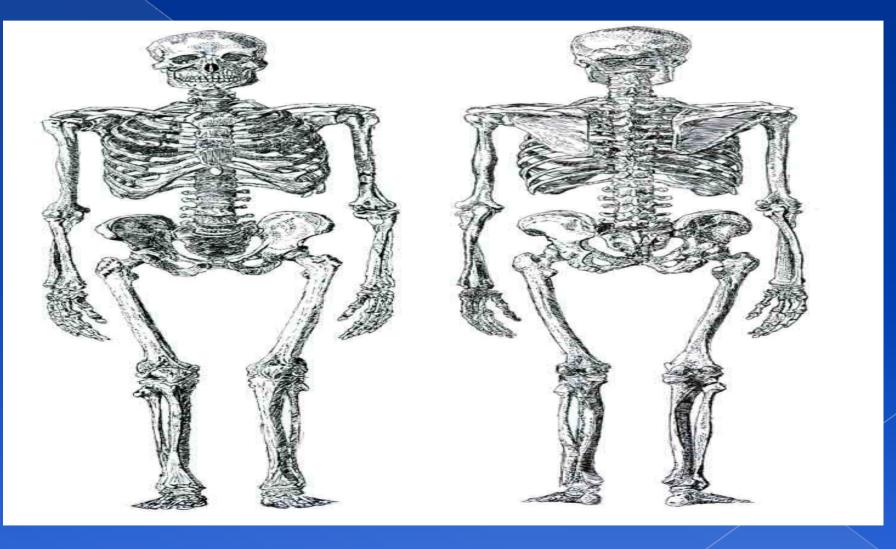
### Exam 2 LAB Review



### Presenters

Esther Alumba
Yolanda Boma
Rachel Nakato
Senait Haile
Akinduro Abonoluwa

# Bone Histology and Terminology CHAPTER 10

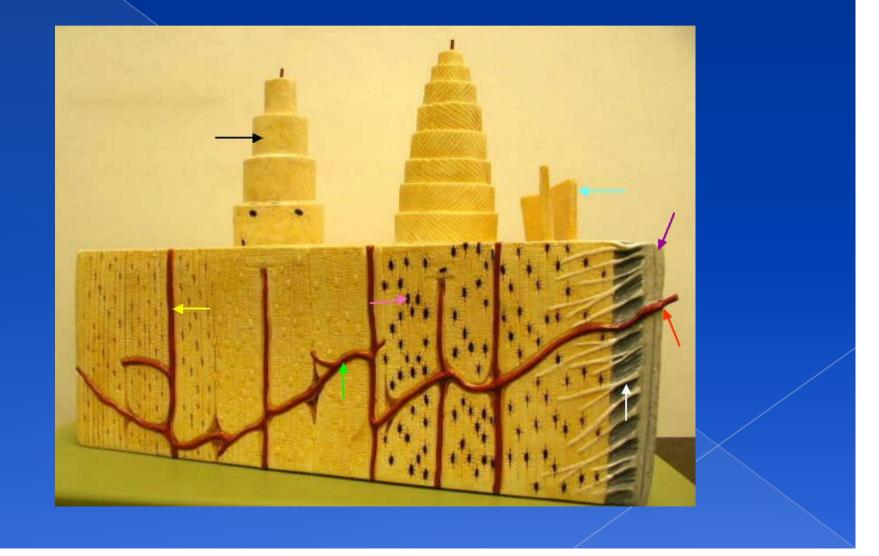
## What type of Tissue is bone?

A. Dense Irregular Connective Tissue,
B. Reticular Tissue
C. Epithelial Tissue
D. Connective Tissue

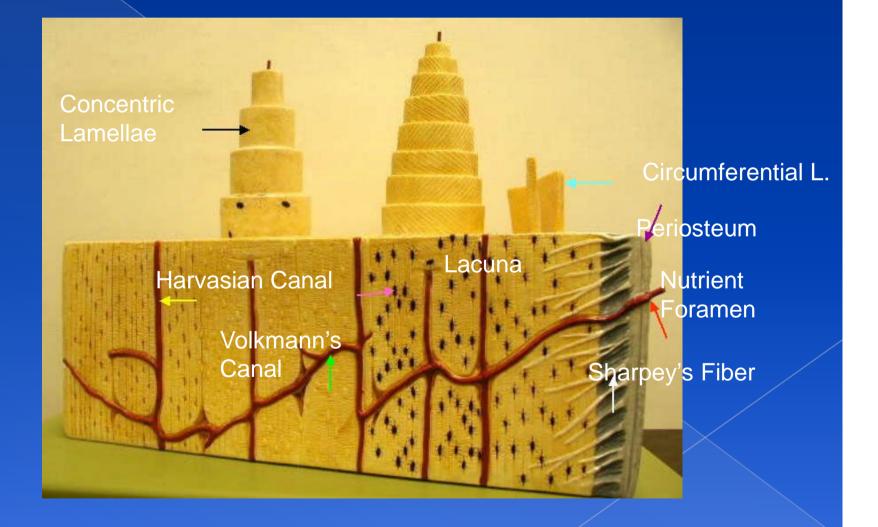
# Most numerous cell in bone is

A. OsteocyteB. OsteoclastC. OsteoblatD. Osteon

# Identify and Label Image



#### Answers



# What kind of tissues are found in bones?

Osseous tissue
Fibrous connective tissue
Cartilage
Vascular tissue
Lymphatic tissue
Adipose tissue
Nervous tissue

What is the purpose of Osteocyte?

Osteocytes are responsible for maintaining healthy bone matrix.

## Matching

#### Questions

#### Answers

- 1. Two ingredients of extracellular matrix
- 2. Helps in resisting pulling or stretching forces placed in bone
- 3. Hardens bones and helps in resisting compression
- 4. Osteocytes in tiny cavities
- 5. Tentacle-like extensions of osteocytes that pass through tunnels in the matrix
- 6. Found at ends of the extensions, where two cells meet to allow nutrients to pass from osteocyte to osteocyte

- A. Canaliculi
- **B.** Collagen
- C. Lacunae
- D. Gap Junctions
- E. Calcium Phosphate
- **F. B &E**
- **G. D &E**

# What are two types of bone tissues?

- 1. Compact
- 2. Spongy Bone

### Matching

Questions

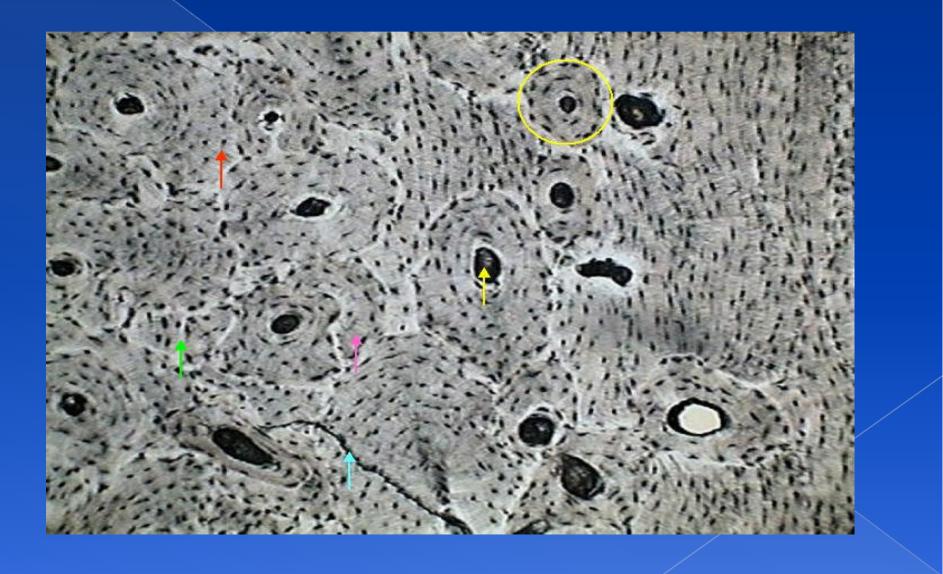
1. Thin layers of bone

matrix

- 2. Concentric circles in compact bone
- 3. Branches that link the central canal to each other

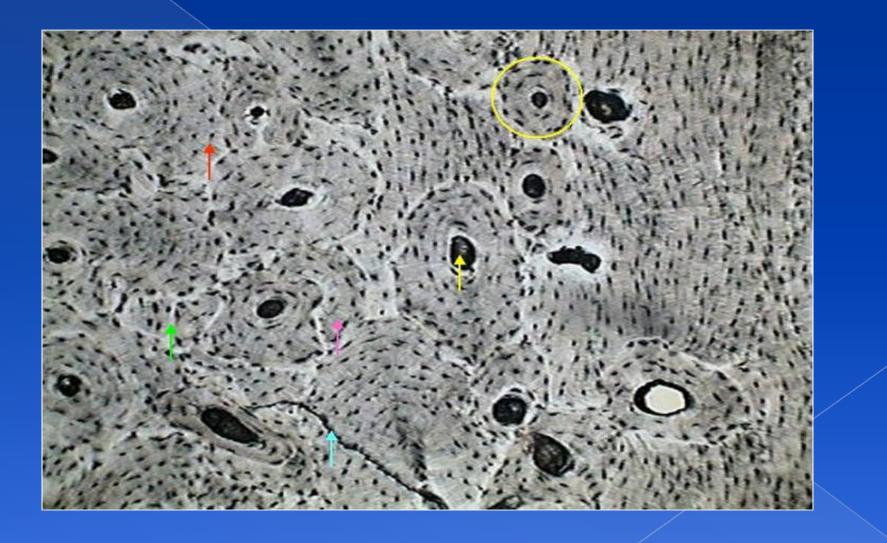
- Answers A. Perforating Canals
- B. Lamellae
- C. Central Canal

### Identify image and type of cut



# It is a longitudinal cut of a compact bone

# Label picture



### Fill in the blanks

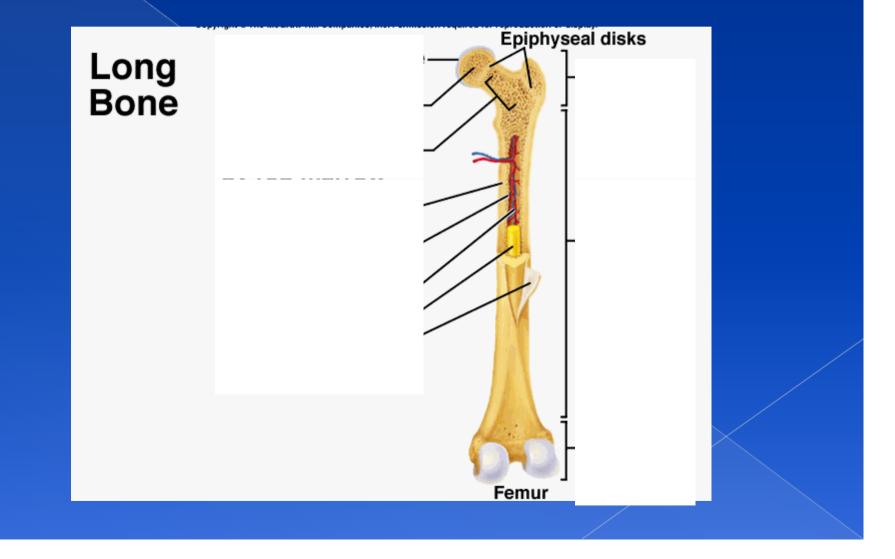
\_\_\_\_\_ are deposits of structural unit,
central microscopic channels called
\_\_\_\_\_, and surrounded by a number of
concentric circles of bony matrix called

#### Answers

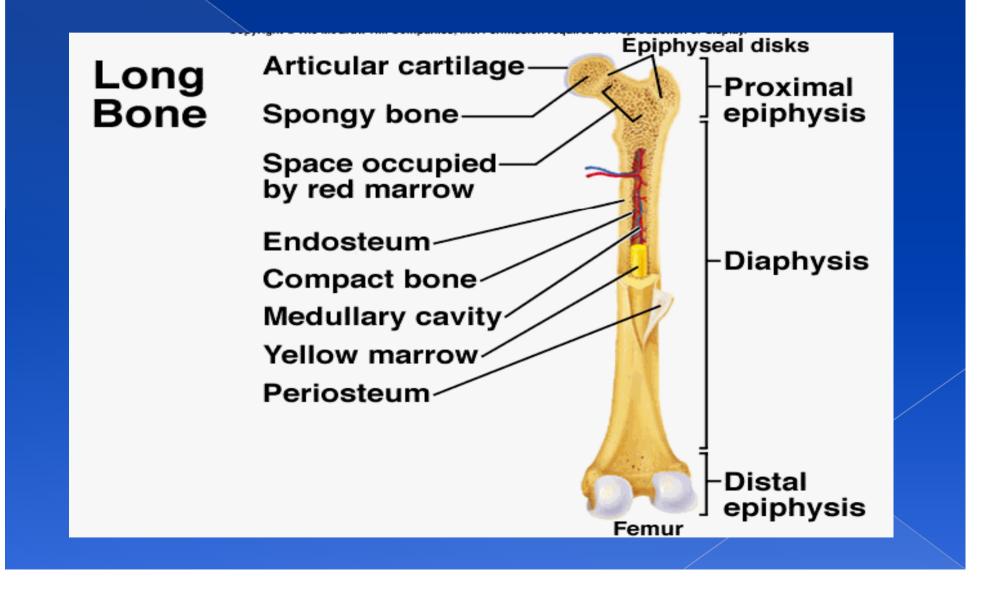
 <u>Osteons</u> are deposits of structural unit, central microscopic channels called
 <u>Harvasian Canal</u>, and surrounded by a

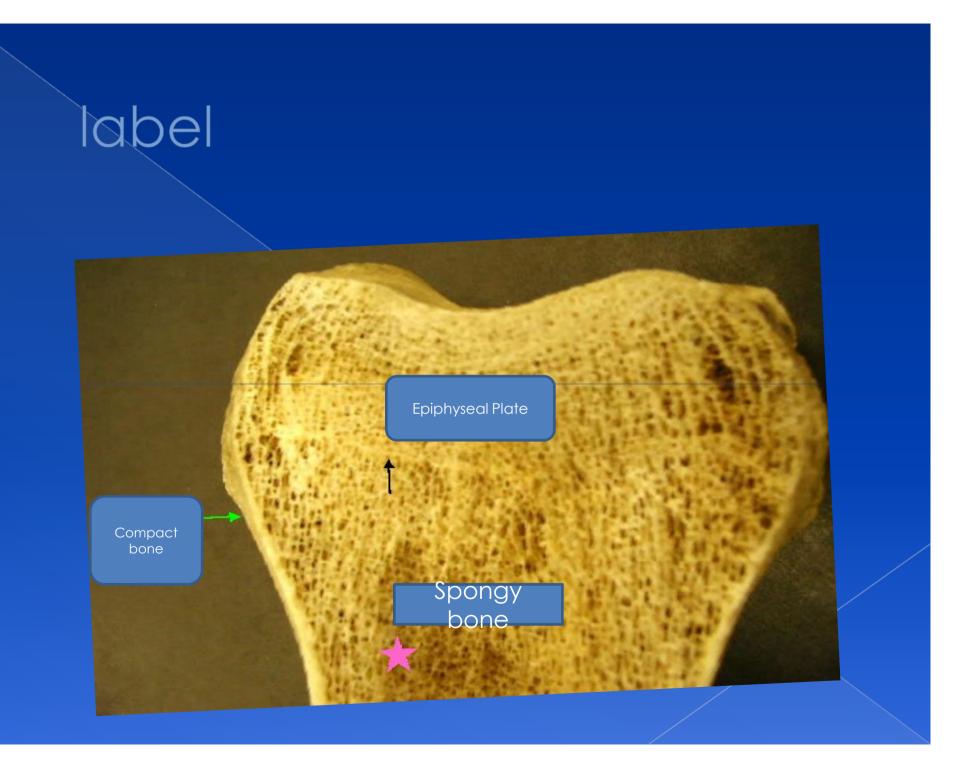
number of concentric circles of bony matrix called Lamellae.

# Label Image



#### Labeled Image



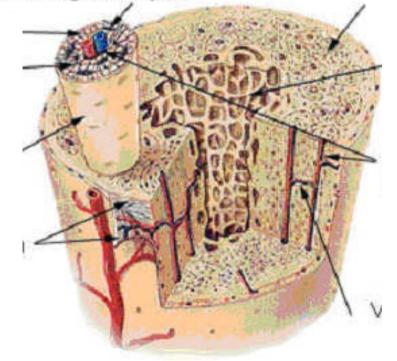


## Label Image

12

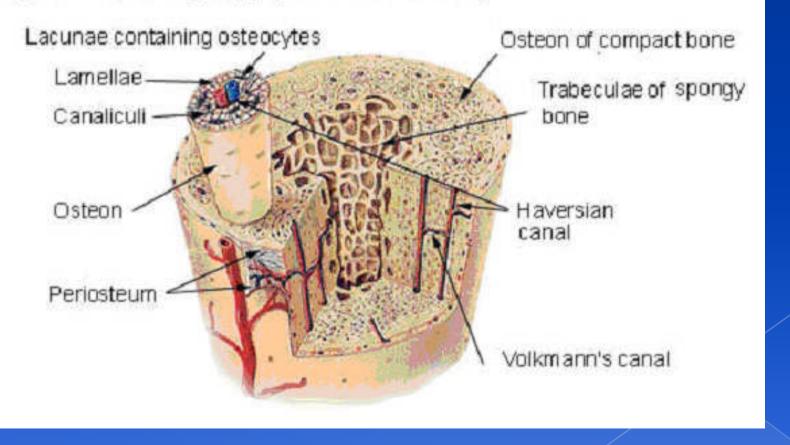
#### Compact Bone & Spongy (Cancellous Bone)

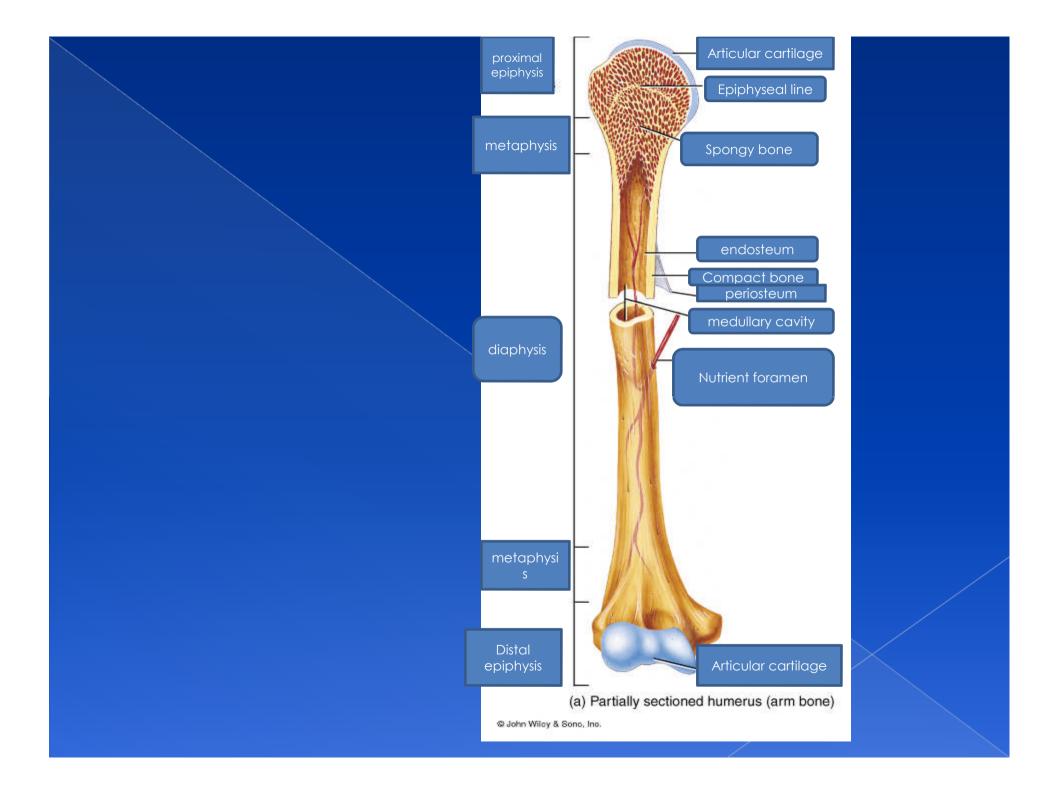
Lacunae containing osteocytes



# Labeled Image

#### Compact Bone & Spongy (Cancellous Bone)





#### True or False

- Woven bones are mature bone that is physically stronger. Collagen is regularly arranged.
  - False (Lamellar Bone)
- Lamellar bone are Immature bones formed rapidly as in the fetus or repair of an injury. Collagen is irregularly arranged False (woven Bones)

#### Fill in the blanks

- In \_\_\_\_\_ bones, the gaps between the osteons are filled with portions of matrix, called \_\_\_\_\_.
- 3. Compact bone tissue is always present at the \_\_\_\_\_ of a bone.
- A third type of lamellae, called\_\_\_\_\_, forms the smooth outermost surface of compact bone.

#### Answers

- In <u>compact bone</u> bones, the gaps between the osteons are filled with portions of matrix, called interstitial lamellae.
- 3. Compact bone tissue is always present at the <u>of</u> a bone.
- A third type of lamellae, called <u>I</u> forms the smooth outermost surface of compact bone.

# What are the basic function of bones?

- A. support
- B. protection
- C. movement assistance in
- D. RBC formation-hemopoiesis
- E. mineral homeostasis importance of calcium
- F. energy supply -yellow marrow
- G. detoxification

# What are the four cell types of bone?

1. osteogenic
 2. osteoblasts
 3. osteocytes
 4. osteoclasts

#### Fill in the blanks

5. The \_\_\_\_\_ bone is found deep to the compact bone.

 The outer covering of the compact bone is the \_\_\_\_\_ and the inner covering is the \_\_\_\_\_.

 Both the outer and inner covering of compact bone are protective linings made of dense \_\_\_\_\_ connective tissue.

#### Answers

5. The <u>spongy</u> bone is found deep to the compact bone.

- 6. The outer covering of the compact bone is the <u>periosteum</u> and the inner covering is the <u>endosteum</u>.
- 7. Both the outer and inner covering of compact bone are protective linings made of dense <u>irregular</u> connective tissue.

#### Fill in the Blank

Showed filter
8. The periosteum is tightly attached to the outer surface of the bone by bundles of collagen called \_\_\_\_\_.

Sharpest fiber

### Questions

- 1. Name five types of bones
- Long, short, flat, and sesamoid, and irregular
- 2. Examples of long bones
- Thigh and humerus
- 3. Examples of short bones
- Wrist and ankle
- 4. Ex. of flat bones
- Sternum, scapulae, ribs and most skull bones
- 5. Ex.of sesamoid bones
- Patella
- 6. Example Irregular bones
- Vertebrae and hip bones
- 7. Examples of flat bones;
- Sternum, scapulae, ribs and most skull bone

# Bone Anatomy Questions Answers

- 1. Found only in long bones
- 2. Two types of bone marrow
- 3. Formation of blood cells
- 4. Formation of adipose tissue
- In adults found at the femur and head of humerus ,sternum, and hip bones
- 6. Fills infant skeleton

- A. Red bone marrow
- B. Yellow bone marrow
- c. Medullar cavity

# Bone Anatomy Questions Answers

- 1. Found only in long bones
- 2. Two types of bone marrow
- 3. Formation of blood cells
- 4. Formation of adipose tissue
- 5. In adults found at the femur and head of humerus ,sternum, and hip bones
- 6. Fills infant skeleton

A. Red bone marrow
B. Yellow bone marrow
C. Medullary cavity

D. Red and yellow bone marrow

#### Bone shapes

 How many types of bone shapes are there?

2. List the different types.

#### Answers

#### 1. Five

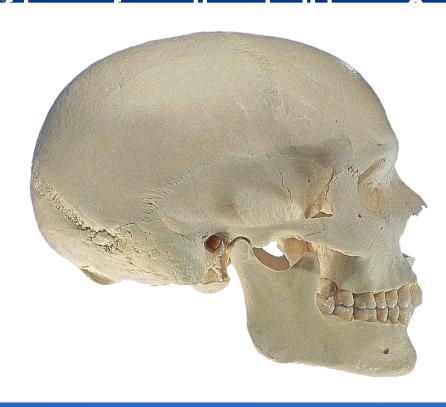
2. Long bones, short bones, flat bones, irregular bones and sesamoid.

## The Skull

## 1. What forms the Skull?

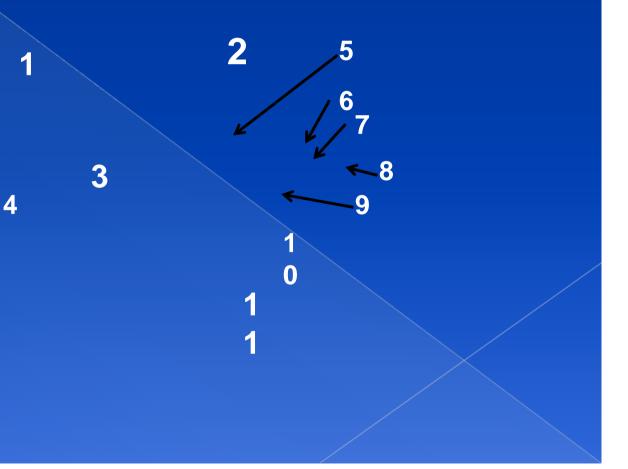
### **The Skull is formed by :-8** Cranial & 14 Facial Bones

### 2.What kind c



## 3. List the cranial bones and some of the Facial Bones?

**1.Parietal bone** 2.Frontal bone **3.**Temporal bone 4.Occipital bone 5.Sphenoid bone 6.Ethmoidbone 7.Lacrimalbone 8.Nasal bone 9.Zygomaticbone 10.Maxilla11. Mandible 11. Mandible



4. Except the mandible all bones of the adult skull are firmly united by what?

## By interlocking joints called sutures

5. Cranium is divided into Cranial vault and Cranial base The cranial vault is formed by Interamembraneons ossification The cranial base is formed by **Endochondrial ossification** 

6. What are the major cavities of the skull?

Cranial cavity Orbital cavity Oral cavity and Middle internal ear cavity

# 7. What is the function of cranial bones?

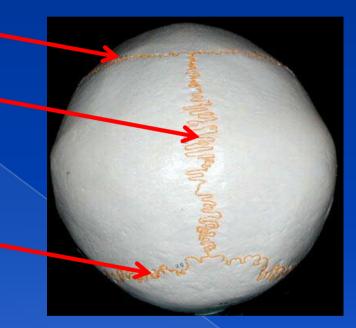
# Protect the brain and is the site of attachment for head and neck muscle.

#### 8. What are the major sutures of the skull?

Coronal suture joins frontal bone and both parietal bones.

Sagittal suture joins left and right parietal bones.

Labdoid suture joins occipital bone and parietal bones.



Squamous suture joins temporal bone and parietal bone.

#### 9. What forms the bulk of the cranial vault?

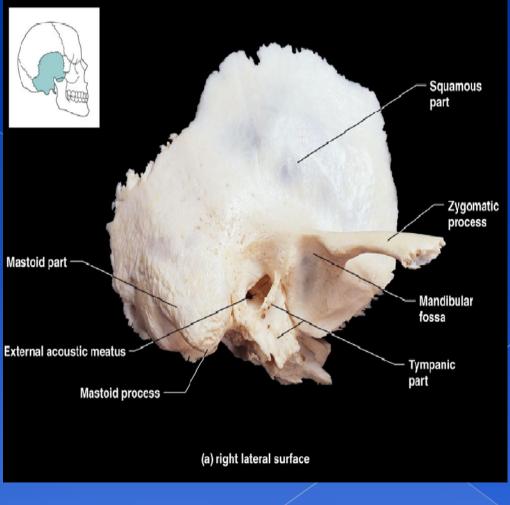
## The parietal bone

10. The cranial bone that forms part of the cranial cavity, the forehead, the brow ridge and the nasal cavity is \_\_\_\_\_

## The frontal bone

## 11. The inferolateral aspect of the skull and parts of the cranial floor is \_\_\_\_\_

## **Temporal bone**



The barlike process the Zygomatic bone of the

A. Zygomatic ard canal through which so B. External acountic meatus The anchoring site for some neck muscles

lorly

eral tongue

Δ

**-C.** Mastoid Process

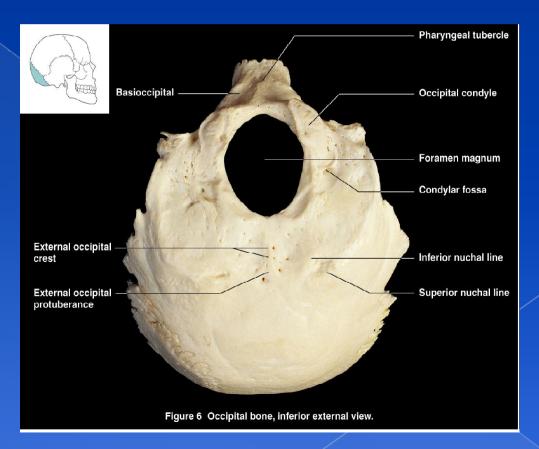
The attachment point f and neck muscles and that secure the hyoid b D. Styloid Proce

## The manidubular fossa.

13.What is the small ,oval fossa on the inferior

# 15. The structure that forms most of the skull's posterior wall and base,

## Occipital bone



12. What are the four major areas of the temporal bone?

The squamus

Tympanic

Mastoid

**Petrous region** 

#### 16. In the base of occipital bone is the

## The magnum foramen

#### 17. Occipital condyle articulate with \_

# With the first vertebrae of the spinal cord in a way that permits nodding

18. The inferior part of the brain connects to the spinal cord through?

## The foramen magnum

19. Superior to the foramen magnum, is a medium protrusion known as

## External occipital protuberance.

## Match the following

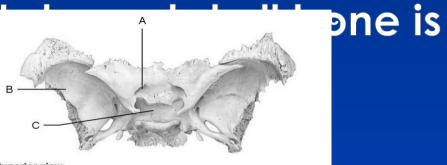
- 1.Passageway for optic nerve
- 2. Anchor the pterygoid muscles.
- 3. Encloses hypophysis-
- 4. Forms parts of the middle cranial fossa,dorsal walls of the orbits,and external
- 5. Allow cranial nerves that control
- eye

movements to enter the orbit

- A. Superior orbital fissure
- B. Greater wing of sphenoid
- C. Optic foramen
- D. Pterygoid process
- E. Hypophyseal Fossa

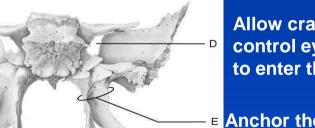
## spheroid tone bo

Forms parts of the middle cranial fossa Encloses hypophysis



(a) Superior view

(b) Posterior view



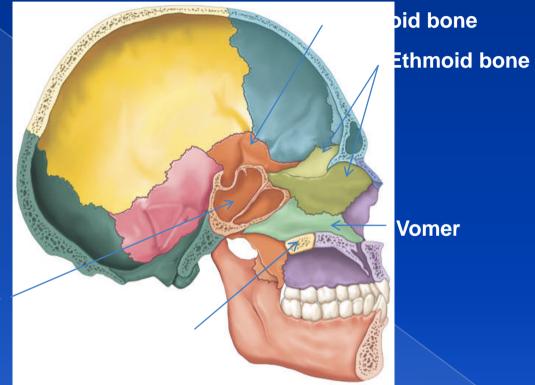
Allow cranial nerves that control eye movements to enter the orbit

Anchor the pterygoid muscles

21.What is considered the key stone of the cranium because it forms a central wedge that articulates with

all other cranial bones.

## Sphenoid bones



#### Sphenoid Sinus

22. The superior surface of sphenoid bone that

forms a snug enclosure for the pituitary gland is

#### Ethmoid Bone

Orbital plate

**23.** What forms

cavity or and the orbits?erpendicular plate **leinid he**s**in cisici**ha

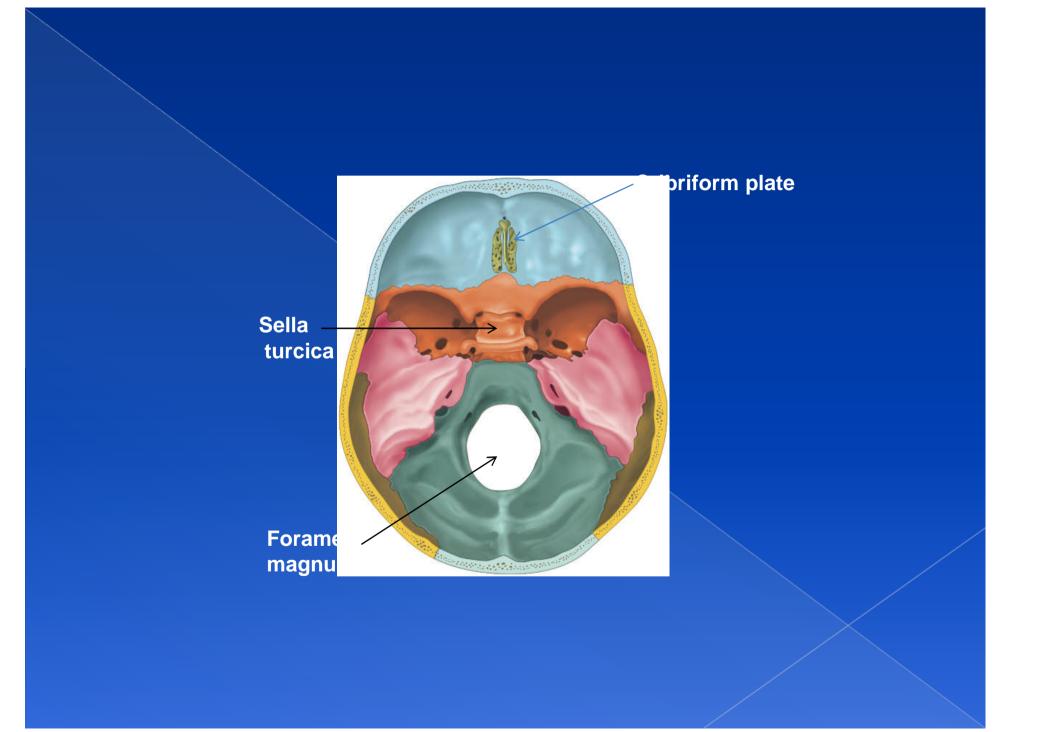
Cribriform

в

## 24. Where is the crista galli and what is its function?

Upper part of the ethmoid bone. The outermost covering of the brain (dura mater) attaches to the crista gali and helps secure the brain in the cranial cavity. 25. The structure punctured by tiny holes that forms the roof of nasal cavity and the floor of the anterior cranial fossa is \_\_\_\_\_

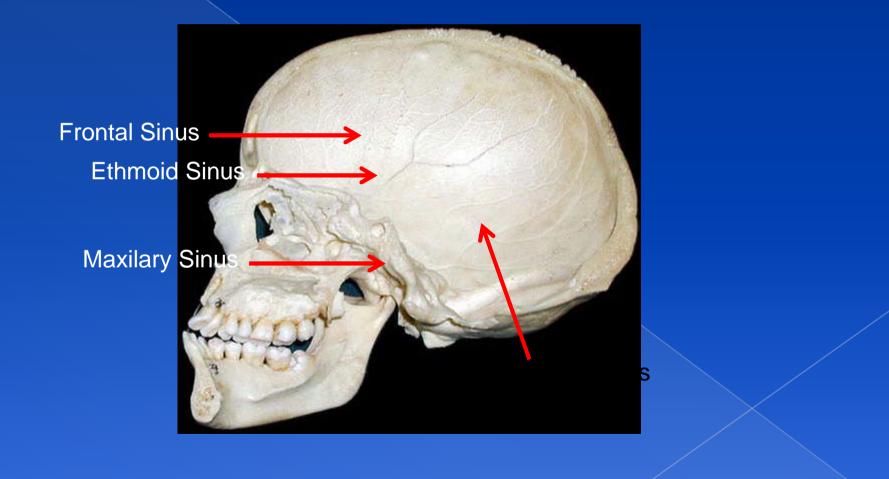
## Cribriform plates.



26. Tiney holes that punctures the cribriform that allows olfactory nerves to pass from smell receptors in the nasal cavity to the brain.

## **Olifactory formaen?**

# 27. What are the four major parasinuses?



#### 28. What are the functions of facial bones?

Framework of the face, the sense organs and the teeth Provide opening for the passage of air and food Anchor the facial muscles and expressions.

# 29. List the paired & unpaired facial bones

Paired Lacrimal Nasal Zygomatics Maxillae Palliatines Inferior nasal conchae

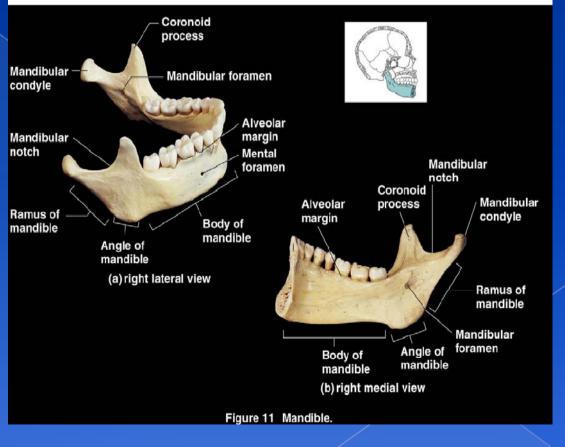
**Unpaired** vomer mandible Hyoid

# 30. What are the middle ear bones?

Malleus 2 Incus 2 Stapes 2

## 31. What is the largest ,strongest U shaped bone of the facial bone?

## The mandible



## 32. What anchors the lower teeth?

## The mandibular body

33. What structure allows blood vessels and nerves to pass to the chin and lower lip?

### The mental foramen

34. What is the insertion point for the large temporalis muscle that elevates the lower jaw during chewing?

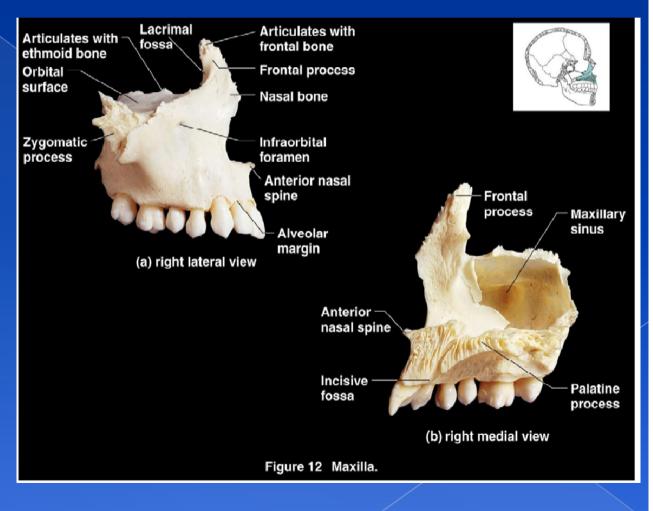
**Coronoid process** 

35. All facial bones except the mandible articulates with \_\_\_\_\_

### **Maxillary bone**

### 36. What carries the upper teeth?

### The alveolar margin of the maxillae

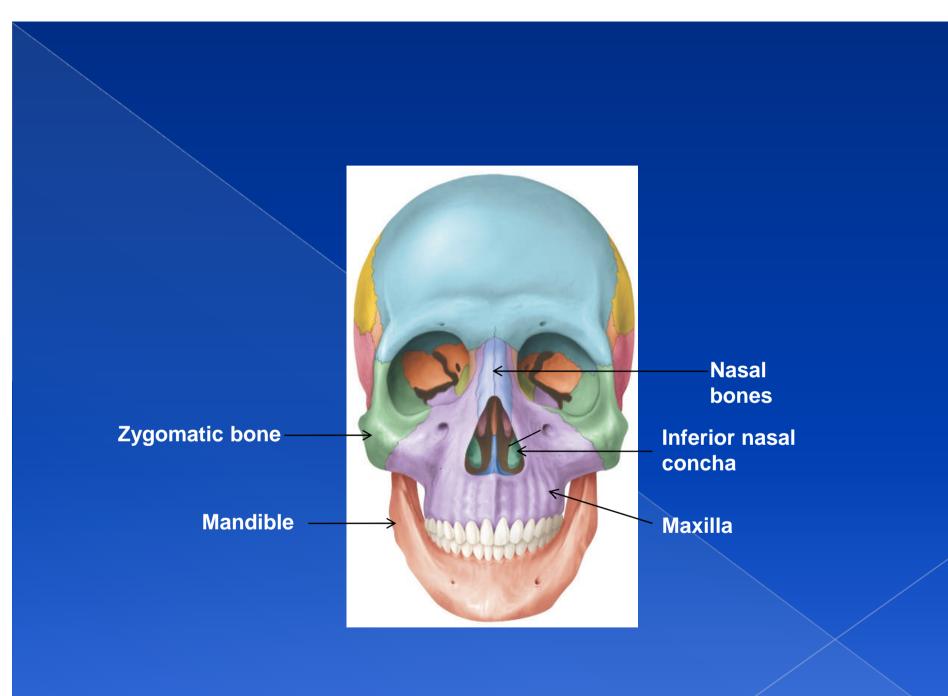


# 37. What forms the hard plate or the boney roof of the mouth?

### The Palatine process

38. What is the irregularly shaped commonly called the cheek bone?

### Zygomatic bone



39. What are the delicate fingernail shaped bones that contribute to the medial walls of each orbit?

Lacerimal bones

40. What is not really part of the skull bone is intimately related to the mandible and temporal bones?

The hyoid bone

## 41. What is the function of the hyoid bone?

Acts as moveable base for the tongue It is the attachment point for neck muscles that raise and lower the larynx during swallowing.

## VertebraL Column and ribs

### EBUNOLUWA akinduro

 Vertebra Column is a part of perpendicular skeleton true or false?
 Answer: False

2) In adults, the vertebral column consists of 26 individual bones, true or false? Answer: True

3) In fetus and infants the vertebra column consists of 33 separate bones true or false?
 Answer: True

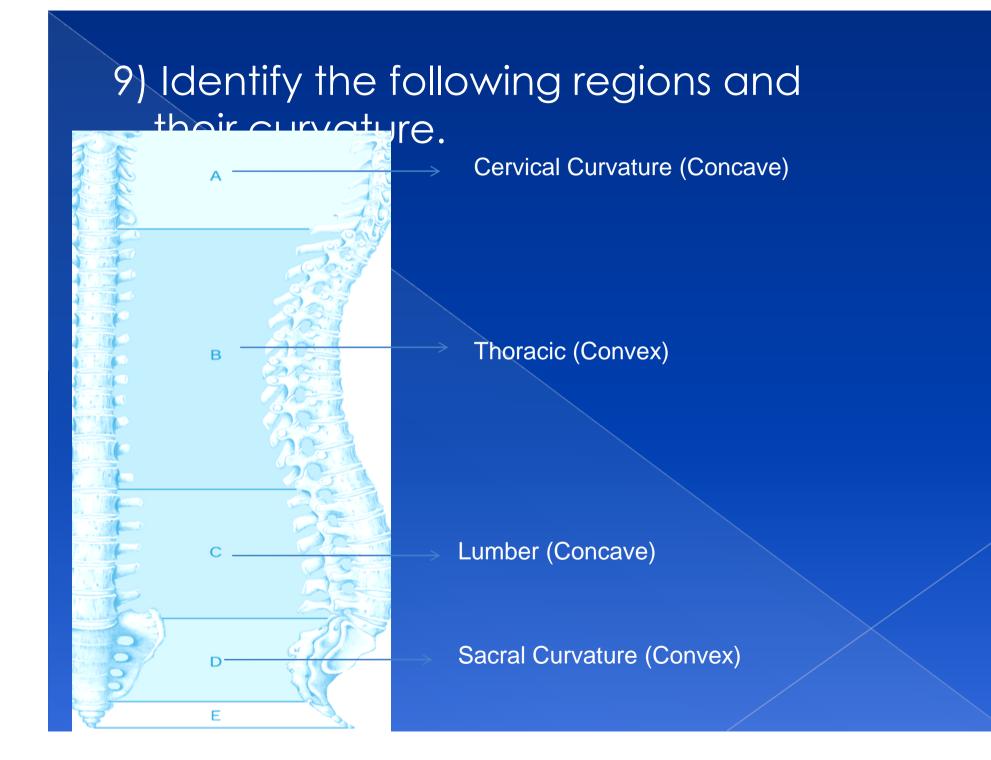
4) Mention the regions and the number of bones in the vertebra column.
Answer:
Cervical (7) , Thoracic (12) , Lumber (5) , Sacrum (5), Coccyx (4).

5) In which two regions is the vertebral column concave posteriority? Answer: Cervical and Lumbar regions

 6) True or False, The lumbar section has the largest intervertebral disc.
 Answer: True

7) What are the ligaments that prevent hyperextension and hyper-flexion of the spine? Answer: Anterior and posterior longitudinal ligament.

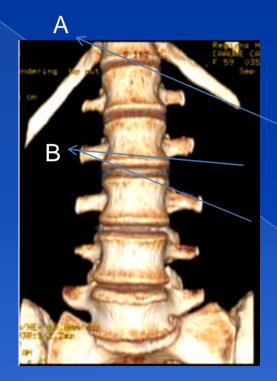
8) What is the name of the Cushion like pad that lies between each vertebra bone?
 Anno: Intervertebral disc



### 10) Identify these structures

#### Intravertebral Disc

Transverse Process



11) The inner gelatin-like part of the disc is the \_\_\_\_\_.
a) gluteus maximus
b) nucleus pulposus
c) intervertebral glue

Answer: B

12) The outer layer, made of collagen fibers is known as the \_\_\_\_\_.Answer: Annulus Fibrous

13) True or False, Articular facets are present in the lumbar sectionAnswer: False

14) Intervertebral foramen provides the passage for?
A) Spinal Nerves
B) Spinal Ligament
C) Spinal Fluid

 15) Name a common homeostatic imbalance involving vertebral discs.
 Answer: herniated (prolapsed) disc

16) Which vertebra region contains the atlas and the axis?Answer: Cervical

17) The knoblike feature of the axis that act as a pivot for rotation of the atlas is called?Answer: Dens

18) Total fracture of the Dens will prevent you from?
Answer: Rotating your head from side to side or say "no".

19) The superior articular facets of the bone articulate with occipital condyles. This articulation allows the "yes" motion.

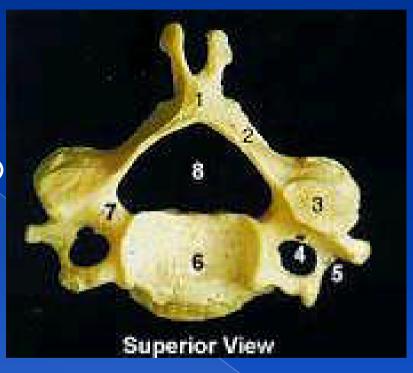
Answer: Atlas

20) Arteries go to the brain through which passage?
A) Transverse Facet
B) Transverse Oval
C) Transverse Foramen
Answer: C

21) Which of the vertebra bones have the transverse foramen in its transverse process?
 Answer: Cervical Vertebra

22) Name each of these vertebra bones and identify the following structures:

1. Spinous process 2. Lamina 3. Superior articular pro 4. Transverse foramen 5. Transverse process 6. Body 7. Pedicle 8. Vertebral foramen



23) What is another name for C-1?
a) Axis
b) Facet
c) Atlas
Answer: C

24) What is another name for C-2?
Atlas

a) Axis
b)Facet
c)Pedicle

Answer: A

25) The First seven pairs of ribs that are typically attached to the sternum are called?
A) False Ribs
B) Joint Ribs
C) True Ribs
Answer: C

26) True or false, the ribs articulate at the coastal facets of the thoracic vertebra.Answer: True

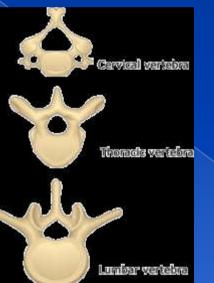
27) The facets of thoracic vertebrae articulates with

Answer: A pair of ribs

28) The body of the Cervical Vertebrae is?
a) Kidney shaped
b) Small, wide side to side
c) Heart shaped
Answer: B

29) The body of which vertebral bone is kidney shaped? Answer: Lumbar

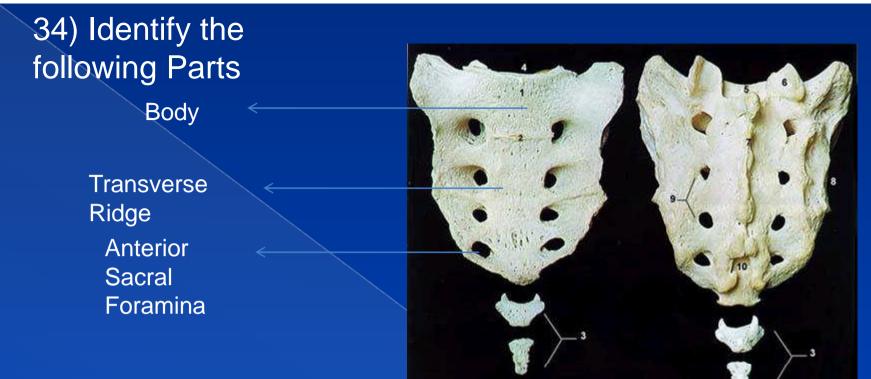
30) True or false, the body of the thoracic bone is heart shaped?Answer: True



31) False ribs are how many in pairs? Answer: Five

 32) The last two pairs of ribs are do not have any attachment to the Sternum and so they are called?
 Answer: Floating Ribs

33) What differentiates the Thoracic vertebrae from the other vertebrae?Answer: Transverse Foramina



Anterior View

Posterior View

35) How many vertebrae fuse together to form the coccyx? Answer: 3-5

36) Give another name for the coccyx.Answer: Tailbone

37) True or false, Ribs numbered 11 and 12 are True Ribs because they have an anterior attachments? Answer: False

38) Coastal Cartilages join True Ribs to the Sternum, true or false?Answer: True

39) The inferior most part of the Sternum is the? A) Body B) Manubrium C) Xyphoid Process 40) Identify (he Labeled Parts Jugular notch

Manubrium

Sternal angle

Body (gladiolus)

Xiphoid process

41) Major Function of the Intervertebral disc is to?
A) Prevent hyper-extension
B) Prevent injuries
C) Absorb shock
Answer: C

42) The abnormal curvature of the vertebral column often seen in thoracic region is?
A) Lordosis
B) Kyphosis
C) Scoliosis
D) Sway Back

43) Only the \_\_\_\_\_ are the vertebrae bones that do not have a body
A) Last Lumbar
B) Axis
C) Atlas
Answer: B AND C

44) The body of the Thoracic vertebrae is what shape?
A) Round
B) Oval
C) Heart Shaped
Answer: C

45) Which of the following phrases best describe the function of the vertebral curves?

- A) To accommodate weight of the Pelvic Girdle
- B) To absorb shock and trauma
- To provide resilience and flexibility.
- Answer: C

46) Which of the vertebral column receives the most stress by bearing most of the body weight?
A) Lumbar region
B) Sacrum region
C) Cervical region
Answer: A

47) The abnormal curve often seen in pregnant women as they attempt to preserve their center of gravity toward the end of the pregnancy is called?
A) Kyphosis
B) Spina Bifida
C) Lordosis
D) Scoliosis

48) What is ligament flavum? Answer : ligament which connects adjacent vertebra 49) A massive blow to the sternum can puncture which organ?
a) Lungs
b) Kidney
c) Heart
Answer: Heart

50) True or false, the Xyphoid Process serves as an attachment for some abdominal muscles.
 Answer: True

## The Pectoral Girdles and Superior Appendages Yolanda Boma

The Arms
Forearms
Wrists
hands

### Fill in the blanks

 Name the structures that make up the Superior appendages What is responsible for attaching the superior appendages to the axial skeleton

• A: Pectoral Girles

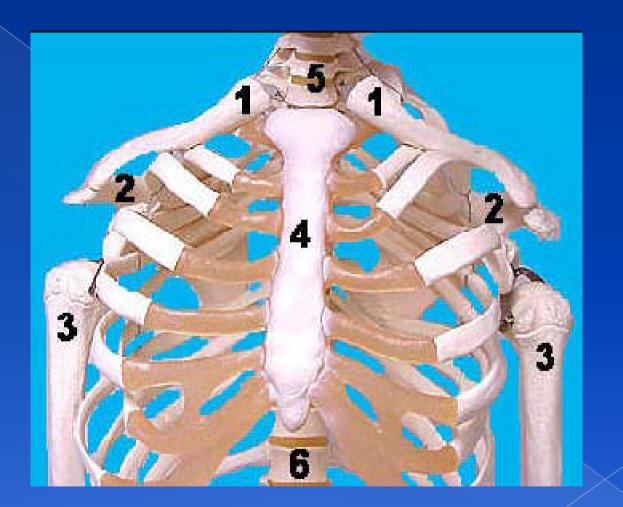
Name the two bones that the pectoral girdles consist of

• A: Scapula & Clavicle

The Socket where the scapula articulates with the Humerus is known as what??

• A: Glenoid Cavity

# Identify these structures



#### Name the two process of the scapula

> Acromion

> Coracoid Process

The Coracoid process serves as a point of attachment for which muscle?
 Biceps

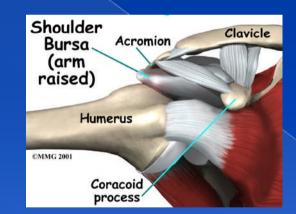
# The lateral end of the clavicle is known as? Acromial End

The medial end of the clavicle is known as ?
 Sternal end

The sternal articulates with the \_\_\_\_\_ of the Sternum

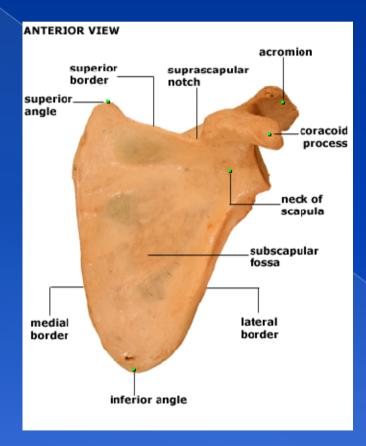
Manubrium





#### Name the three sides of the scapula.

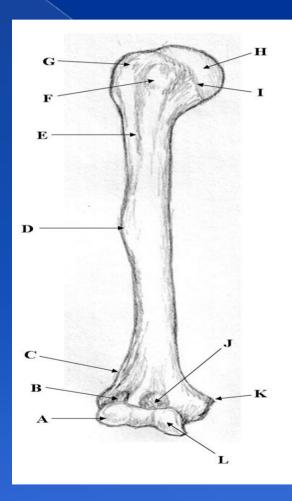
## A: Superior, medial and lateral border



#### Name the ONE and ONLY bone in the arm

#### A: Humerus

# Identify these structures



A. capitulum
B. radial fossa
D. deltoid tuberosity
F. Lesser tubercle
G. Greater tubercle
H. Head

Proximal end of the humerus is the
Radial fossa
Head
Surgical neck
None of the above

# a. Head

Name the two bumps next to the head
A. scapula and acromion
B. greater and lesser tubercle
C. coronoid and olecranon fossa
D. none of the above

## • greater and lesser tubercle

Along the shaft of the humerus there is a ridge on its lateral surface. The ridge is known as

 a. Deltoid tuberosity
 b. Body
 c. Scapula
 d. All of the above

# Deltoid tuberosity

# True or false

#### The two process of the humerus is known as the medial and lateral epicondyle



# • The tubercles and the deltoid tuberosity are sites of the muscle attachment.

> True

 Which structure has a ball shape and located on the lateral portion of the distal end of the humerus

 Medial to the capitulum is the which articulates with the ulna

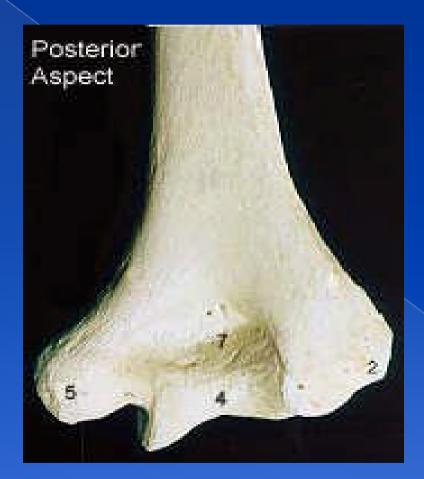
# Capitulum

#### Troclea

## The structure with a deep indentation is known as

## Olecranon Fossa

#### Identify the numbered Structures



2. Lateral Epicondyle
 4. Trochlea
 5. Medial Epicondyle
 7.Olecranon Fossa

#### • List the two bones in the forearm

#### At the proximal end of the radius is the

List the two bones in the forearm
A: Radius
A: ulna

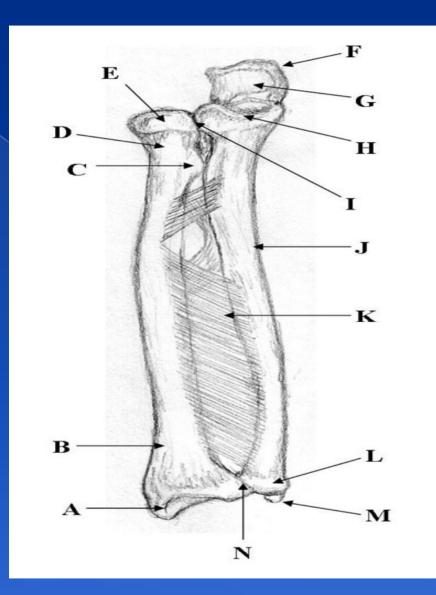
At the proximal end of the radius is the head

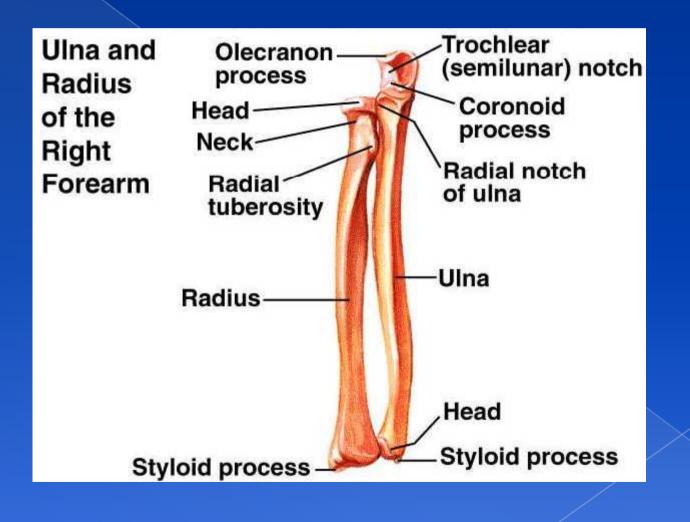
#### Name the two process that help form a crescent-shaped indentation

The indentation is known as

#### Olecranon and coronoid process

Trochlear Notch





# The Wrist and Hand

The \_\_\_\_\_ has eight short bones

 The palm of the hand contains five long bones called

## Carpals

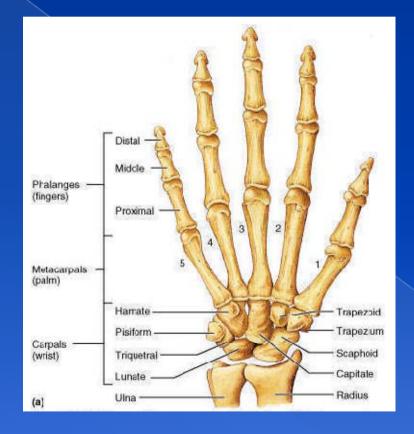
## Metacarpals

# The fingers and thumbs contain bones called\_\_\_\_\_

#### Name the two phalanges of the thumb

## Phalanges

## Proximal and distal phalanx



# PELVIC GIRDLE AND INFERIOR APPENDAGES. WHAT IS THE MAIN FUNCTION OF THE PELVIC GIRDLE?

#### >IT IS RESPONSIBLE FOR ATTACHMENT OF INFERIOR APPENDAGES TO AXIAL SKELETON.

# WHAT ARE INFERIOR APPENDEGES?

# LOWER EXTREMITIES >THIGH, LEGS, ANKLES AND FEET.

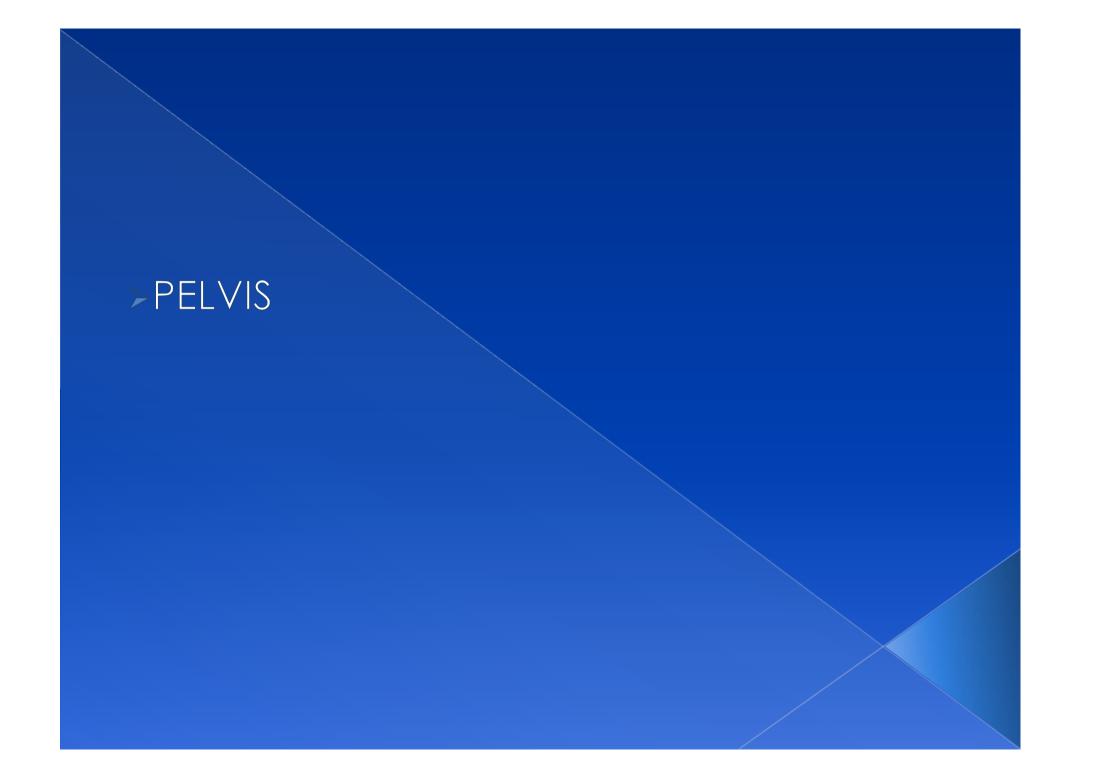
# WHAT IS ANOTHER NAME FOR COXAL BONES?

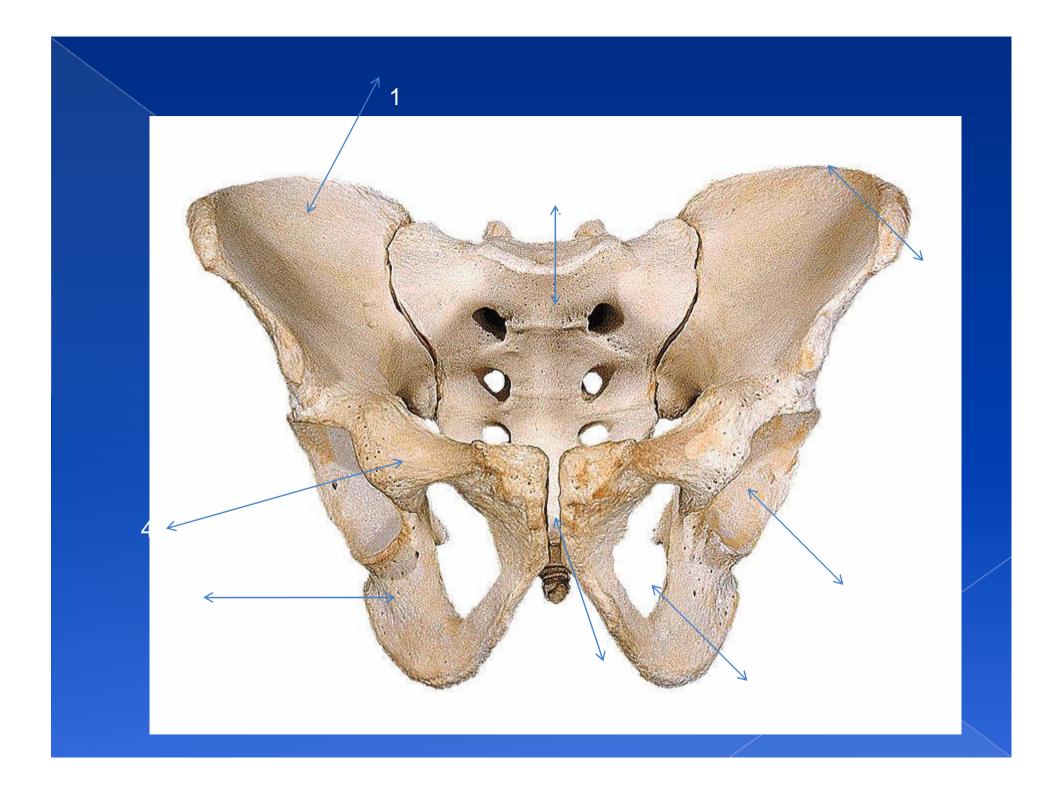
#### >HIP BONES

# WHAT ARE THE THREE BONES THAT FUSE TO FORM A COXAL BONE?

#### >ILIUM, ISCHIUM AND PUBIS.

# WHAT DO THE COXAL BONES, SACRUM AND COCCYX MAKE UP?





YOU PUT YOU FEEL WHEN YOU PUT YOUR HANDS AROUND YOUR HIPS? LOCATION?

#### >ILIAC CREST. >LOCATED AT THE SUPERIOR BORDER OF THE COXAL BONE.

# WHAT AREA OF THE COXAL BONE ARTICULATES WITH THE SACRUM?

#### >AURICULAR SURFACE.

# WHAT MAKES THE SACROILIAC JOINT STRONG?

# >ROUGH SURFACES OF THE BONE >STRONG LIGAMENTS

# WHAT IS THE INFERIOR MARGIN OF THE ISCHIUM?

#### SCHIAL TUBEROSITY

#### >SYNPHYSIS PUBIS

WHAT IS THE LARGE HOLE AROUND THE PUBIS AND ISCHIUM? FUNCTION?

#### >OBTURATOR FORAMEN >ENABLE PASSAGE OF SOME VESSELS &NERVES.

# WHAT IS THE SOCKET THAT ARTICULATE WITH THE HEAD OF THE FEMUR?

## ACETABULUM

# ANTERIORLY WHERE DO THE COXAL BONES ARTICULATE?

# INVOLVED IN THE FORMATION OF THE PELVIS? WHAT ARE THEY?

# > 2 SACROILIAC JOINTS > PUBIC SYNPHYSIS > BETWEEN SACRUM AND COCCYX

## T.WHAT BONE DO WE FIND IN THE THIGH? 2.WHAT BONES DO WE FIND IN THE LEG?

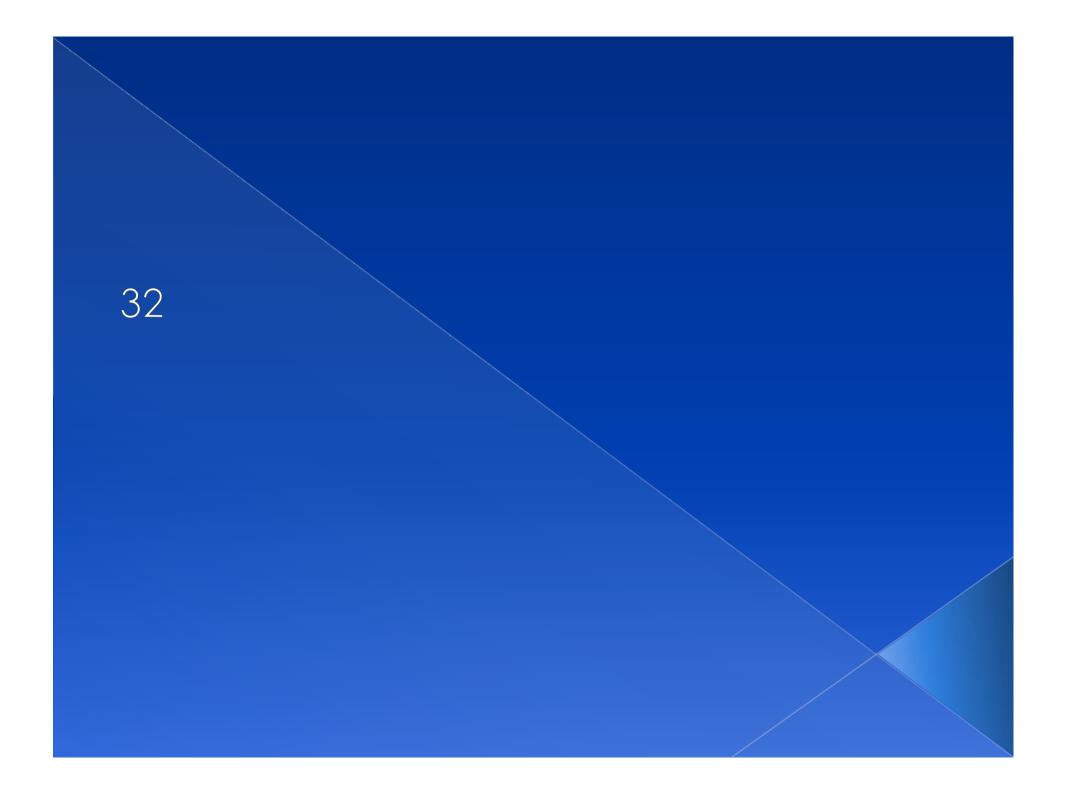
#### >FEMUR >TIBIA AND FIBULA

DISTINCTIVE PROCESSES NEXT TO THE HEAD OF THE FEMUR? FUNCTION?

# >GREATER & LESSER TROCHANTER >PROVIDE MUSCLE ATTACHEMENT

# WHAT SEPARATES THE TRUE PELVIS FROM FALSE PELVIS?

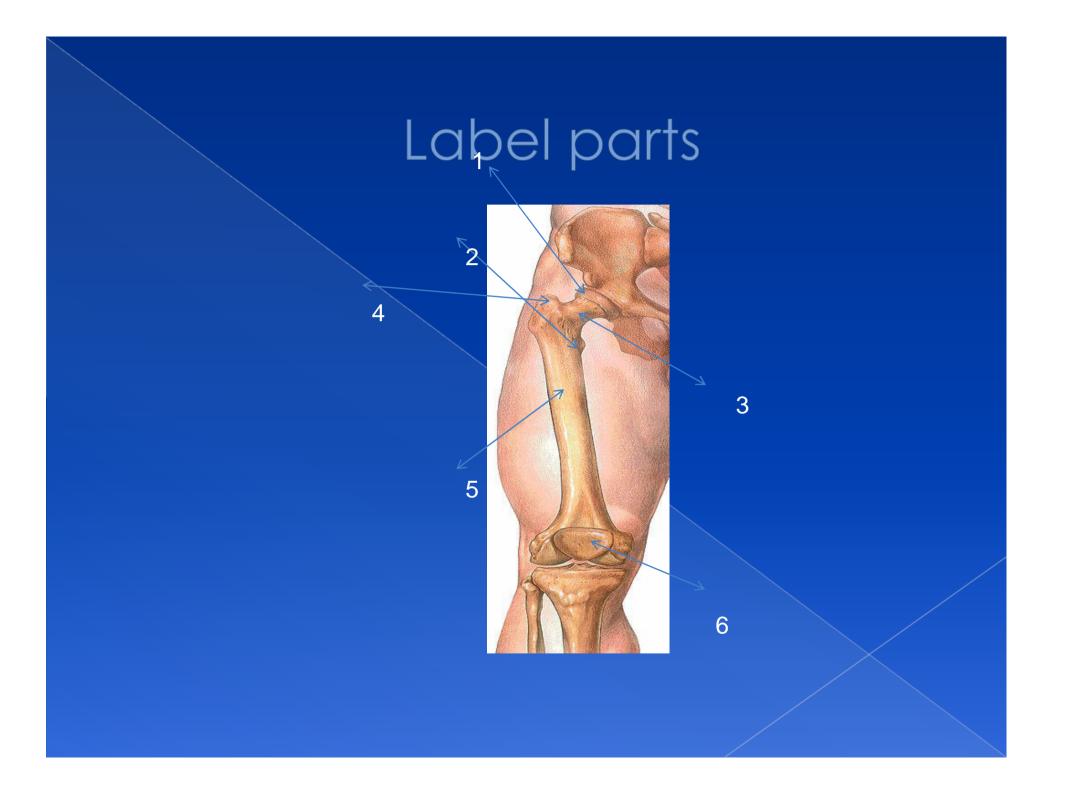
# 1.HOW MANY BONES DO WE FIND IN THE LOWER LIMBS? 2.WHAT ARE THEY?



# BONES OF THE LOWER APPENDEGES?

- FEMUR(1)
- PATELLA(1)
- FIBULA(1)
- TIBIA(1)
- OCALCANEUS(1)
- TARSALS(7)
- METATARSALS (5)
- PROXIMAL PHALANGES(5)

- INTERMEDIATE PHALANGES(5)
   DISTAL
  - PHALANGES(4)





## WHAT ARE THE TWO LARGE PROCESSES AT THE DISTAL END OF THE FEMUR?

#### >MEDIAL CONDYLE >LATERAL CONDYLE > FORM MOVABLE ARTICULATION WITH THE TIBIA

WHAT DO WE FIND JUST PROXIMAL TO THE CONDYLES? FUNCTION?

#### > MEDIAL & LATERAL EPICONDYLE > PROVIDE MUSCLE & LIGAMENT ATTACHMENT.

## WHAT ARTICULATES WITH THE PATELLA?

## >PATELLA SURFACE

ANTERIOR SURFACE OF THE TIBIA, DISTAL TO THE CONDYLES?

## >TIBIAL TUBEROSITY

## WHAT IS THE DISTAL END OF THE TIBIA?

#### >MEDIAL MALLEOLUS & FORMS THE ANKLE JOINT.

#### >PROXIMAL -HEAD >DISTAL- LATERAL MALLEOLUS.

## WHAT BONES INVOLVE THE KNEE JOINT?

#### >FEMUR >PATELLA >TIBIA

1.HOW MANY JOINTS MAKE THE KNEE? 2.WHAT ARE THEY?

# >3.JOINTS >FEMORAL PATELLA JOINT >TIBIAL FEMORAL JOINT >BETWEEN MEDIAL AND LATERAL CONDYLES.

WHAT ARE THE 4 LIGAMENTS THAT HOLD TOGETHER THE TIBIAL FEMORAL JOINT? > ANTERIOR CRUCIATE LIGAMENET.
 > POSTERIOR CRUCIATE LIGAMENT.
 > TIBIAL COLLATERAL LIGAMENT.
 > FIBULAR COLLATERAL LIGAMENT.

CARTILAGE THAT ACT AS A CUSHION BETWEEN FEMORAL AND TIBIAL CONDYLES?

#### >MEDIAL MENICUS >LATERAL MENICUS

ANTERIOR MOVEMENTS OF THE FEMUR RELATIVE TO THE TIBIA?

#### >POSTERIOR CRUCIATE LIGAMENT >ANTERIOR CRUCIATE LIGAMENT

JOINT WHERE THE PATELAR AND PATELAR SURFACE OF THE FEMUR ARTICULATE?

## FEMORAL PATELLAR JOINT

## WHAT IS THE NAME OF THE JOINT FORMED BY THE TIBIA AND FEMUR?

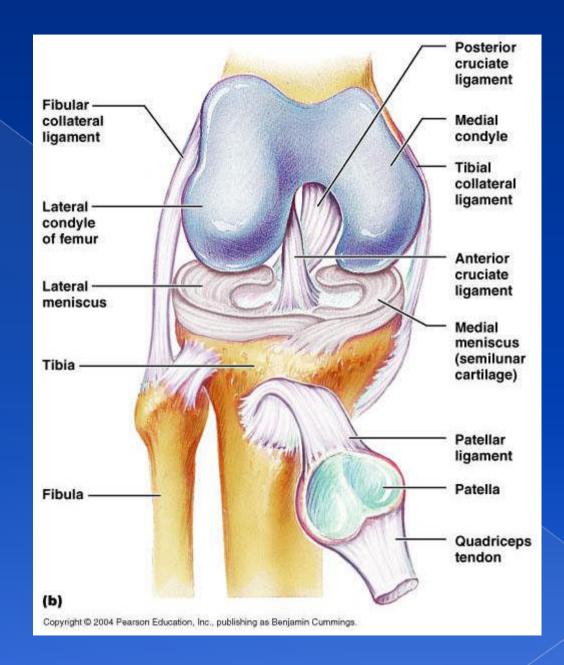
## TIBIOFEMORAL JOINT

THROUGH WHAT TENDON IS THE PATELLA ATTACHED TO QUADRICEPS MUSCLE?

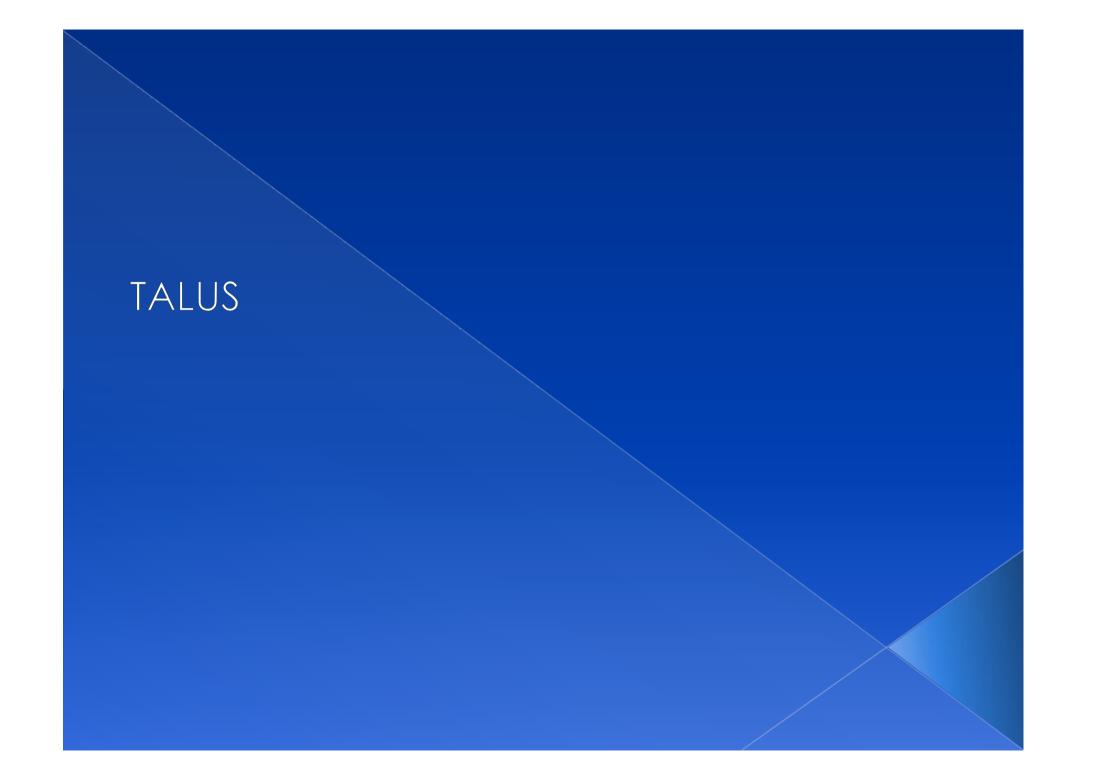
## QUADRICEPS TENDON.

## WHAT BONE ARE THE BABIES NOT BONE WITH?

## PATELLA



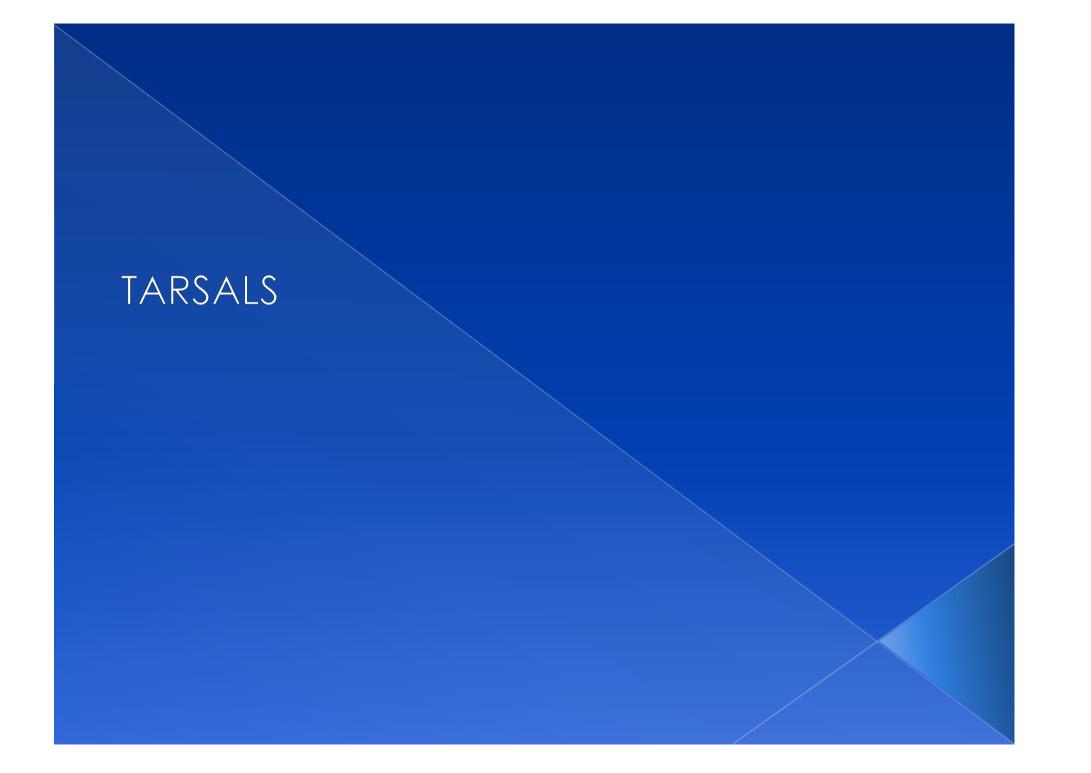
## WHAT BONE ARTICULATES WITH THE TIBIA INFERIORLY?



## WHAT BONE FORMS THE HEEL?

## CALCANEUS

## WHAT ARE ANKLE BONES?



## WHAT IS THE MIDDLE PORTION OF THE FOOT MADE OF?

#### METATARSALS

## WHAT ARE THE BONES OF THE TOES?

#### PHALANGES