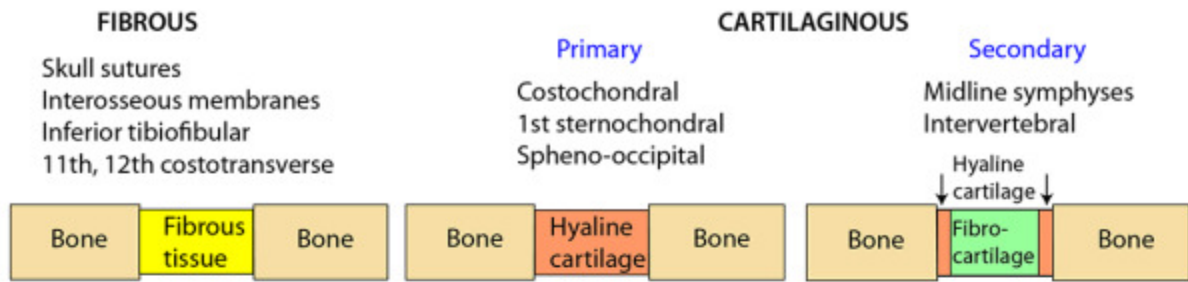


## CLASSIFICATION OF JOINTS



### ATYPICAL SYNOVIAL

Articular surface covered with fibrocartilage  
 Temporomandibular  
 Sternoclavicular  
 Acromioclavicular  
 2-7 Sternochondral



### TYPICAL SYNOVIAL

Articular surface covered with hyaline cartilage  
 All other synovial joints



### MOVEMENTS IN SYNOVIAL JOINTS

- PLANE Gliding  
Tarsus & carpus



### ● HINGE

Interphalangeal



Flexion  
Extension

### ● MODIFIED HINGE

Knee



Flexion  
Extension  
Rotation with flexed knee

### ● CONDYLOID

Metacarpophalangeal



Flexion  
Extension  
Adduction  
Abduction  
Circumduction

### ● SADDLE CONDYLOID

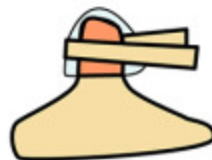
1st Carpometacarpal



Flexion  
Extension  
Adduction  
Abduction  
Circumduction  
"Controlled" rotation = opposition

### ● PIVOT

Both ends of radius  
Atlanto-axial



Rotation (Uni-axial)

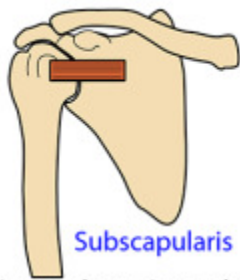
### ● BALL AND SOCKET

Hip  
Shoulder (Sternoclavicular)  
Talo-calcaneonavicular - many features of one)



Flexion  
Extension  
Adduction  
Abduction  
Circumduction  
"Free" rotation

## PRINCIPLES OF MOVEMENTS AT JOINTS - SHOULDER



Subscapularis

- Internal rotation only
- Crosses anteriorly at level of joint



Infraspinatus  
Teres minor

- External rotation only
- Crosses posteriorly at level of joint



Supraspinatus  
Deltoid

- Abduction only
- Crosses superiorly at level of joint



Teres major  
Latissimus dorsi  
Pectoralis major

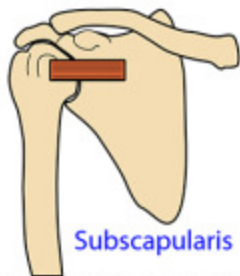
- Internal rotation & adduction
- Crosses both anteriorly & inferior to level of joint



Combinations of several muscles

- External rotation & adduction
- Crosses both posteriorly & inferior to level of joint

## PRINCIPLES OF MOVEMENTS AT JOINTS - SHOULDER



Subscapularis

- Internal rotation only
- Crosses anteriorly at level of joint



Infraspinatus  
Teres minor

- External rotation only
- Crosses posteriorly at level of joint



Supraspinatus  
Deltoid

- Abduction only
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Teres major  
Latissimus dorsi  
Pectoralis major

- Internal rotation & adduction
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Combinations of several muscles

- External rotation & adduction
- Crosses both posteriorly & inferior to level of joint