Unit 1

THE SKELETAL SYSTEM Joints

OBJECTIVES

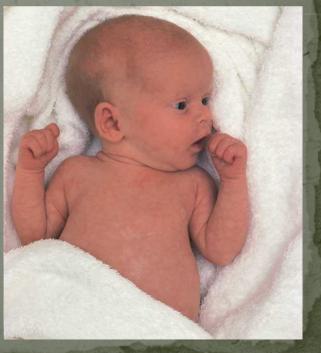
 Be able to name the different types of joints e.g. ball and socket, hinge, gliding and pivot and specific ranges of movement e.g. flexion, extension, rotation, adduction and abduction.

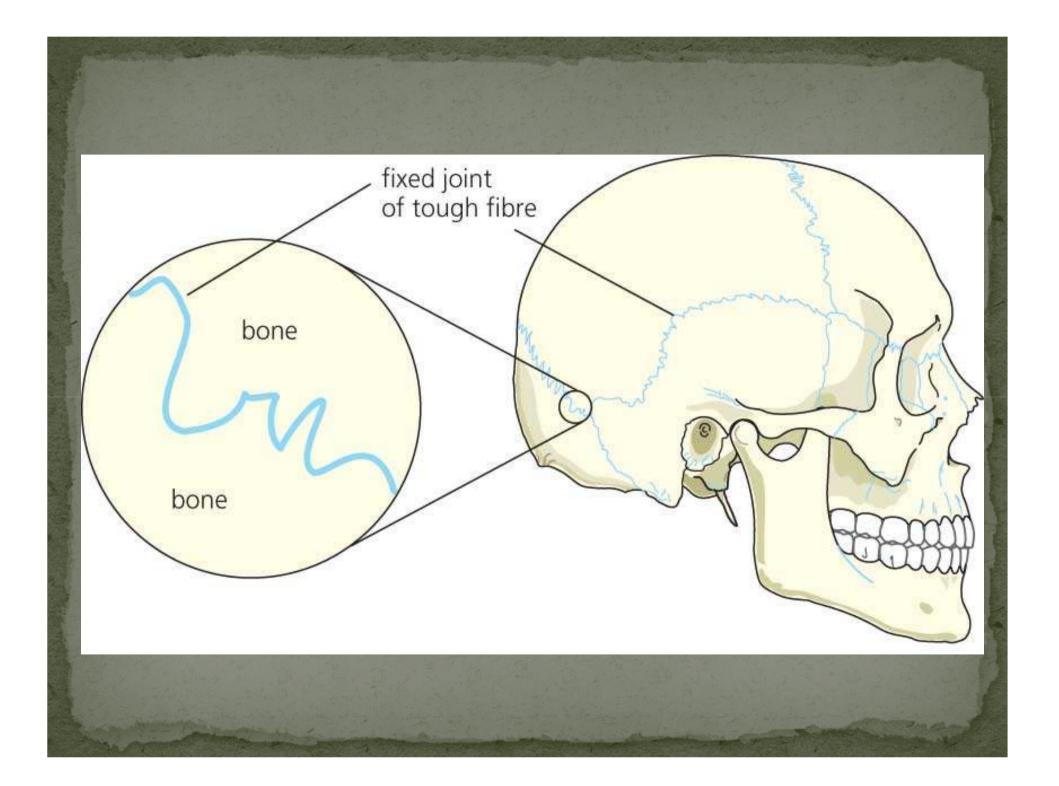
 Understand the importance of the skeleton for movement and participation in practical activities

Immovable/ fixed joints

 These occur where movement would be a disadvantage e.g. the bones of the cranium, the joint between the pelvis and the vertebrae

 The joint are held together by tough fibrous tissue which develops during child hood

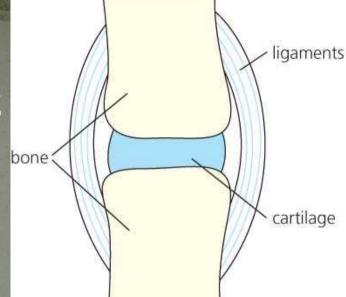


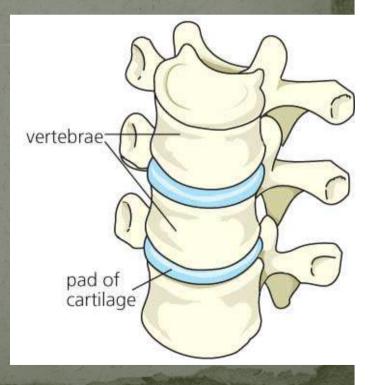


Slightly Moveable Joints

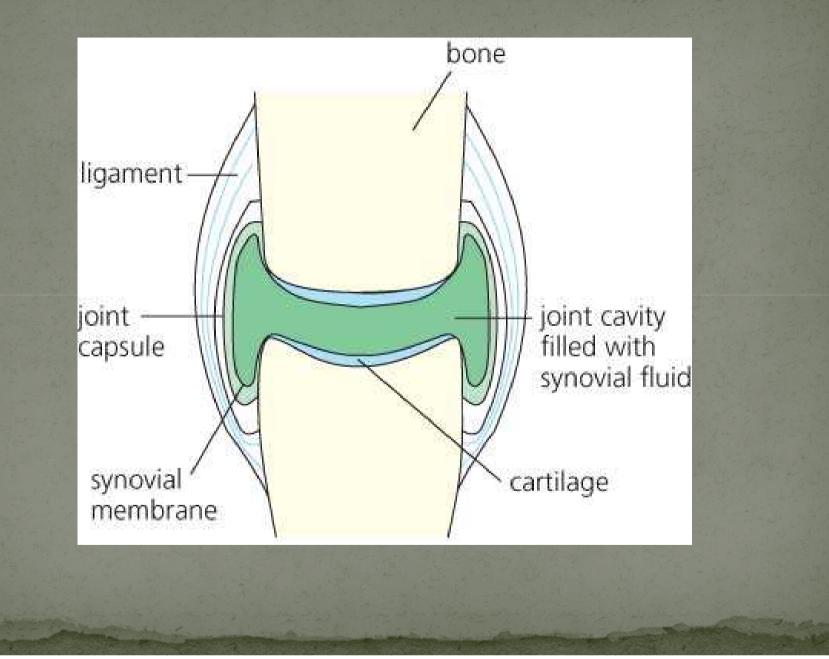
 Allow a small amount of movement e.g. vertebral column

 Individual vertebrae are separated by cartilage and held together by tough fibrous bands





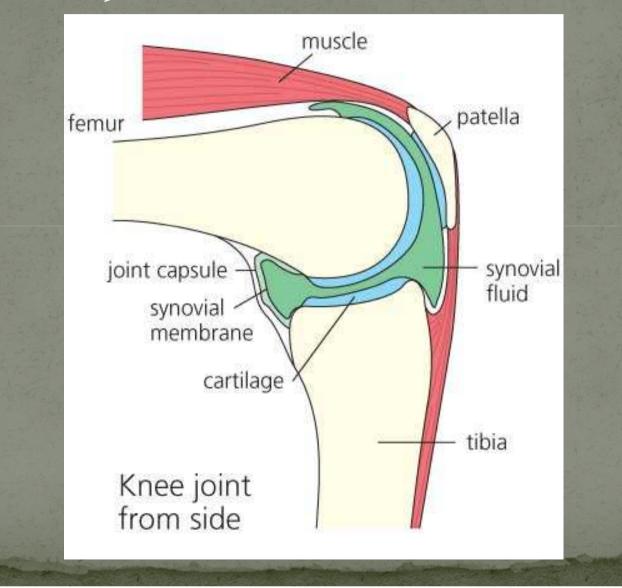
Freely Moveable / Synovial Joint



Freely Moveable / Synovial Joint

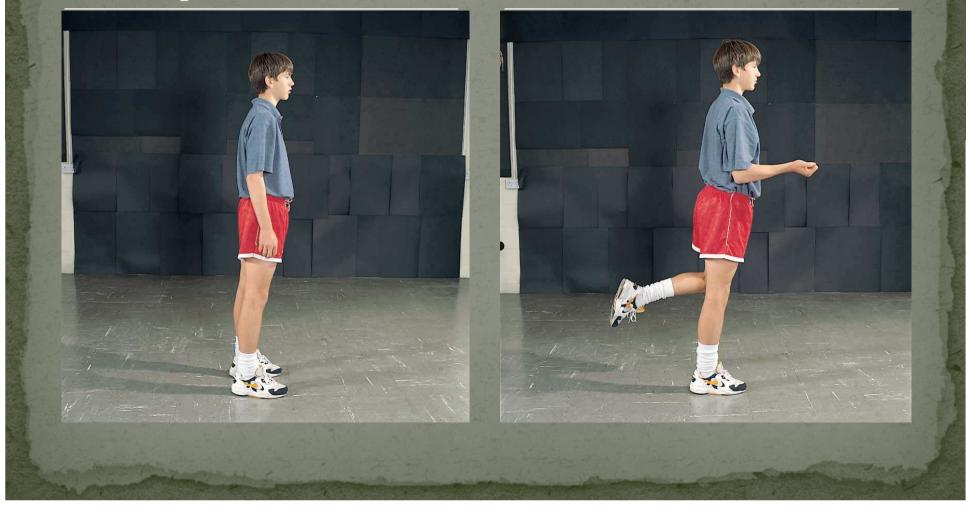
- Write a short description of what each of the following sections of a synovial joint are made of, and the role they play in the movement / protection of the joint
 Joint Capsule
 Synovial Membrane
 - Synovial fluid
 - Joint cavity
 - Cartilage
 - Ligaments

The Knee Joint



Types of movement – Flexion and Extension

Extension – Straightening one part of the body to it's normal position Flexion- Means bending it. Moving one bone towards another

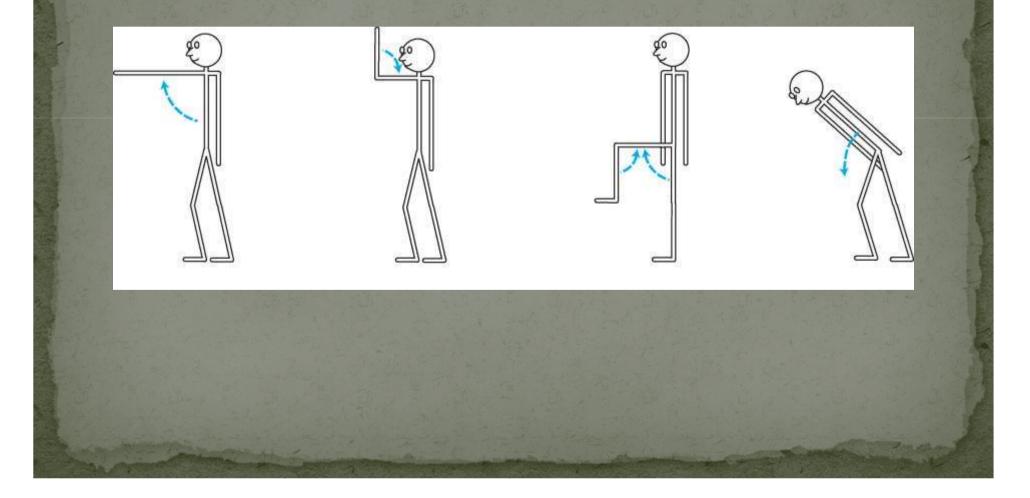


Flexion and Extension

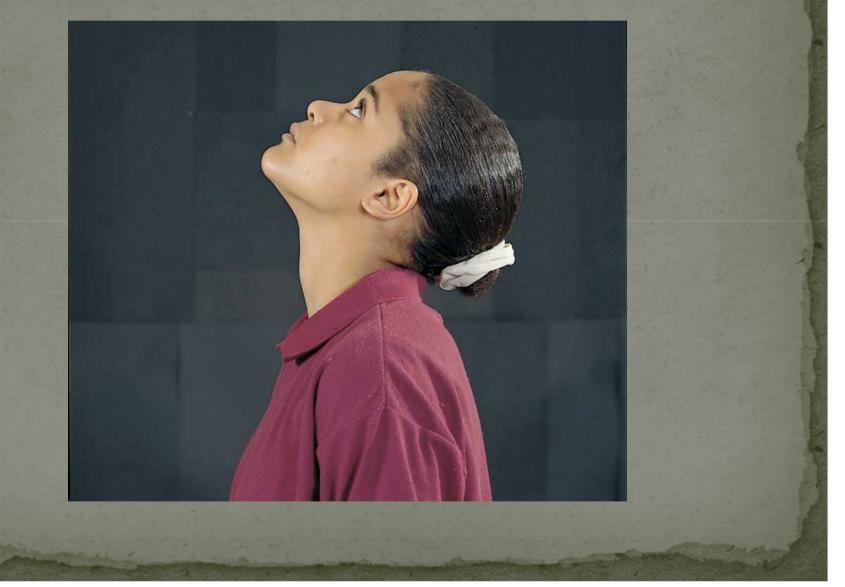
• When you run you repeatedly flex and extend your hip, knee and ankle, elbow and shoulder joints



Examples of flexion and Extension

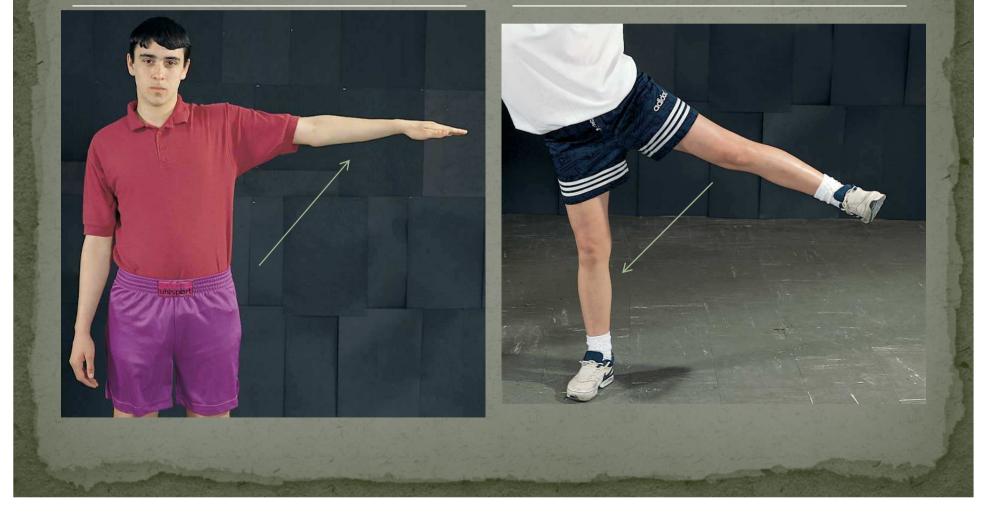


Hyperextension



Abduction and Adduction

Abduction – A movement away from the centre line of the body Adduction – A movement towards the centre line of the body



Abduction



Rotation and circumduction

