

Anatomy (OSPE) Revision

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Anatomy Team

433

Important notes before you begin

Make sure you understand the difference between the terms (NAME & TYPE) which have two completely different answers.

Also, make sure your spelling is correct or relatively similar to ensure your grade in the given question.

If you have any inquiries or questions, please contact us through our e-mail.

* In practical anatomy we studied three lectures :
Skeletal muscles, Joints and Nervous System.

The type of bones: (NOTE)

Short Bones

- Carpals (16)
- Tarsals (14)

Irregular Bones

- Vertebral Column (26)
- Skull Bones (25)
- Scapula (2)
- Coxal Bones (2)
- Patella (2)

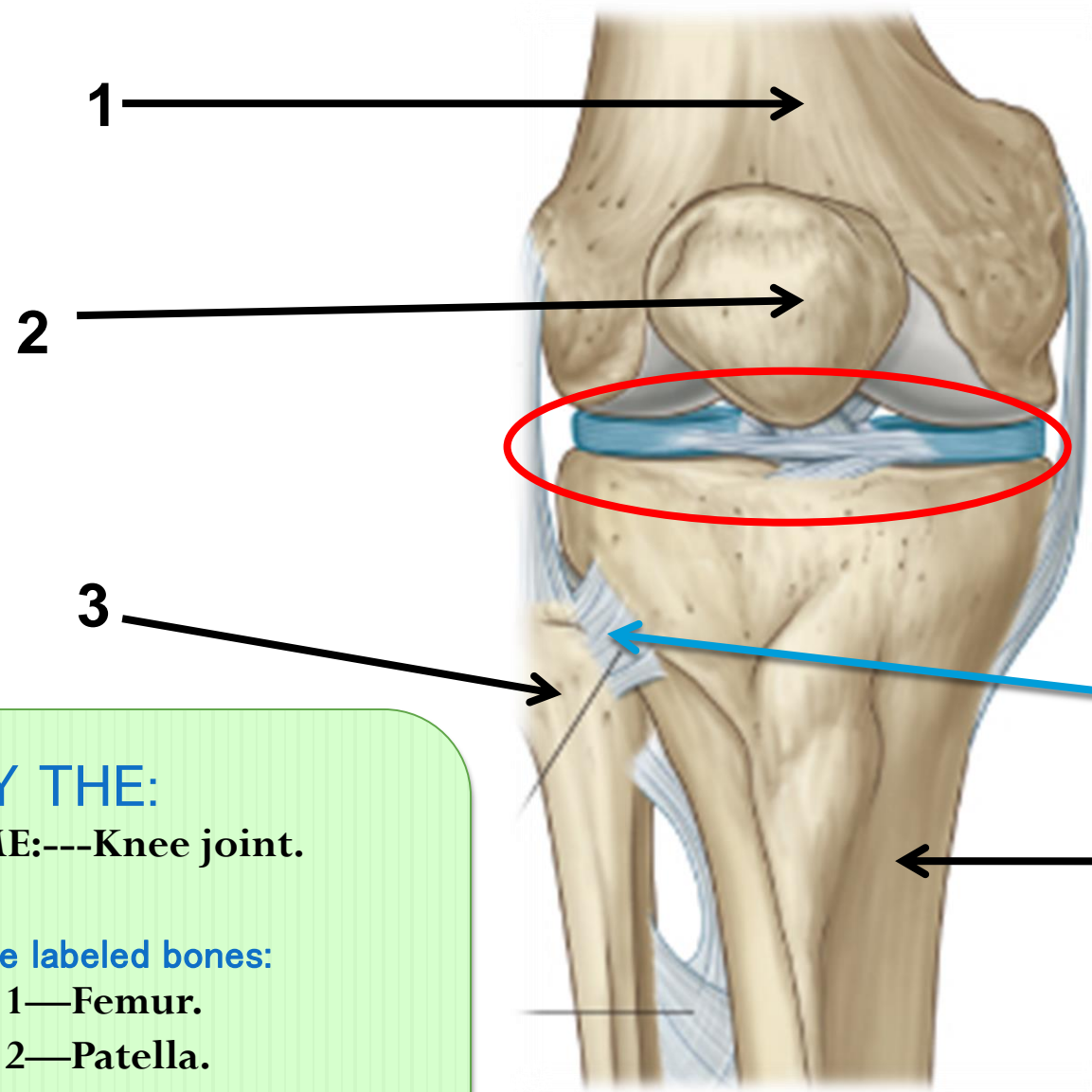
Long Bones

- Humerus (2)
- Radius (2)
- Ulna (2)
- Metacarpals (10)
- Phalanges of the Hand (28)
- Femur (2)
- Tibia (2)
- Fibula (2)
- Metatarsals (10)
- Phalanges of the Foot (28)
- Clavicles (2)

Flat Bones

- Cranial Bones (4)
- Thoracic Cage Bones (25)

Case #1



Note:
There are 3 types of joints:
1. Fibrous.
2. Cartilaginous.
3. Synovial.

Type of this joint:
is Hinge Synovial
uni-axial joint
(COMPLETE ANSWER)

Superior
tibiofibular joint (Synovial)

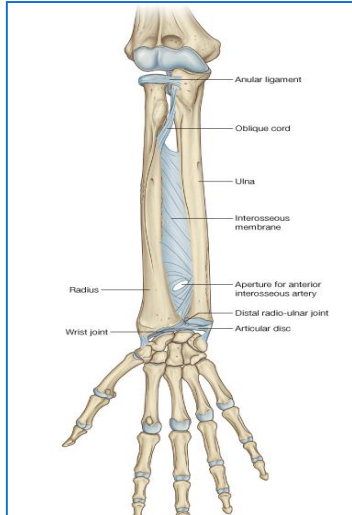
IDENTIFY THE:
JOINT NAME:---Knee joint.

IDENTIFY the labeled bones:
1—Femur.
2—Patella.
3---Fibula (lateral)
4---Tibia (medial).

1. Uniaxial.

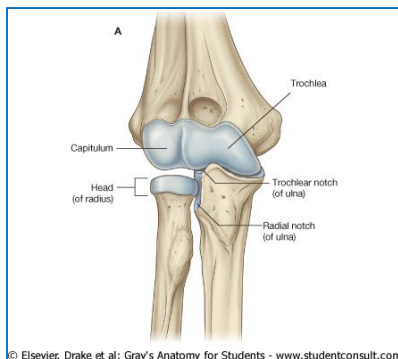
1- Pivot: radio-ulnar joints

Movements: Rotation.



2- Hinge joints: elbow and ankle joints.

Movements: Flexion & Extension.



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Axial joints are divided into:

1. Uniaxial.
2. Biaxial.
3. Multi-axial (polyaxial).

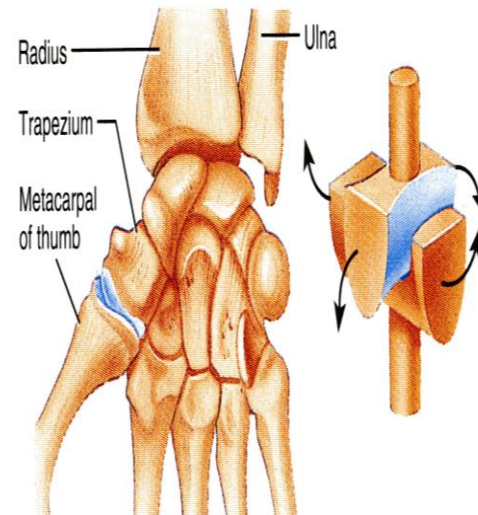
2. Biaxial .

1- Saddle joints:

metacarpal joint of the thumb.

Movements: (Flexion & Extension + Abduction & Adduction) +

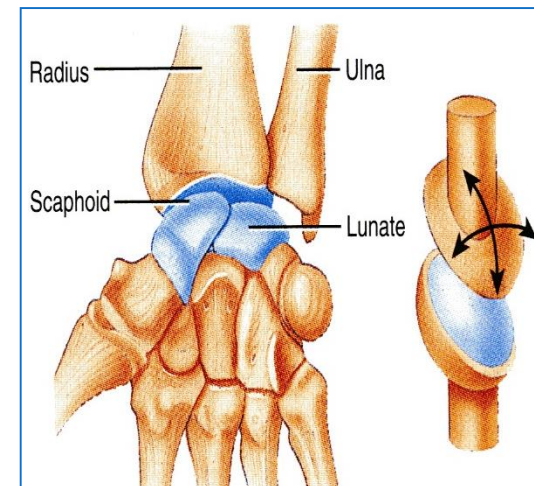
a small range of rotation.



2- Ellipsoid joints:

Wrist joint.

Movements: Flexion & extension + abduction & adduction

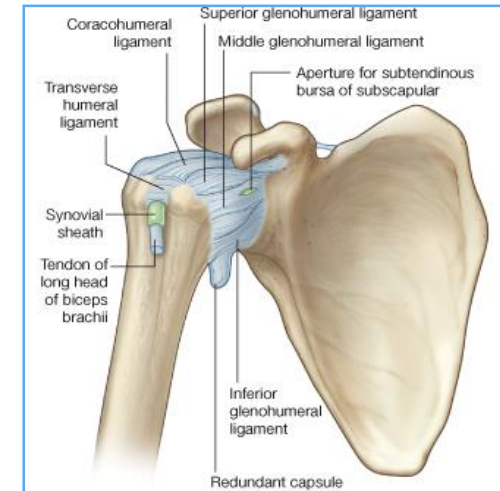


3. Multi-axial (polyaxial).

Ball-and-socket joints:

Shoulder joint & Hip Joint.

Movements: Flexion & Extension + (Abduction & Adduction) + Rotation along a separate axis.



This slide is for addition

IDENTIFY

1- The type of the bone
A: Flat bone. marked

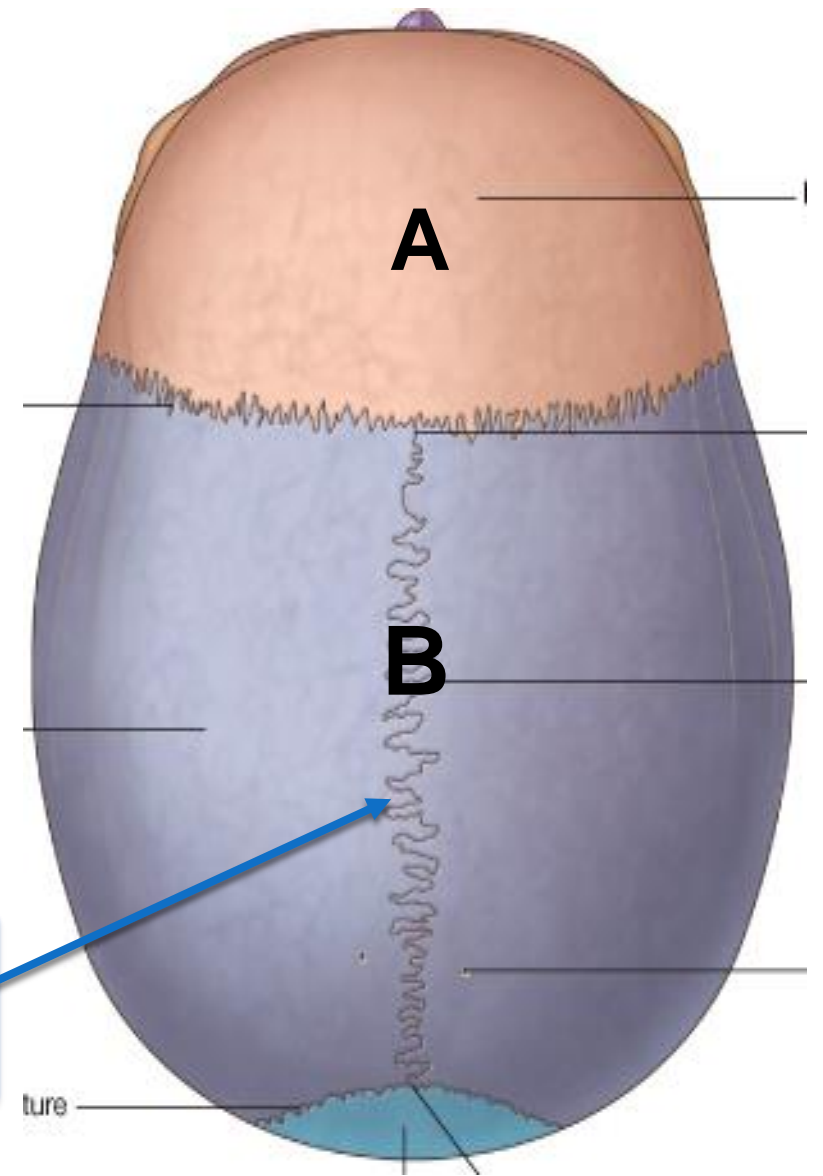
2- The type of joint marked
B: Fibrous joint

NOTE:-

types of bones:-

- 1- flat bone
- 2- long bone
- 3- short bone
- 4- irregular bone
- 5- pneumatic (الهوائية)

The name of the joint marked
B: skull suture

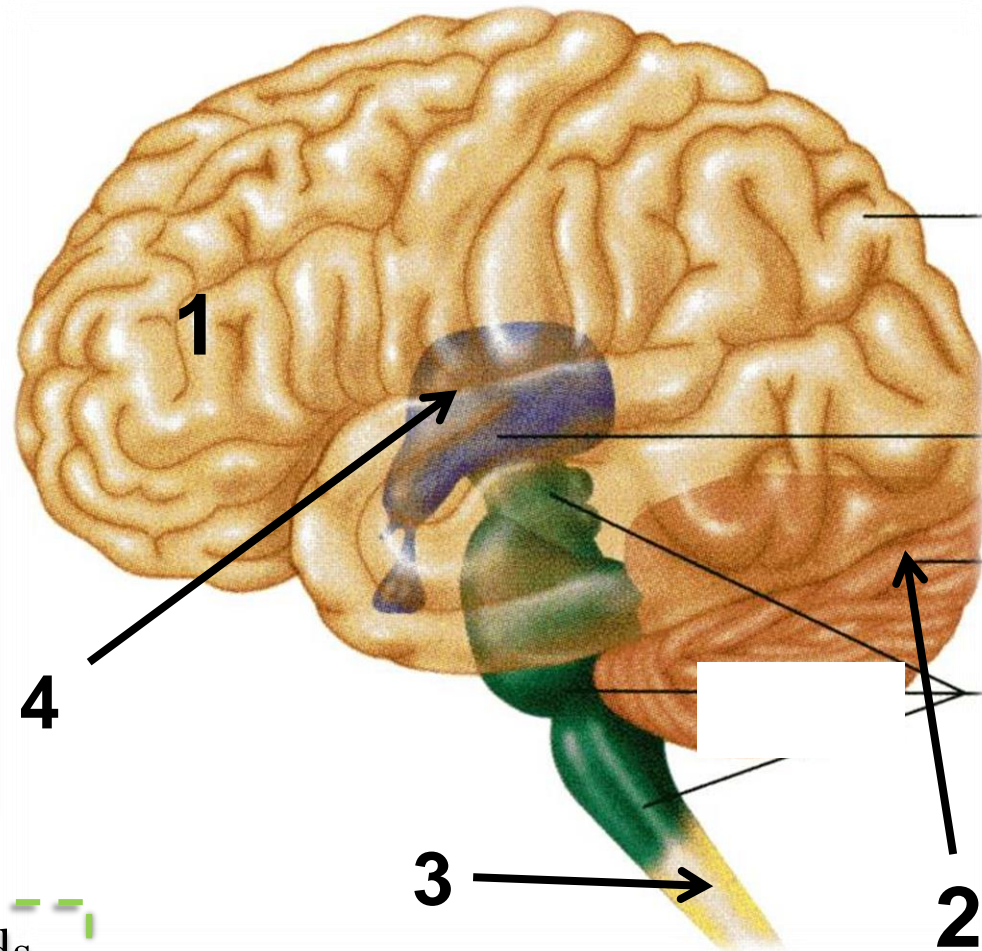


IDENTIFY THE LABELED STRUCTURES:

1. Cerebrum.
2. Cerebellum.
3. Spinal cord.
4. Diencephalon.

(note) **Diencephalon:** (parts)
midthalamus – epithalamus –
hypothalamus – thalamus –
subthalamus

(note) **Thalamus:** bed → sends
signals / sensations & passes them
to their correct place



Case # 4

This slide is
very
important

IDENTIFY THESE MOVEMENTS:

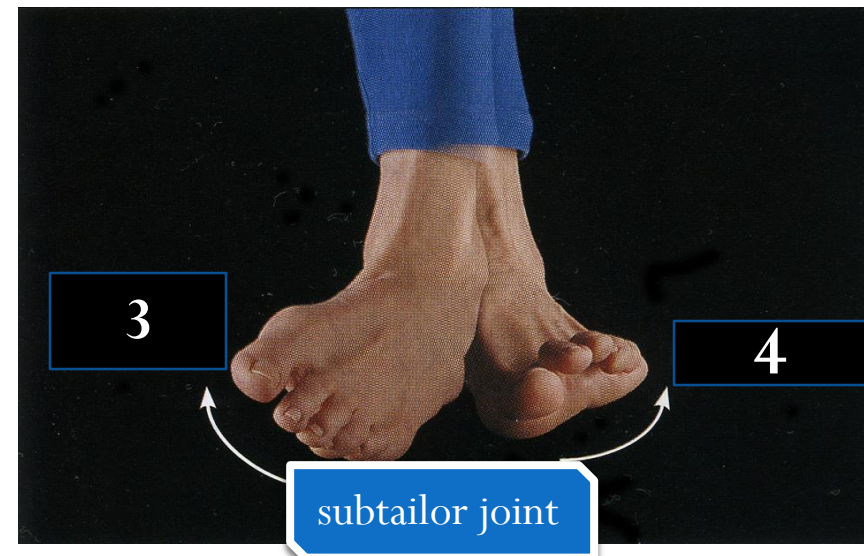
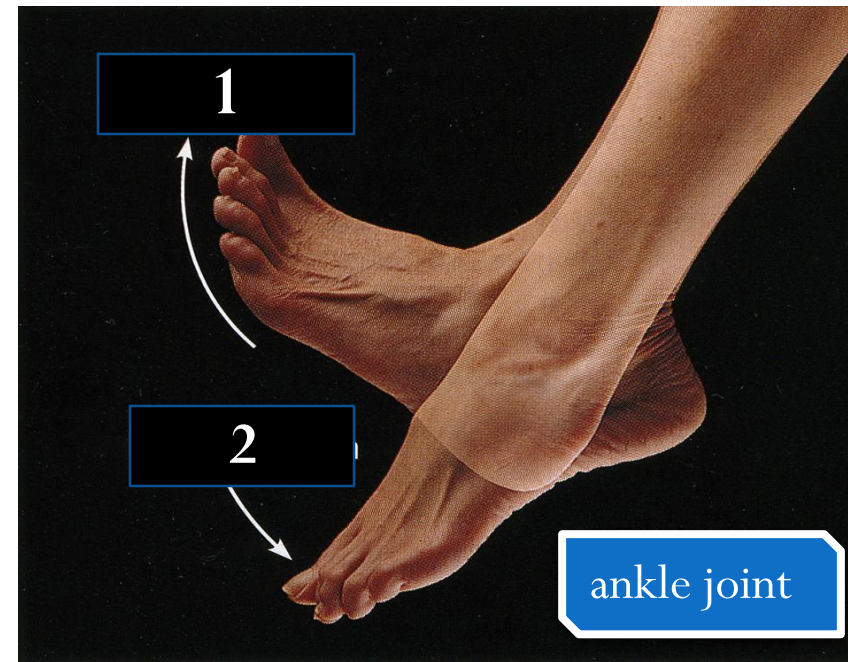
1. Dorsiflexion. (فك رجلك من البنزين)
2. Planterflexion. (فرامل)
3. Inversion (sole of the foot is pointed inwards)
4. Eversion (sole pointed outwards) 3&4 are SUBTAILOR JOINT

(note)With hand:

- Dorsiflexion (like holding a stop position)
- plantarflexion (put hand down)

(note)Why did we use the terms
planter &Dorsi ?

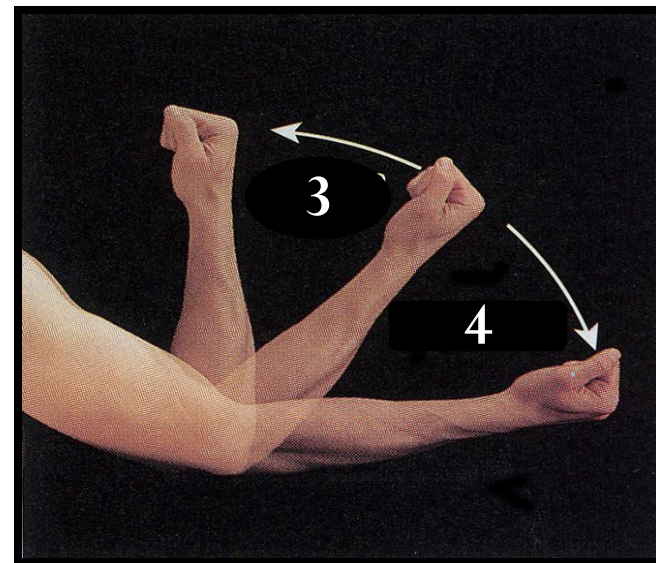
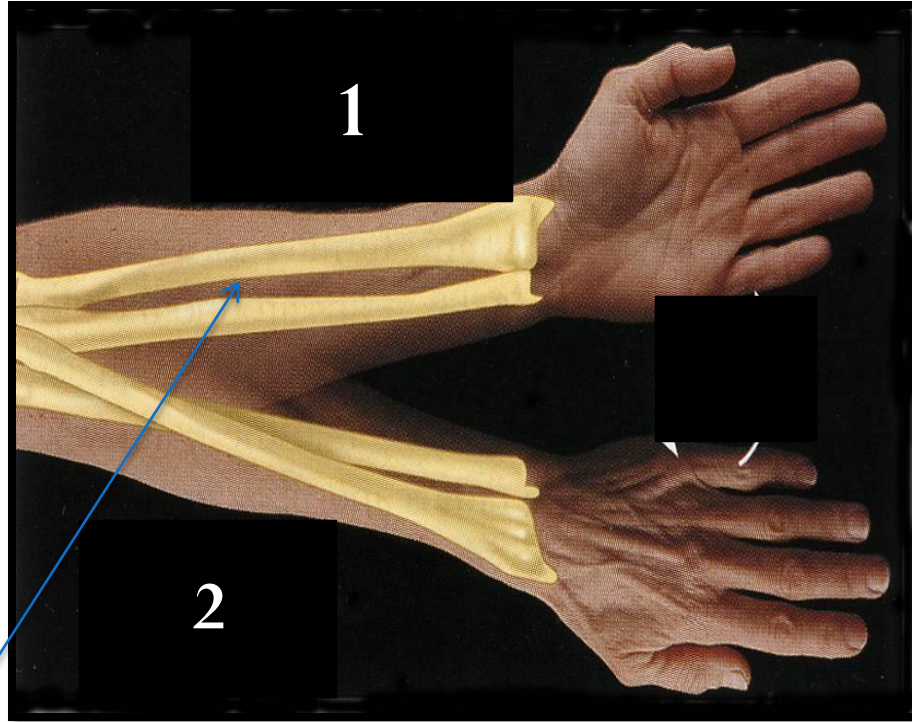
-We used them because we are talking
about the surface.



IDENTIFY THESE MOVEMENTS:

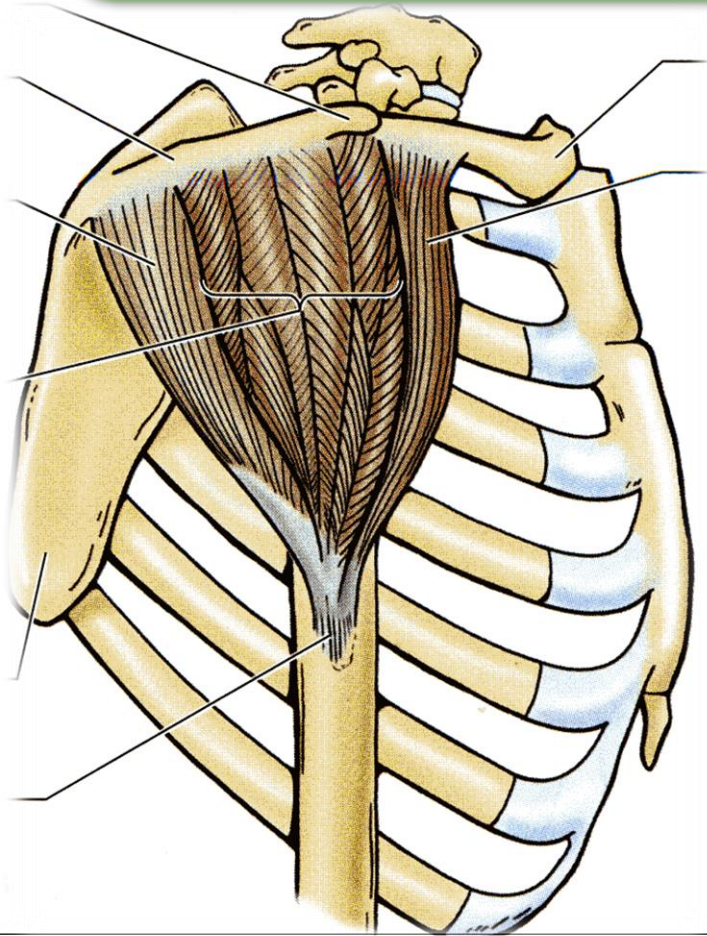
1. **Supination.** (سبحان الله)
2. **Pronation:** (radius moves across & ULNA (DOES NOT MOVE)
→ making the letter **X**)
3. **Flexion.** (on sagittal plane
→ radius (**lateral bone**))
4. **Extension.**

The type of joint marked is:
UNIAXIAL SYNOVIAL JOINTS
(**Pivot**).



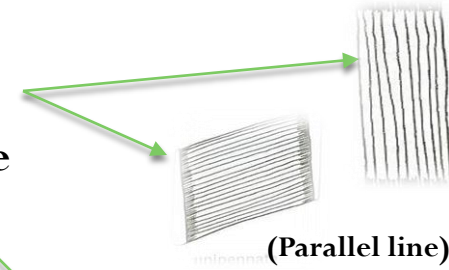
IDENTIFY THIS TYPE OF THIS
SKELETAL MUSCLE:

Answer : Multipennate (lateral
view)

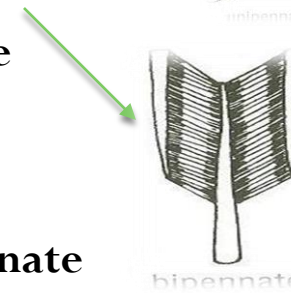


(note) TYPES OF THE SKELETAL
Muscles:

1-Unipennate



2-Bipennate



3-Multipennate



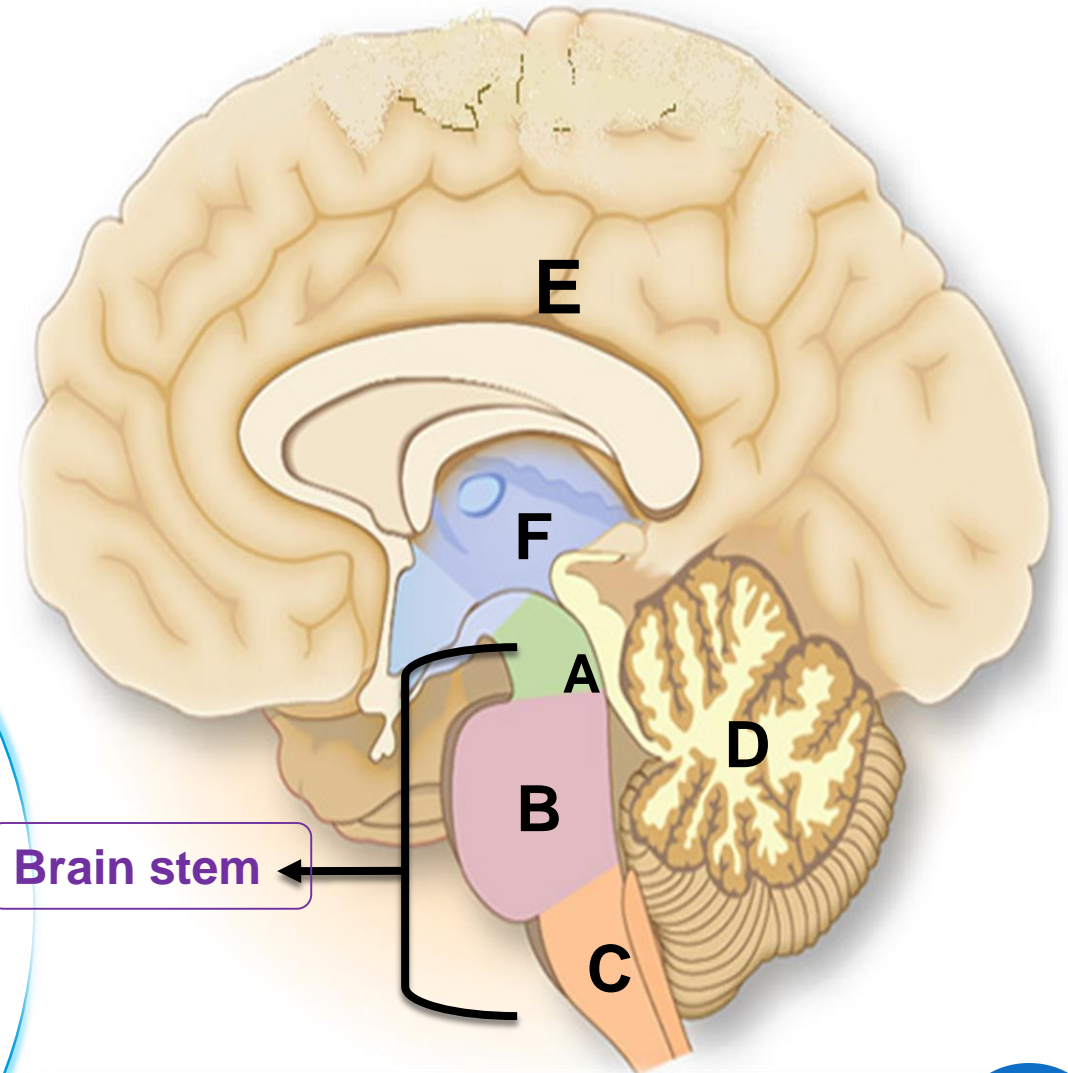
The NAME of this muscle is
Deltoid muscle
Named according to its **SHAPE**
(triangular)

Identify parts of the brain marked :

- A. Midbrain.
- B. Pons.
- C. Medulla oblongata.
- D. Cerebellum.
- E. Cerebrum
- F. Diencephalon .A

Note :
Diencephalon above Midbrain

And the diencephalon consist of :
thalamus, hypothalamus,
subthalamus, and epithalamus



Case # 8



A. Identify the bones

1. Ulna
2. Radius

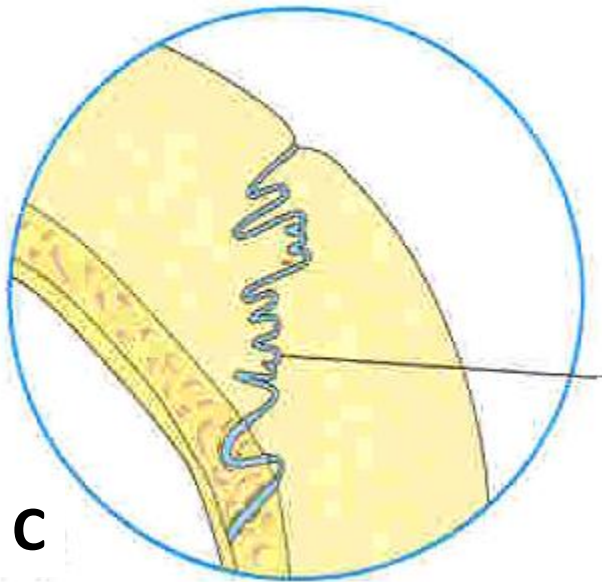
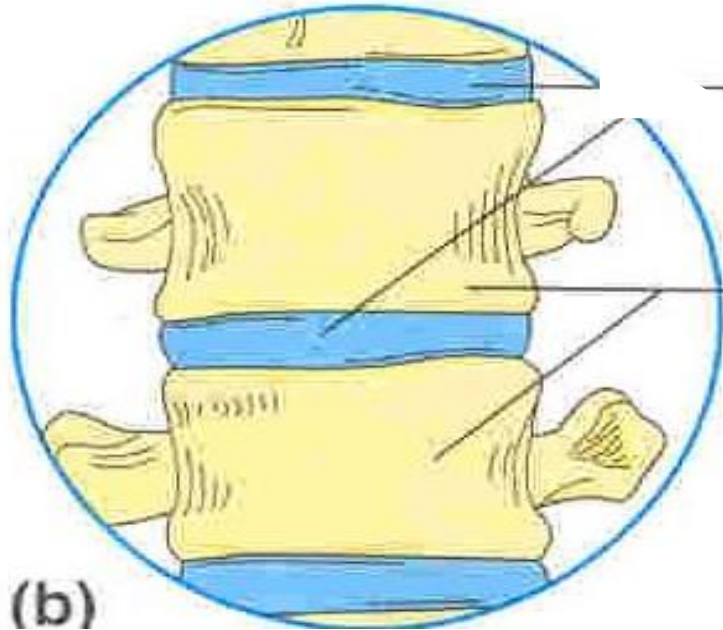
B. Name of this synovial joint: Wrist or radio .carpal joint

C. Type of this joint: Synovial **BIAXIAL** ellipsoid joint.

Note :
Ulna is smaller than Radius.

(note) Bone identification: (**make sure you understand it based on the SHAPE of the bone and not what it is attached to, because they may crop the edges of the photo!**)

- Ulna (lower end is small)
- Radius (large lower end)



A. Mention the 3 types of joints:

- 1- Fibrous.
- 2- Cartilaginous.
- 3- Synovial.

B. Mention the name & type of joint B

Intervertebral disc, Secondary
Cartilaginous.
Intervertebral is between vertebrae
(**between bodies**)

Characteristics: never
ossifies + located on the
midline

C. Mention the name & type of joint C

Skull suture, Fibrous joint



Picture on x-ray:

Identify the bone:

A. **The answer:**
Second metacarpel
bone

(note) Metacarpal bones in one
part :
5 bones

We start counting from the
thumb in the hands and from the
toe in the feet → **start with
the fattest, biggest finger!**

Carpal bones (in hands): 8 bones
Tarsal Bones (in feet): 7 bones

Work Hard & Good Luck

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Anatomy Team

433