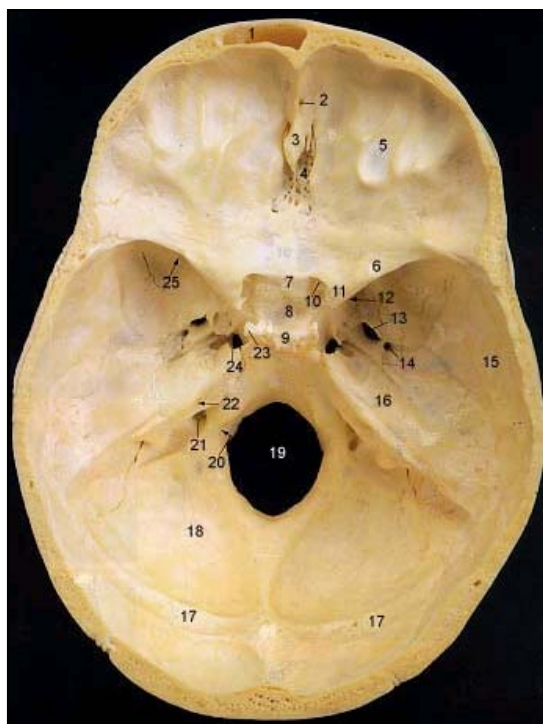










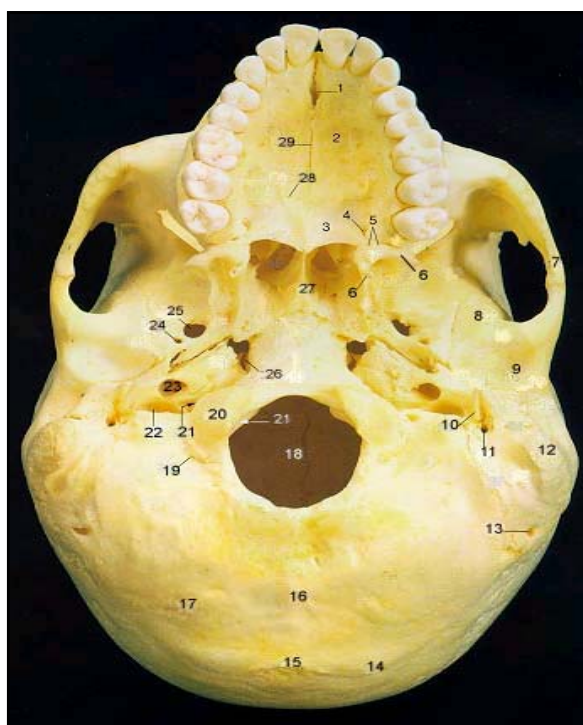


62/ Identify # 1 frontal sinuses

63/ Identify # 3.
Crista Galli

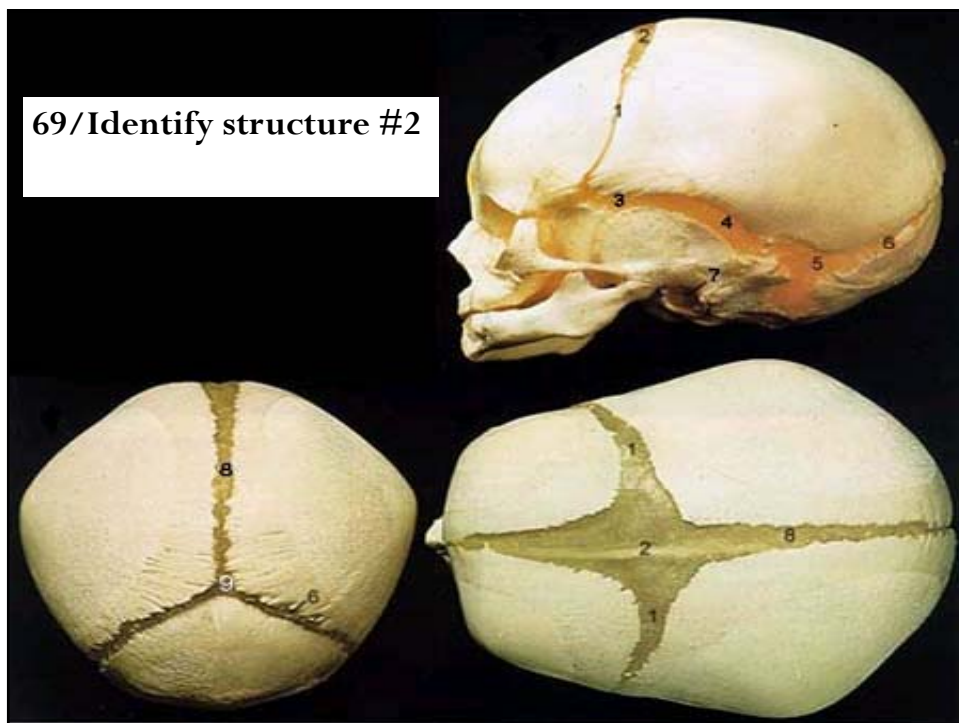
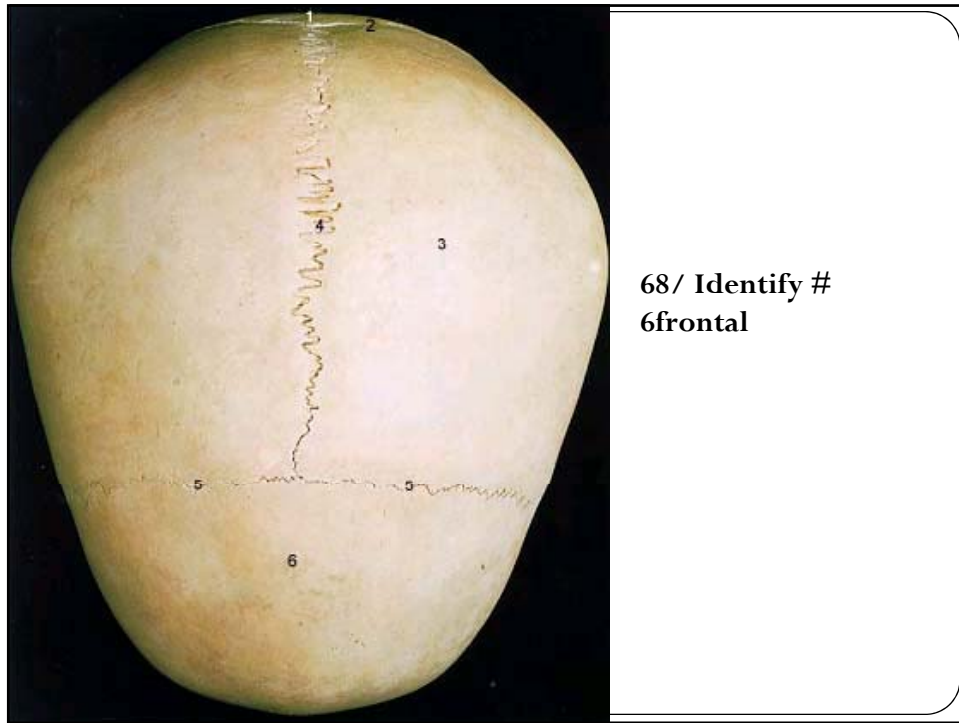
64/ Identify # 19 foramen magnum

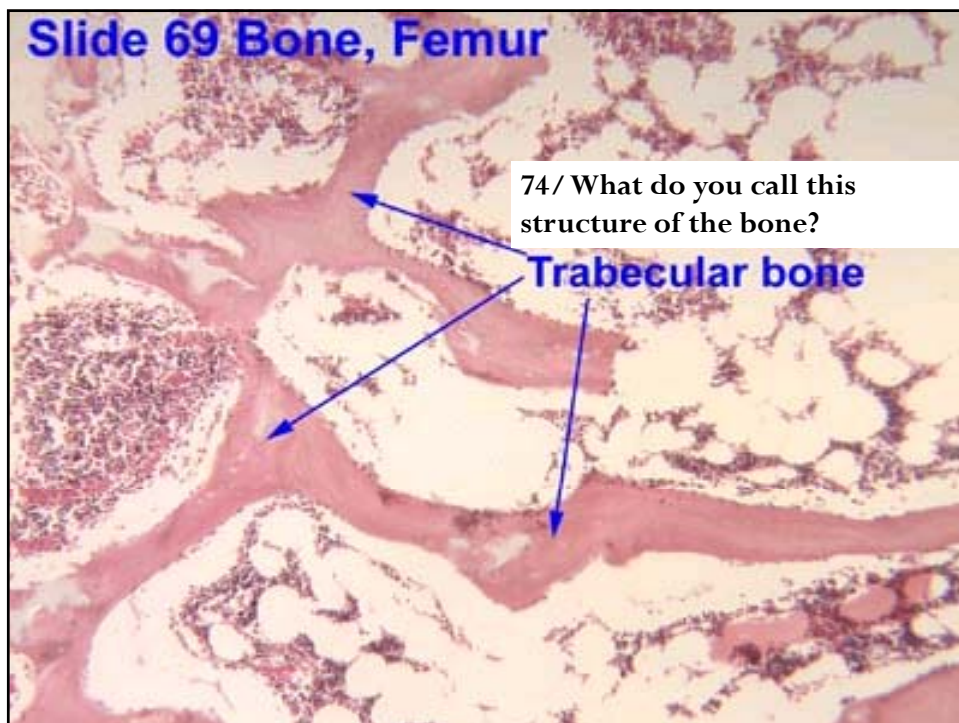
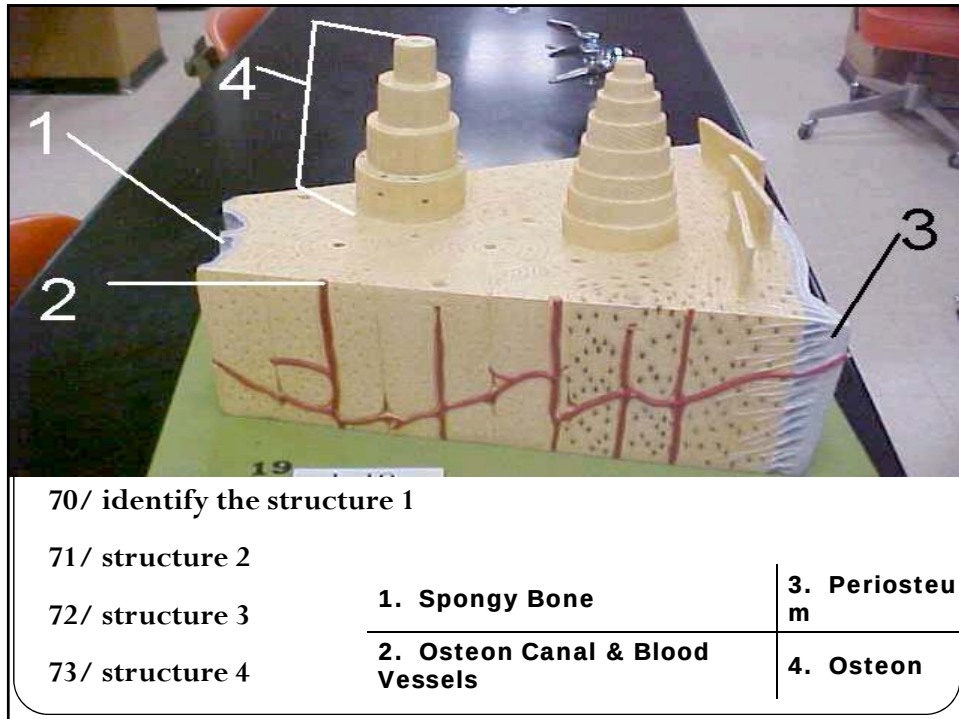
65/ Identify # 6.
Lesser Wing of Sphenoid

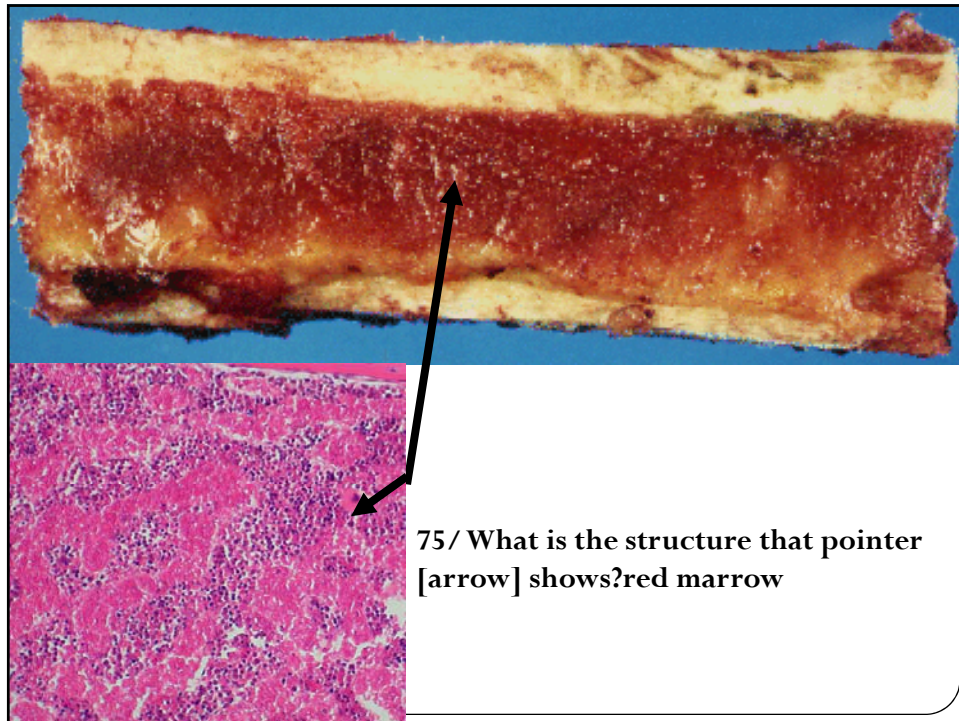


66/ Identify # 29 hard palatine line

67/ Identify # 7
Zygomatic Process







Define the following terms

76/ Tuberosity – Tuberosity – large, rounded projection

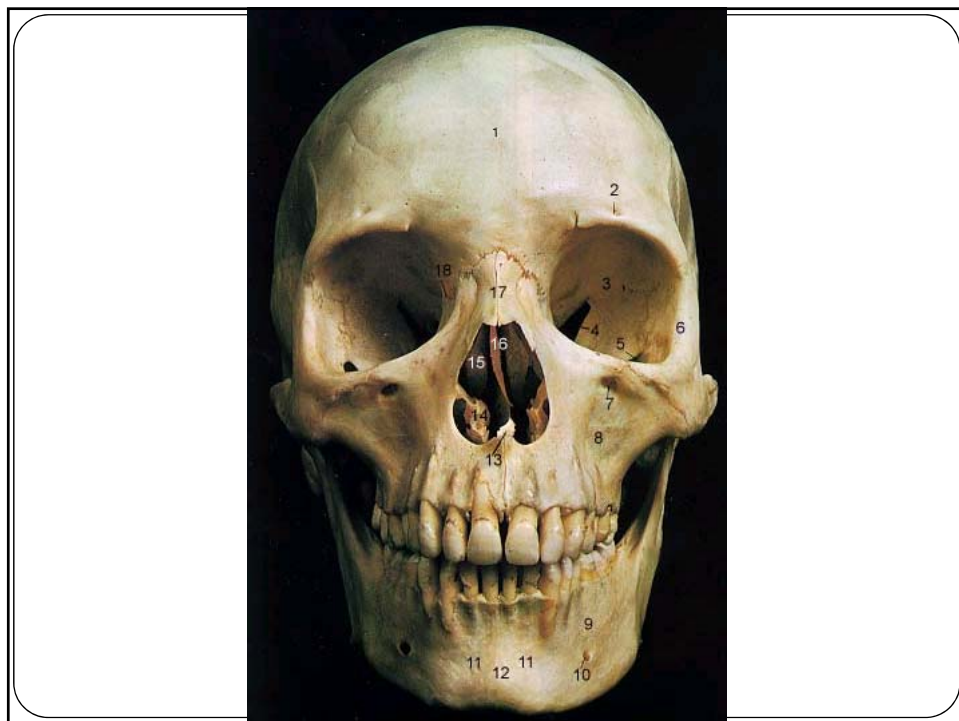
77/ Foramen Foramen – round opening

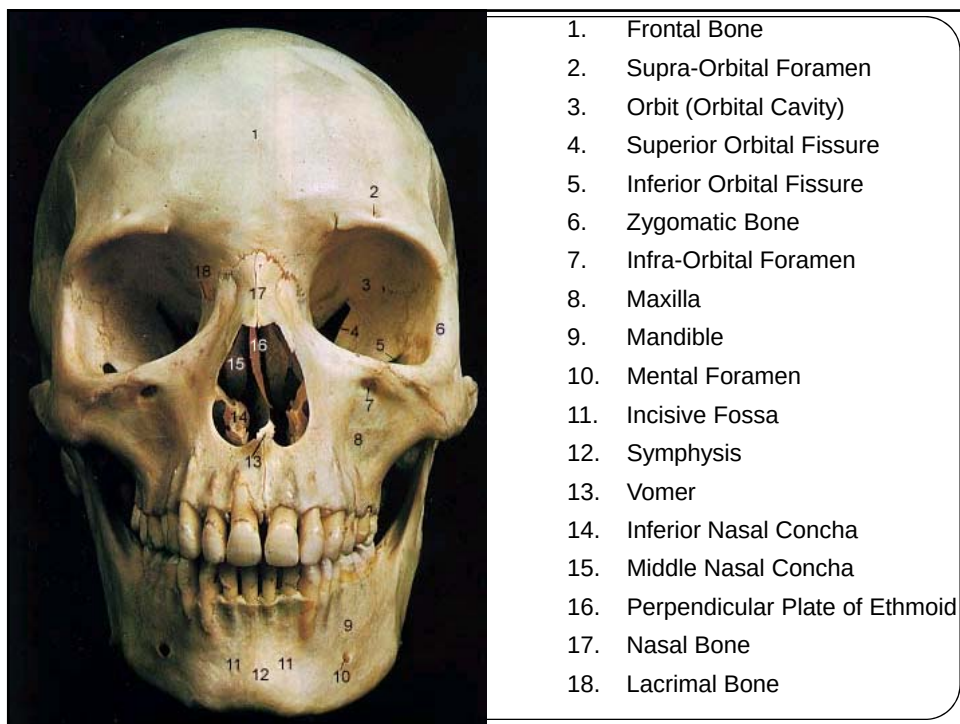
Define the function of each of these cells:

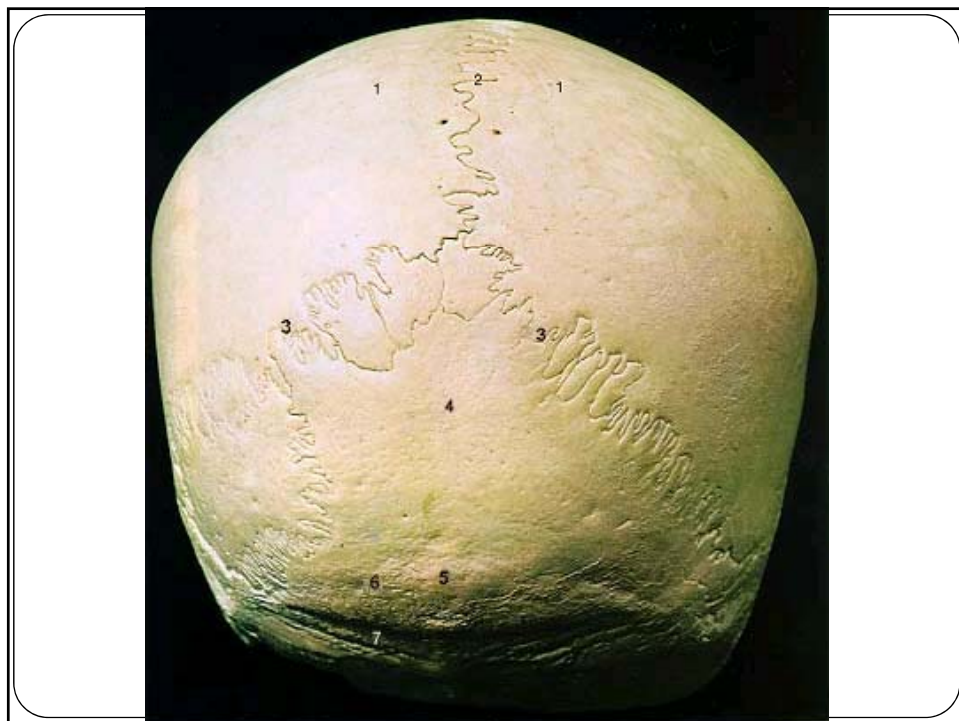
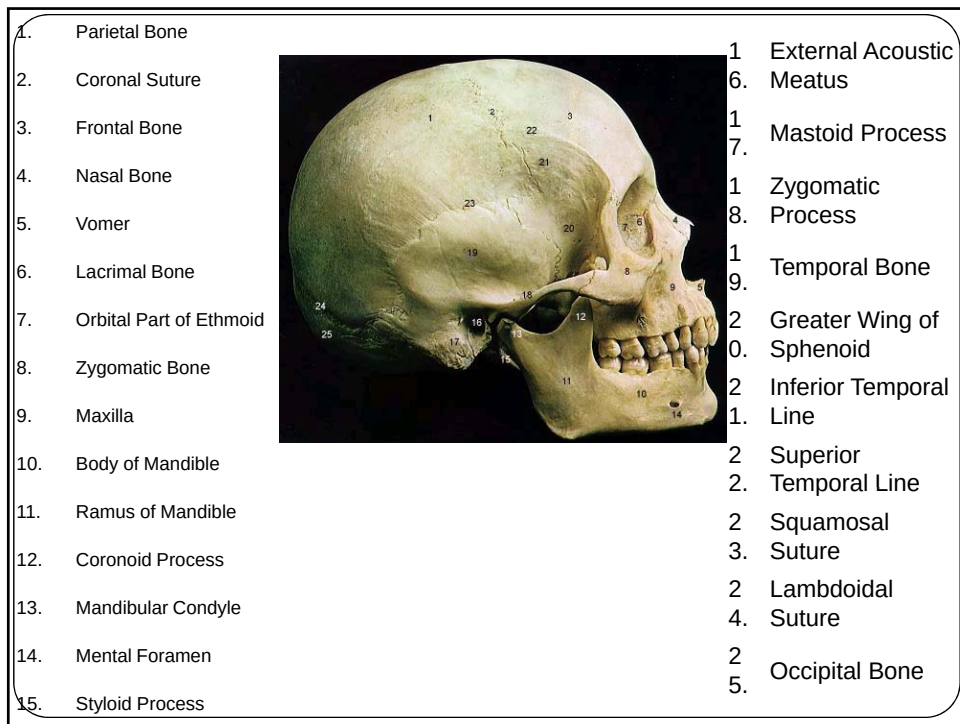
78/ Osteoblasts – form bone

79/ Osteocytes –maintain and form bones

80/ Osteoclasts – remodel bone, breaking down

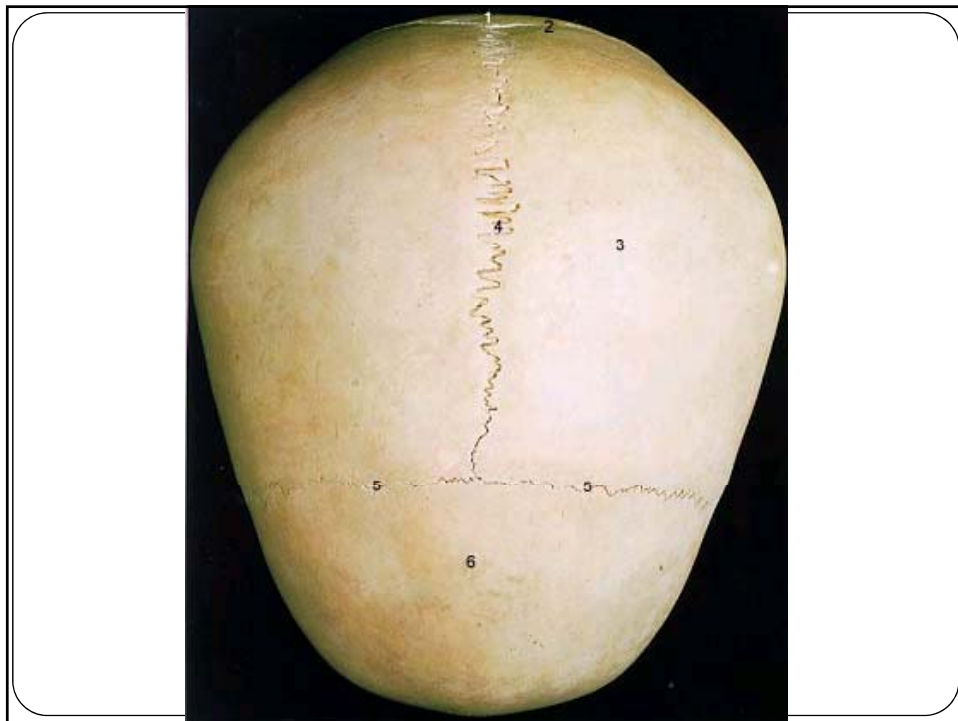


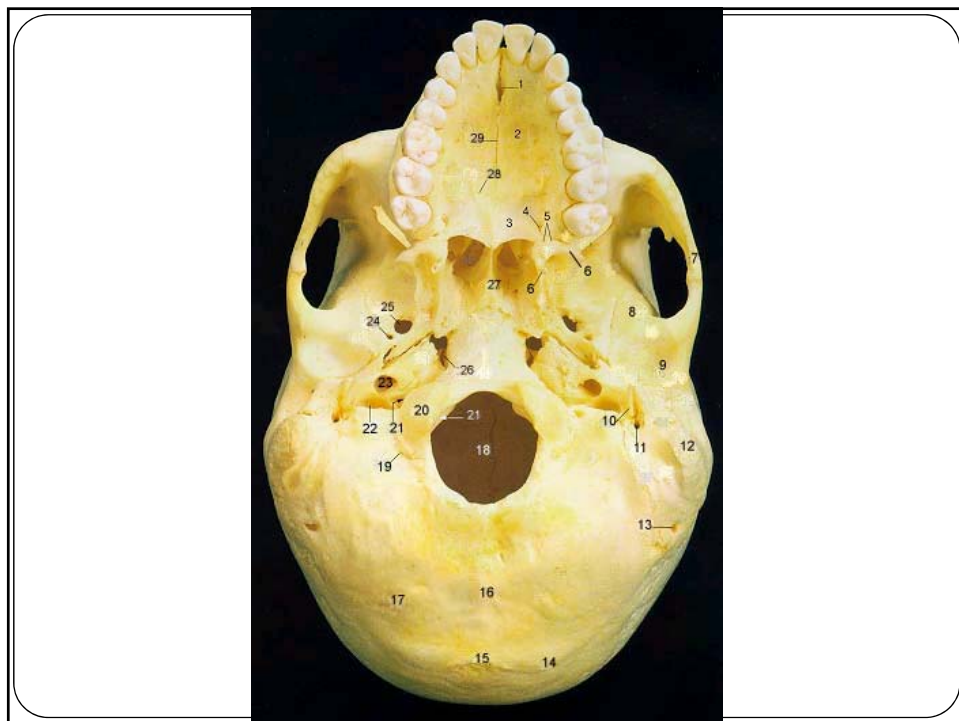
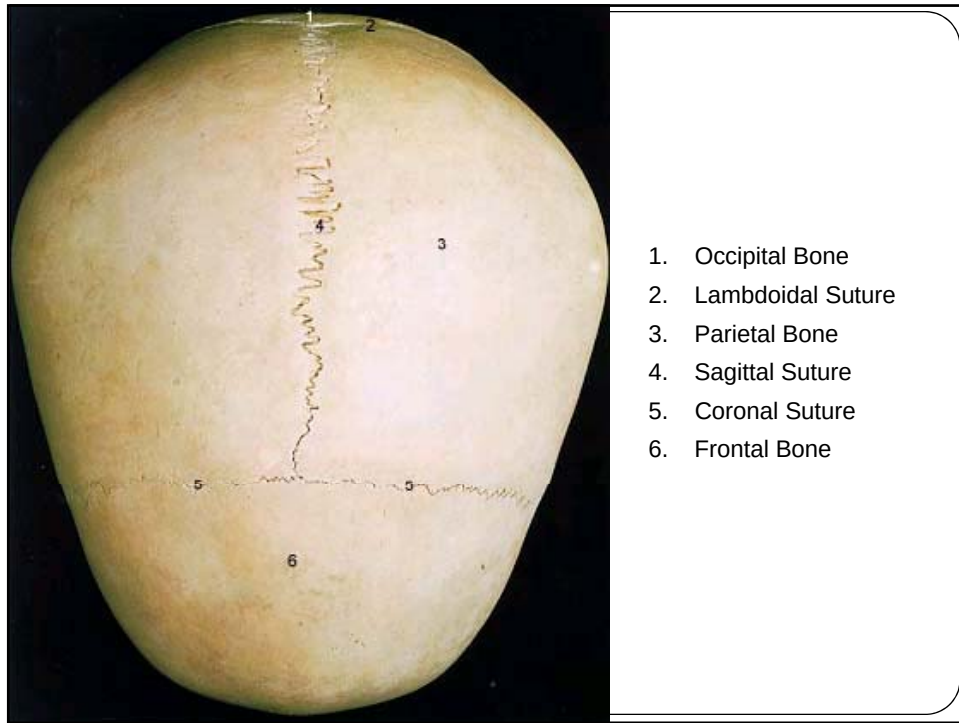


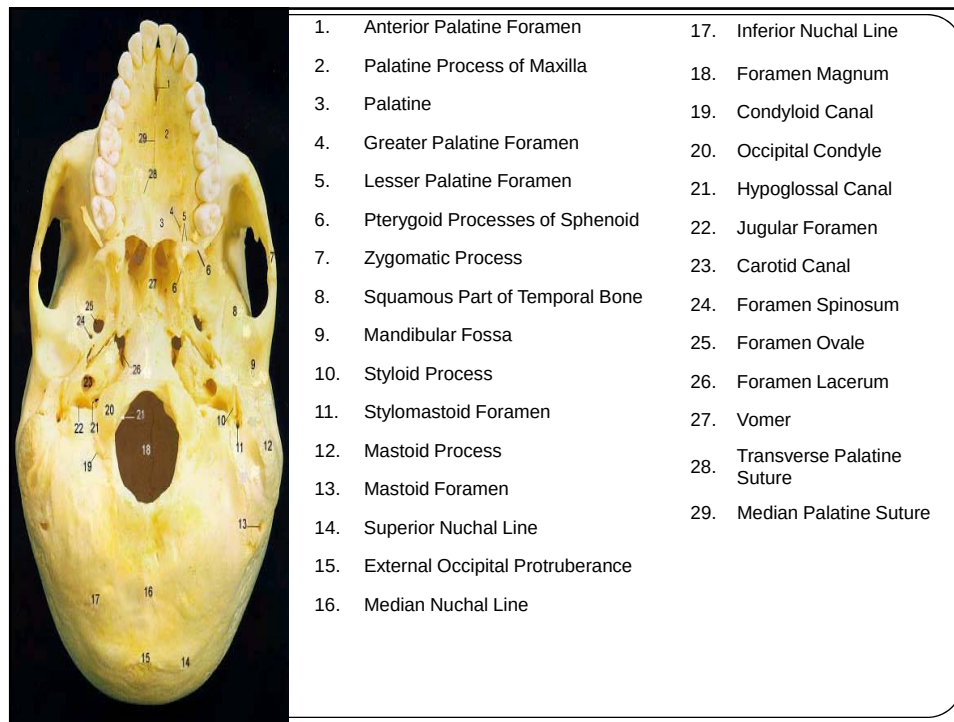




1. Parietal Bone
2. Sagittal Suture
3. Lambdoid Suture
4. Occipital Bone
5. External Occipital Protruberance
6. Superior Nuchal Line
7. Inferior Nuchal Line

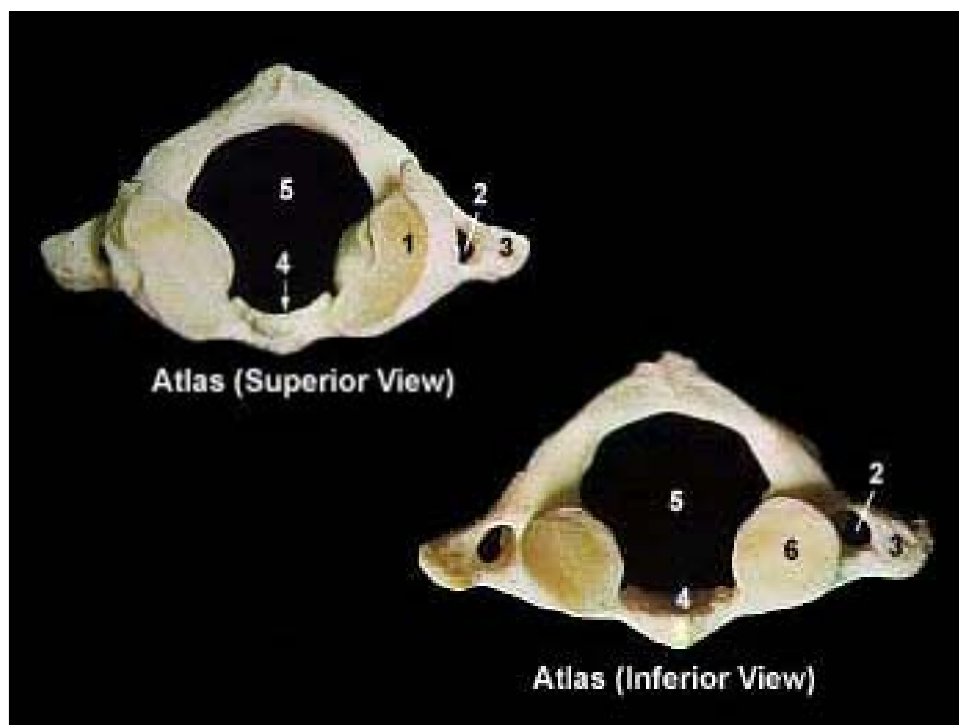


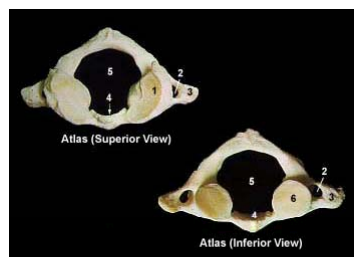




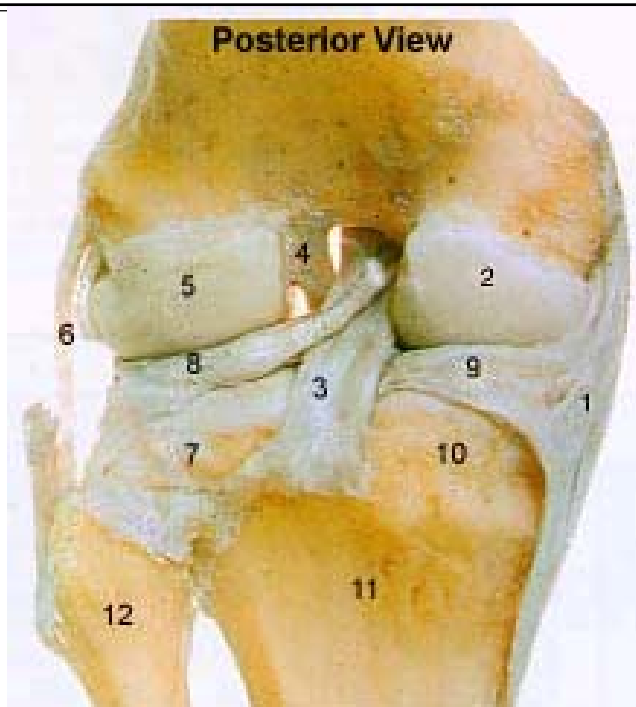
- 1/ Tuberosity –
2. Trochanter –
3. Tubercle –
4. Epicondyle –
5. Condyle –
6. Fossa –
7. Fissure –
8. Foramen –

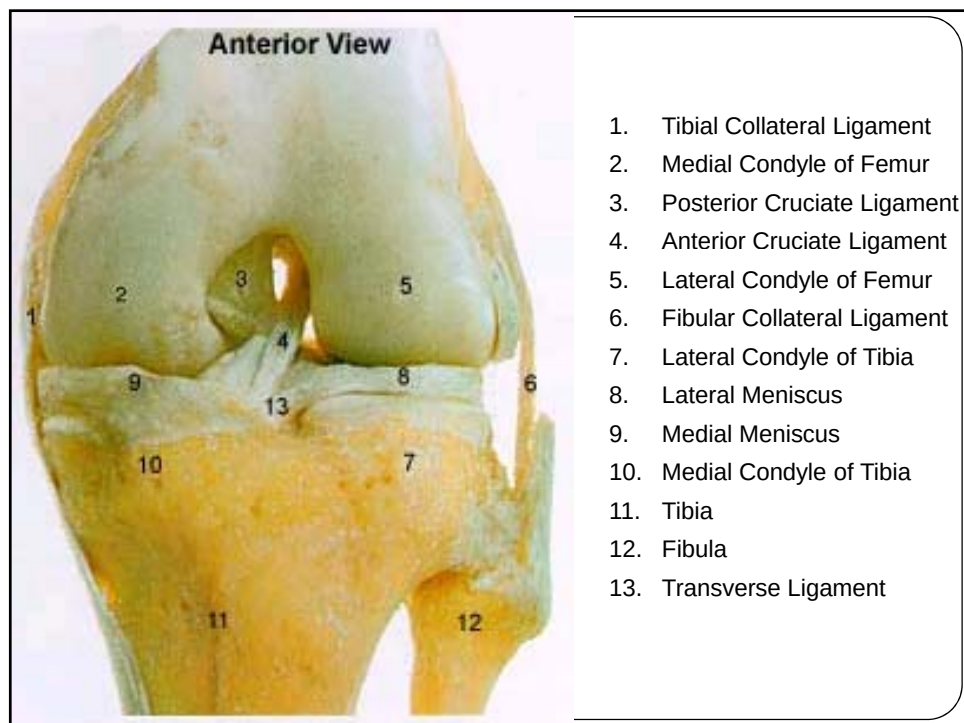
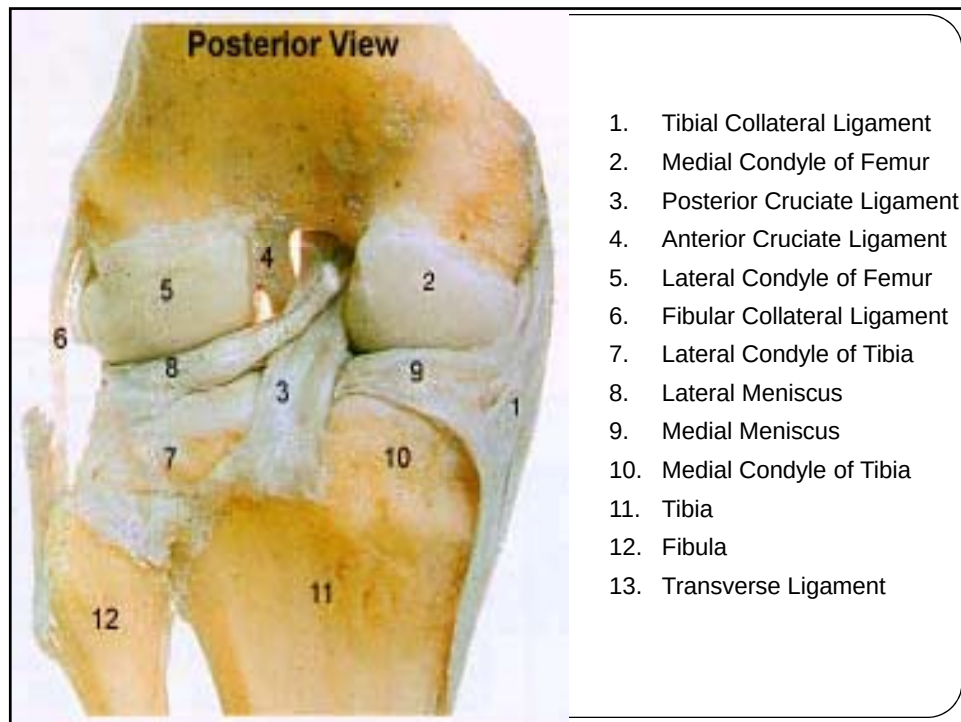
- 1/ Tuberosity – large, rounded projection
2. Trochanter – large, irregularly shaped process
3. Tubercle – small, rounded projection
4. Epicondyle – raised area on or above a condyle
5. Condyle – rounded articular projection
6. Fossa – shallow, superficial depression
7. Fissure – narrow slit-like opening
8. Foramen – round opening

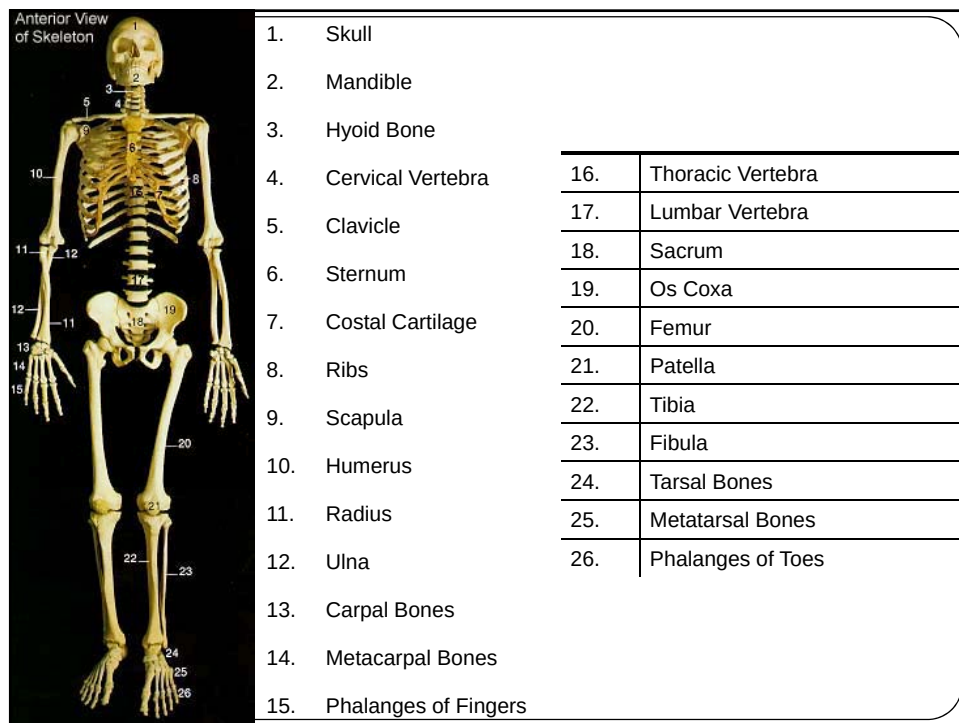
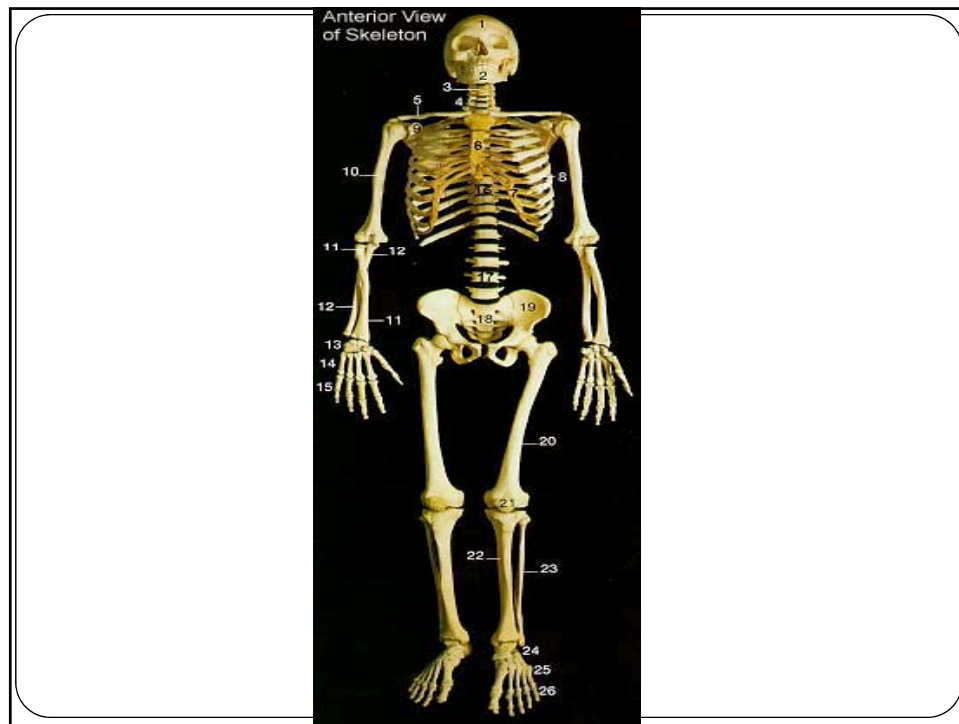


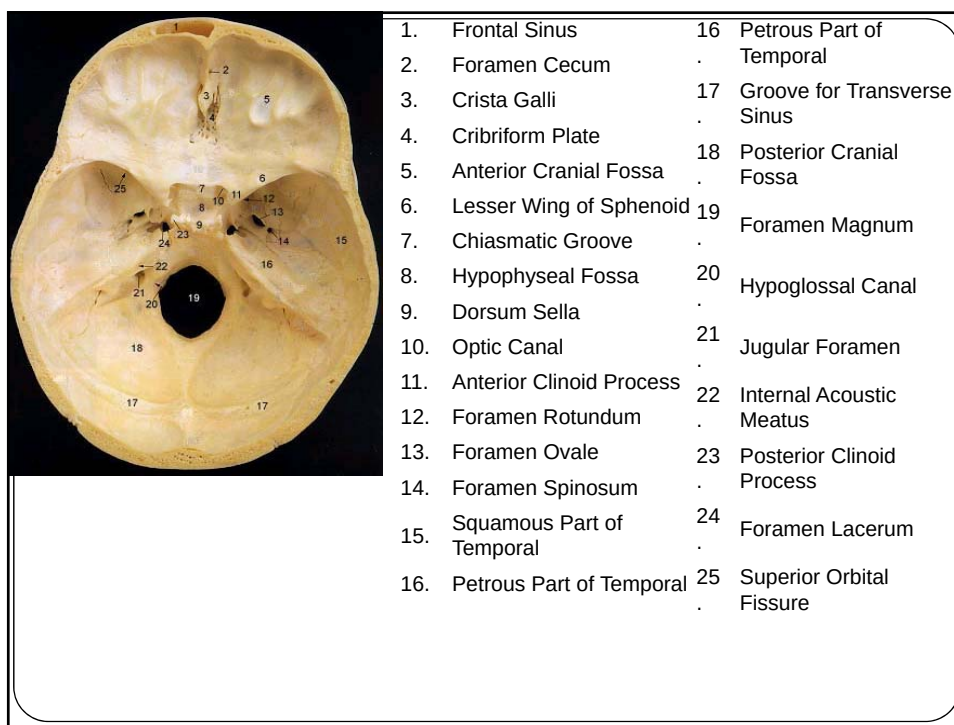
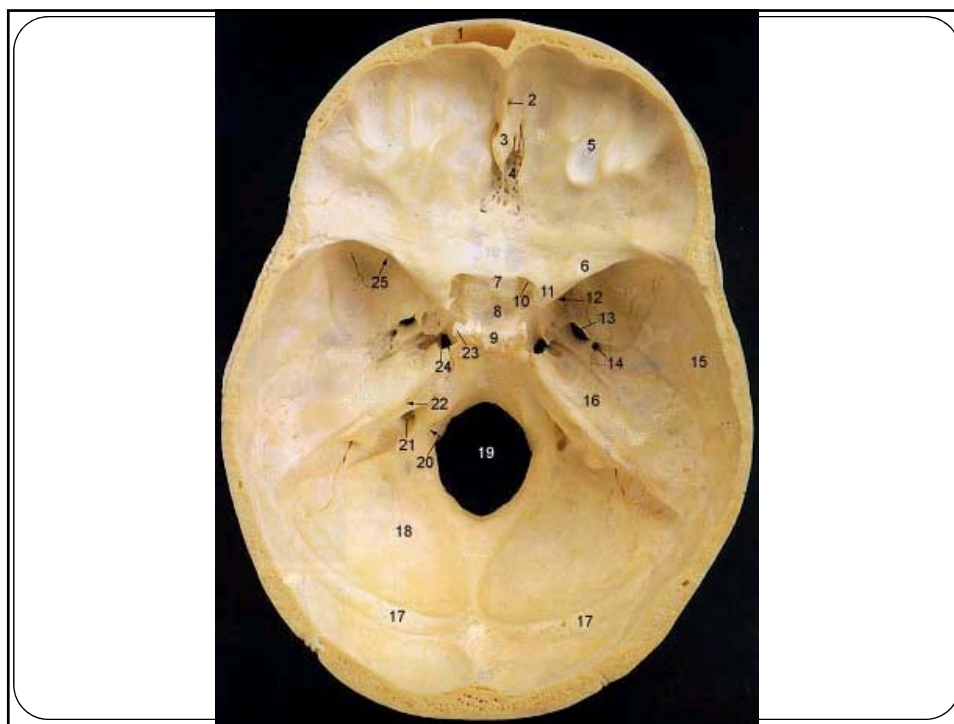


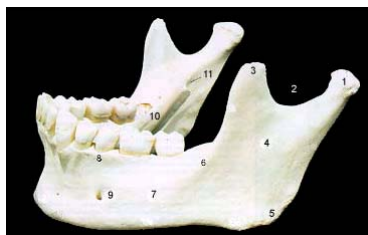
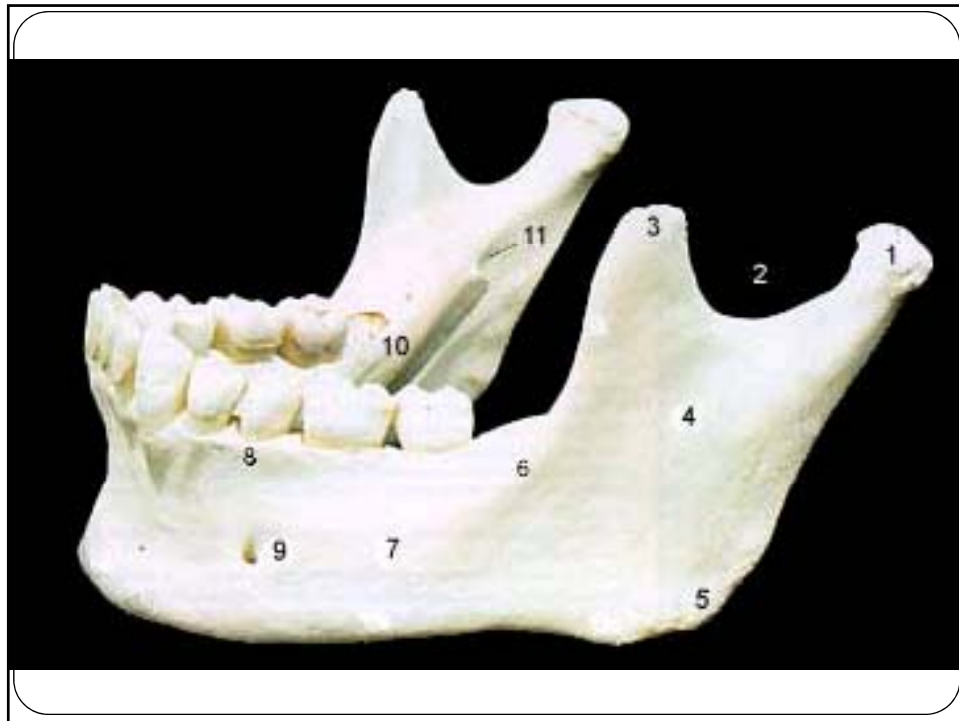
1. Superior Articular Surface
2. Transverse Foramen
3. Transverse Process
4. Odontoid (Dens) Facet
5. Vertebral Foramen
6. Inferior Articular Surface



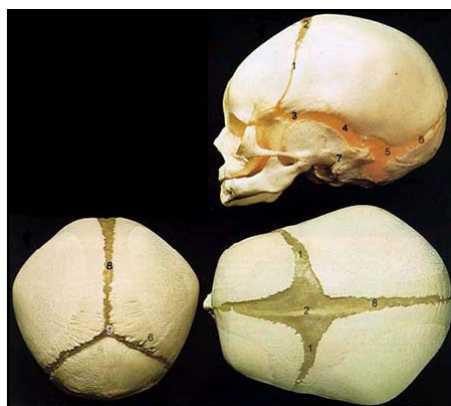
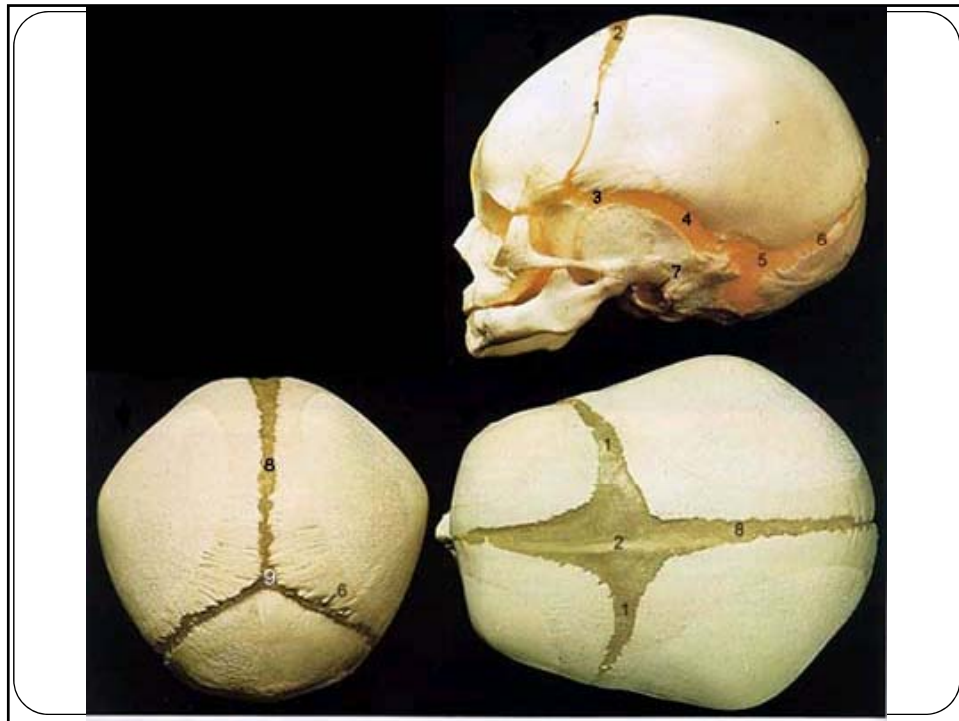




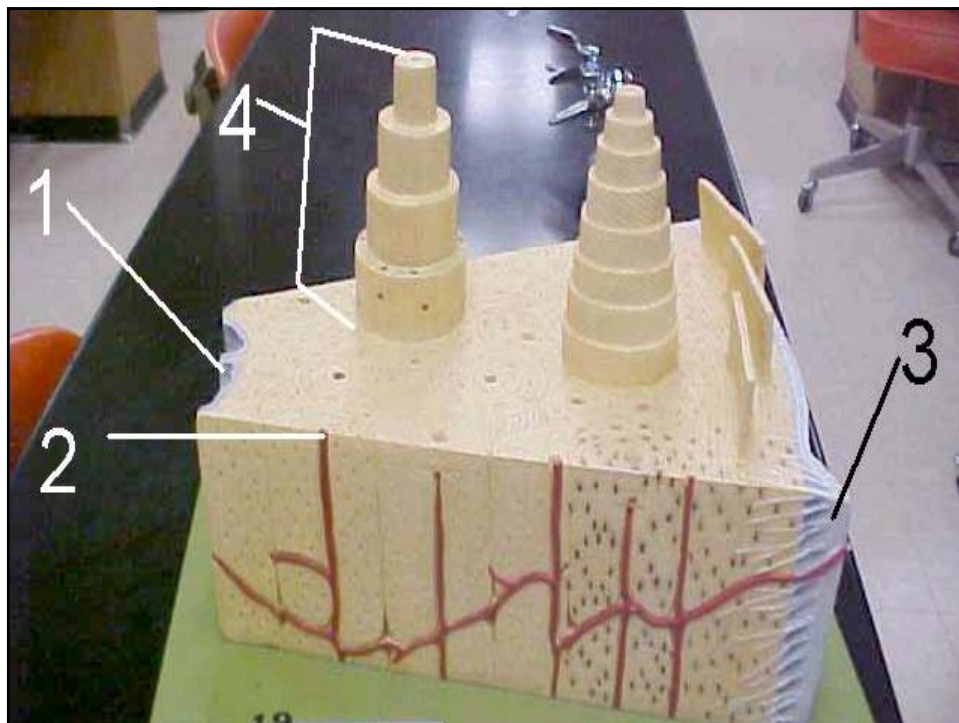
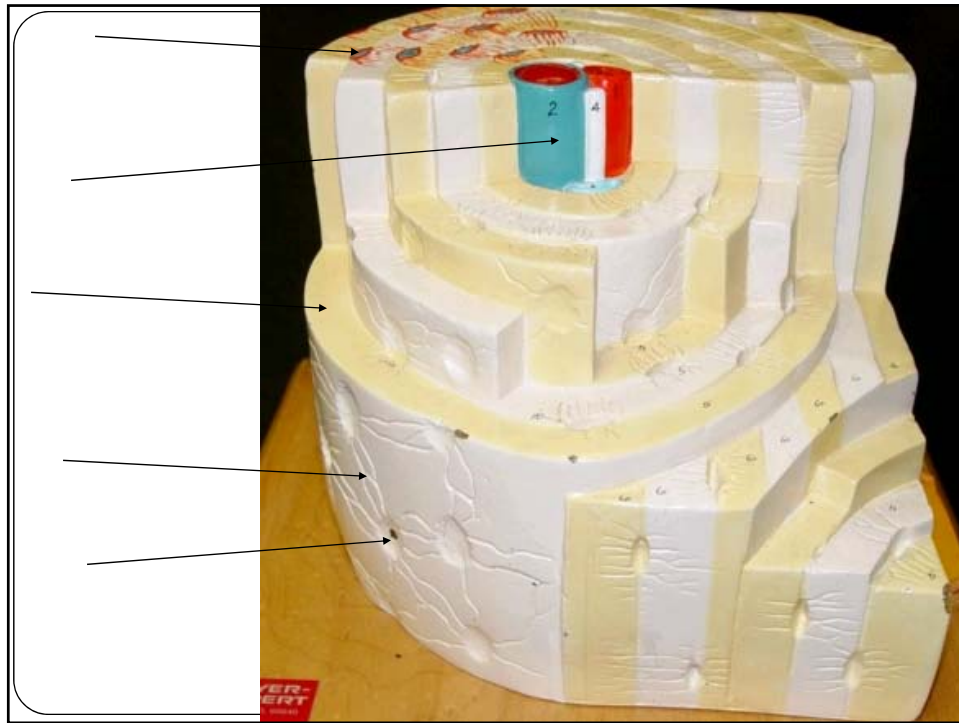


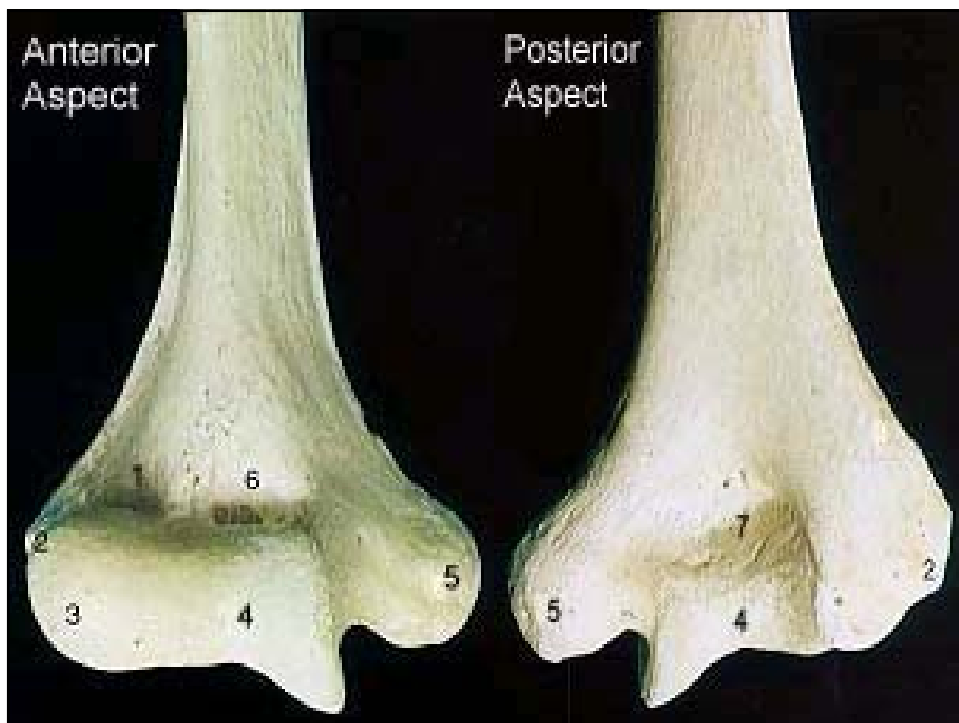
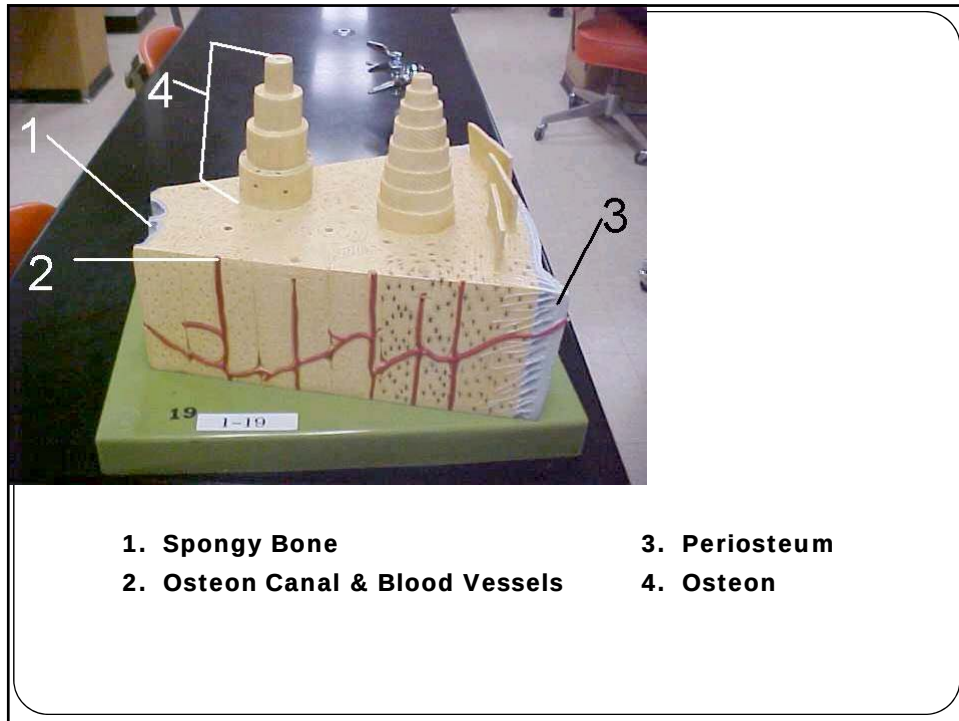


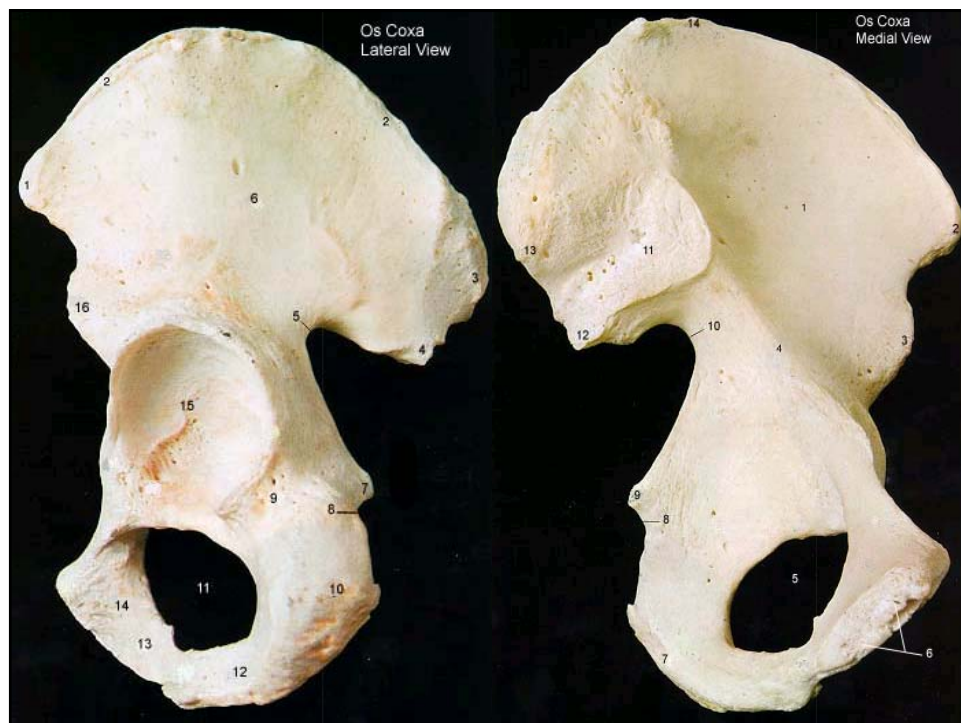
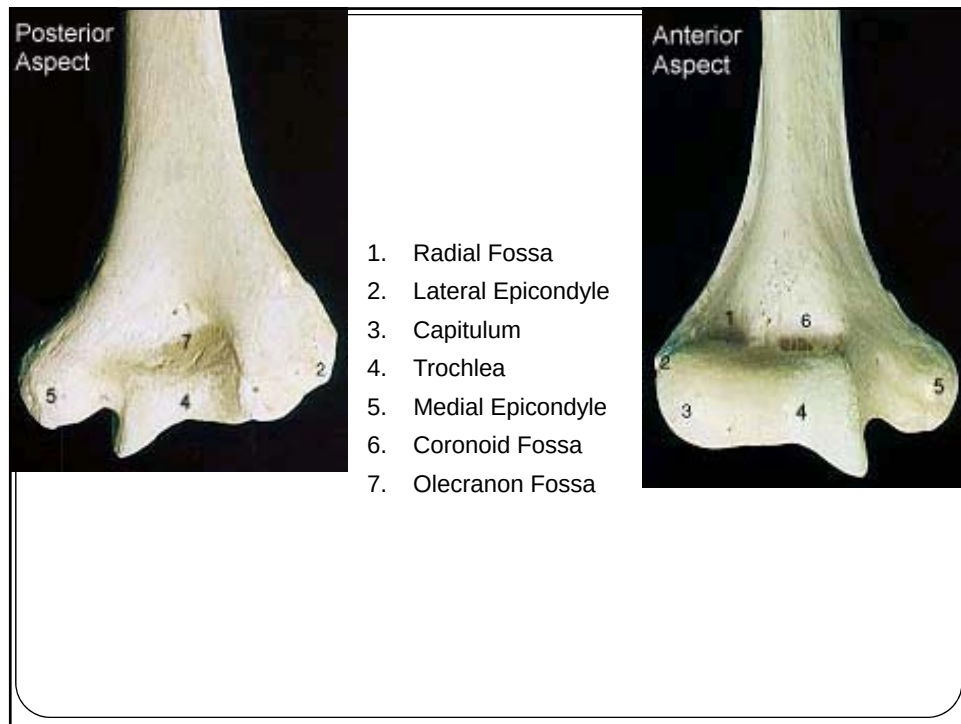
1. Mandibular Condyle
2. Mandibular Notch
3. Coronoid Process
4. Ramus
5. Angle
6. Oblique Line
7. Body
8. Alveolar Process
9. Mental Foramen
10. Mylohyoid Line
11. Mandibular Foramen

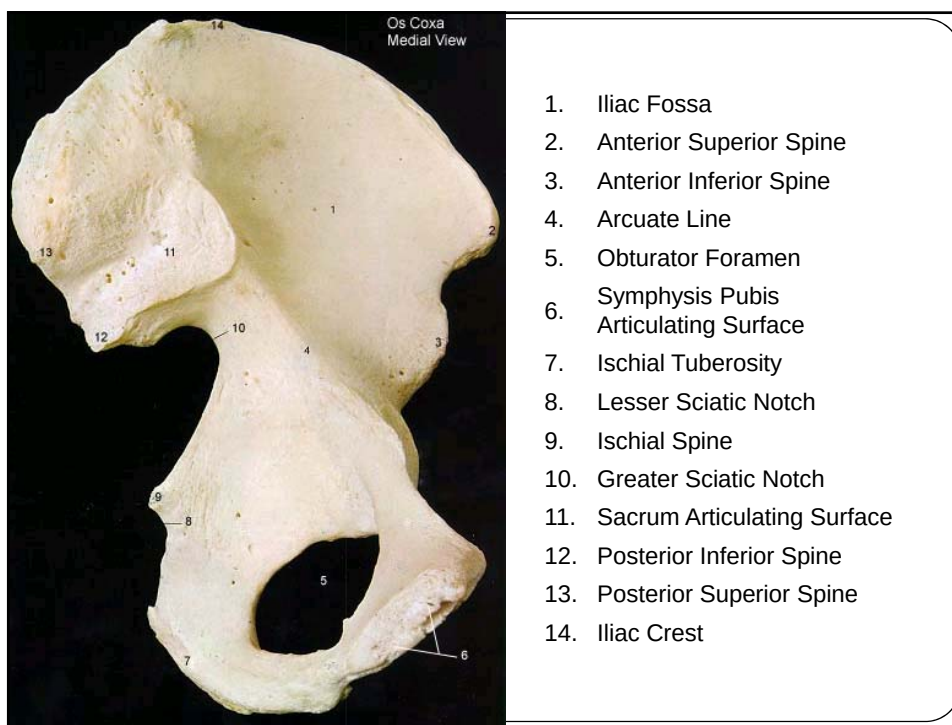
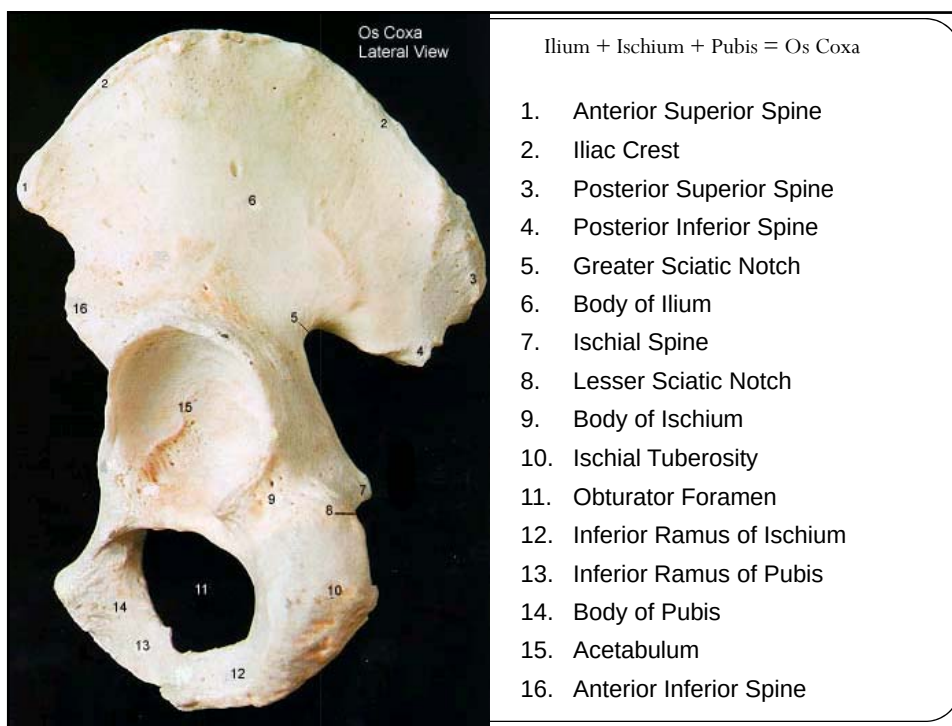


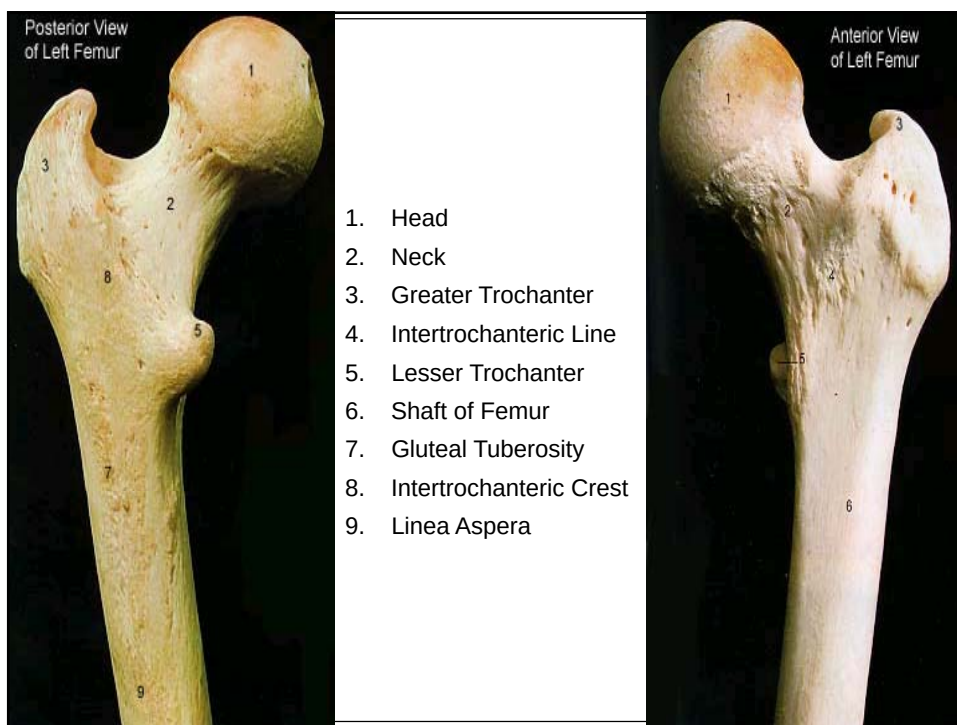
1. Future Coronal Suture
2. Anterior Fontanel
3. Anterolateral Fontanel
4. Future Squamosal Suture
5. Posterolateral Fontanel
6. Future Lamdoidal Suture
7. External Acoustic Meatus
8. Future Sagittal Suture
9. Posterior Fontanel

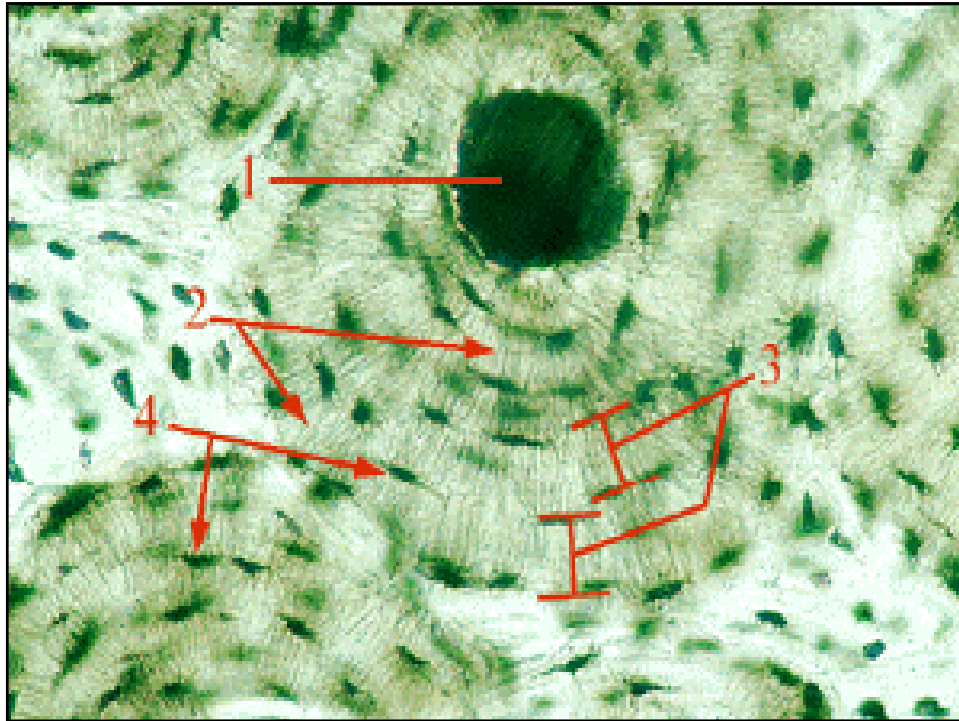




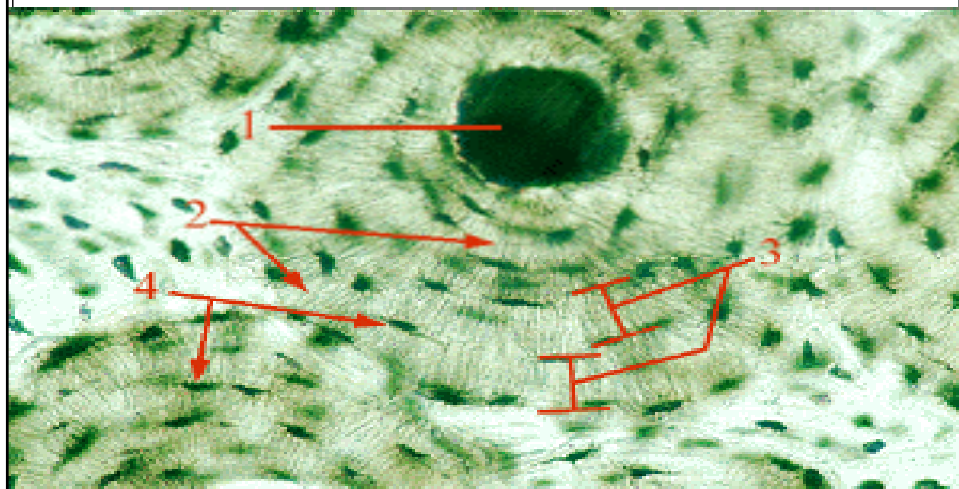








1. Haversian Canal
2. Canaliculi gap junction are found at the end of the extension
3. Lamellae
4. Lacunae



Woven bone?

Lamellar bone?

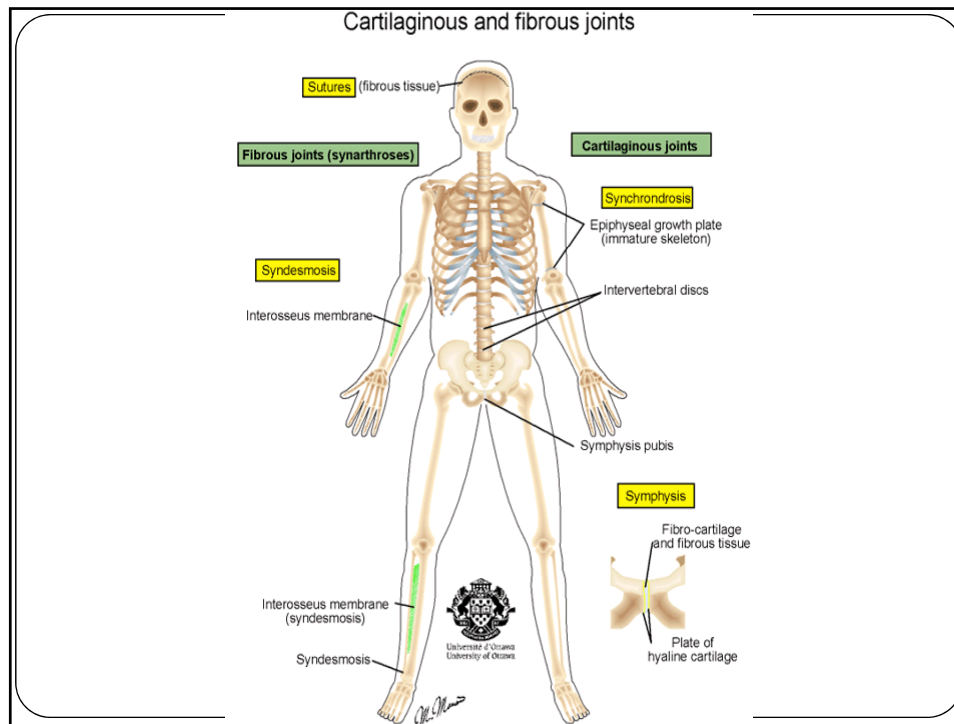
Bone

Woven bone

1. Immature bone formed rapidly as in the fetus or repair of an injury.
2. Collagen is irregularly arranged.

Lamellar bone

1. Mature bone that is physically stronger.
2. Collagen is regularly arranged



Fibrous joints (synarthroses): the bones are connected by fibrous tissue. The extent of movement depends on the proximity of the bones to one another.

2 types are present:

Sutures in the skull.

Syndesmoses. A layer of fibrous tissue is present between the bones.

Interosseous membranes that are present in the middle radioulnar and middle tibiofibular joints

An interosseous ligament in the distal tibiofibular joint.

Cartilaginous Joints

Movement is limited or absent.

2 types are present :

Synchondroses formed of hyaline cartilage, as in connecting cartilage (epiphyseal cartilage), between the epiphyses and diaphyses of long bones.

Symphyses: The articular surfaces of bones are covered by a plate of hyaline cartilage. Fibrous cartilage and fibrous tissue are present between these plates. E.g.: intervertebral disks and the pubic symphysis.

Synovial Joints

Allow freedom of movement between the bones of the joint.

