JOINTS

A site where two or more bones come together, whether or not movement occurs between them. Joints are classified according to the tissues that lie between the bones: 1 <u>fibrous joints</u>, 2 <u>cartilaginous joints</u>, and 3 <u>synovial joints</u>

1. Fibrous Joints

- Bones joined by fibrous tissue.
- Example is the sutures of the vault of the skull.
- Very little movement is possible.
- 2. Cartilaginous Joints: can be divided into two types: primary and secondary.
 - Primary cartilaginous joint:
 - Bones united by a plate of hyaline cartilage.
 - Example is the union between the 1st rib and the manubrium sterni.
 - No movement is possible.
 - Secondary cartilaginous joint:
 - Bones are united by a plate of fibrocartilage and covered by a thin layer of hyaline cartilage.
 - Examples are the vertebral bodies and the symphysis pubis.
 - A small amount of movement is possible.

3. Synovial Joints

- Bones are covered by a thin layer of hyaline cartilage <u>separated</u> by a joint cavity.
- Examples are hip, knee joints etc..
- This arrangement permits a great degree of freedom of movement.

Types of synovial Joints:

- 1. Hinge- . (Elbow, Knee)
- 2. Ball and Socket- (Hip, Shoulder)
- 3. Gliding- or plane- (carpal, tarsal bones)
- 4. Saddle- (Thumb).
- 5. Pivot joint : (between C1 & C2)
- 6. Condyloid joint : (between radius and carpal bones).



