Ankle joint

From where	Ankle joint
Type	Synovial
Variety	Hinge (the result: the shape of articular surface)
Articular parts	Above: - Inferior surface of lower end of tibia, - Inner surface of medial malleolus, - Inner surface of lateral malleolus Below: talus - Superior surface of trochlea of talus - Comma shaped surface for med. Mall. - Triangular surface for lat. Mall.
Capsule	attach to margins of articular surface. Thin in front , back thick on sides
Synovial membrane	line the capsule
Ligaments	1-medial collateral (deltoid) lig. 2-lateral collateral lig.
Relations	Anteriorly - Structures deep to the extensor retinacula 1-Tom: Tibialis ant. 2-Has: ext. hallucis longus 3-Very: ant. tibial vessels 4-Nice: ant. tibial n. 5-Dog: ext. digitorum longus 6-& Pigs: peroneus tertius posteromedially - Structures deep to the flexor retinaculum 1-Tom: Tibialis post. 2-Does: flexor digitorum longus 3-Very: post. tibial vessels 4-Nice: post. tibial n. 5-hats: flexor hallucis longus Posterolaterally - Structures deep to the peroneal retinacula - Tendons of peroneus longus & brevis posterior - Tendoachilis
N.S.	Ant. & post. Tibial nerves
Movements	- only dorsiflexion & plantar flexion But Eversion & eversion occur at tarsal joints - Dorsiflexion (extension): by 1. tibialis ant 2. extensor hallucis longus 3. extensor digi longus 4. peroneus tertius - Plantar flexion (flexion) : by 1- gasterocnemius 2- soleus 3- plantaris 4- tibialis post. 5- flexor hall. Longus 6- flexor digi longus

The ligament in the ankle

From where	medial collateral (deltoid) lig.	lateral collateral lig
Char	-One of the strongest ligaments in the body -Triangular in shape	Weaker
Attachment	Apex : - medial malleolus Base: - tuberosity of navicular bones - Plantar calcaneo navicular (spring) ligament - neck of talus - Sustantaculum tali - Body of talus	- 3 bands 1. calcaneo – fibular lig : From : tip of lateral malleolus To : lateral surface of calcaneus 2. ant. talofibular lig : From : ant. border of lateral malleolus To : neck of talus 3. post. talofibular lig : From : malleolar fossa of lateral malleolus To : posterior tubercle of talus
Function	1- prevent over eversion of foot 2- maintain the medial long. Arch of foot	

Joints of foot

From where	1- subtalar joint	2- TALOCALCANEONAVICULAR joint
Type	Synovial	Synovial
Variety	Plane	Ball & socket
Articular parts	- lower surface of body of talus - upper surface of calcaneus	a- Ball:- is formed by the head of the talus. b- Socket:- is formed by - navicular bone, -upper surface of the spring ligament, (which extends from sustantaculum tali to navicular bone it support head of talus) -sustentaculum tali, -superior surface of the calcaneus
Movements	1- Inversion -medial rotation of the foot so the sole looks inwards - It is done by a) Tibialis anterior b) Tibialis posterior. 2- Everson: -Lateral rotation of the foot so the sole looks outwards -It is done by a) Peroneus longus. b) Peroneus brevis. c) Peroneus tertius.	

Tibifibular joints

From where	1- superior tibiofibular	2- middle tibiofibular	3- inferior tibiofibular
Type	synovial	Site:the interosseous membrane( )tibia & fibula	Fibrous
variety	plane		
Articular parts	- Head of fibula - Fibular facet on lateral condyle of tibia		- Rough area on medial side of lower part of fibula - Fibular notch on lower end of tibia
Movements	sliding		no