

## BLOOD TESTS

### **Complete blood count CBC**

Hemoglobin: 13-17 g/dL (men), 12-15 g/dL (women)

anaemia is usual in rheumatoid arthritis

White blood cells (WBC)  $4-10 \times 10^9/L$

Leucocytosis is generally associated with infection,

Platelets:  $150-400 \times 10^9/L$

**The erythrocyte sedimentation rate (ESR)** is usually increased in acute and chronic inflammatory disorders and after tissue injury.

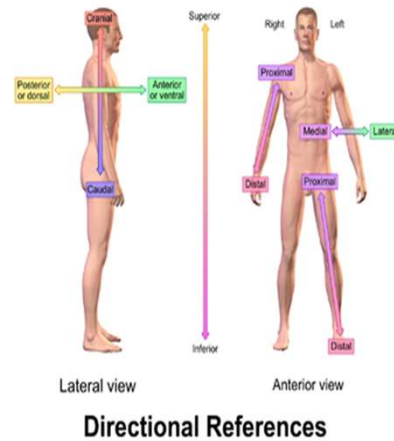
**C-reactive protein (and other acute phase proteins)** may be abnormally increased in chronic inflammatory arthritis and (temporarily) after injury or operation.

### Rheumatoid factor tests

Rheumatoid factor, an **IgM** autoantibody, is present in about 75% of adults with rheumatoid arthritis.

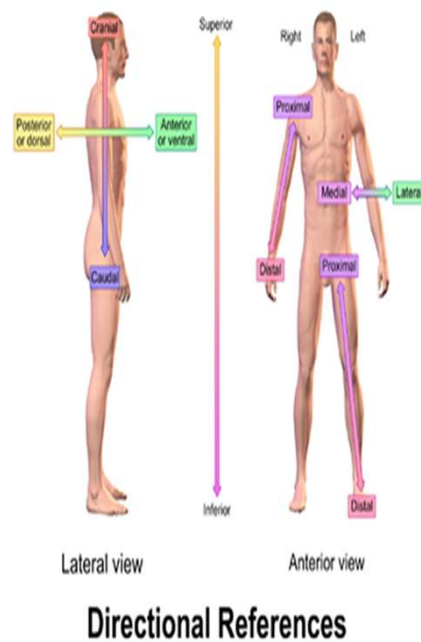
## TERMINOLOGY

Anterior signifies the frontal aspect and posterior the rear aspect of the body or a body part



Proximal and distal are used mainly for parts of the limbs, meaning respectively the upper end and the lower end as they appear in the anatomical position. Thus the knee joint is formed by the distal end of the femur and the proximal end of the tibia.

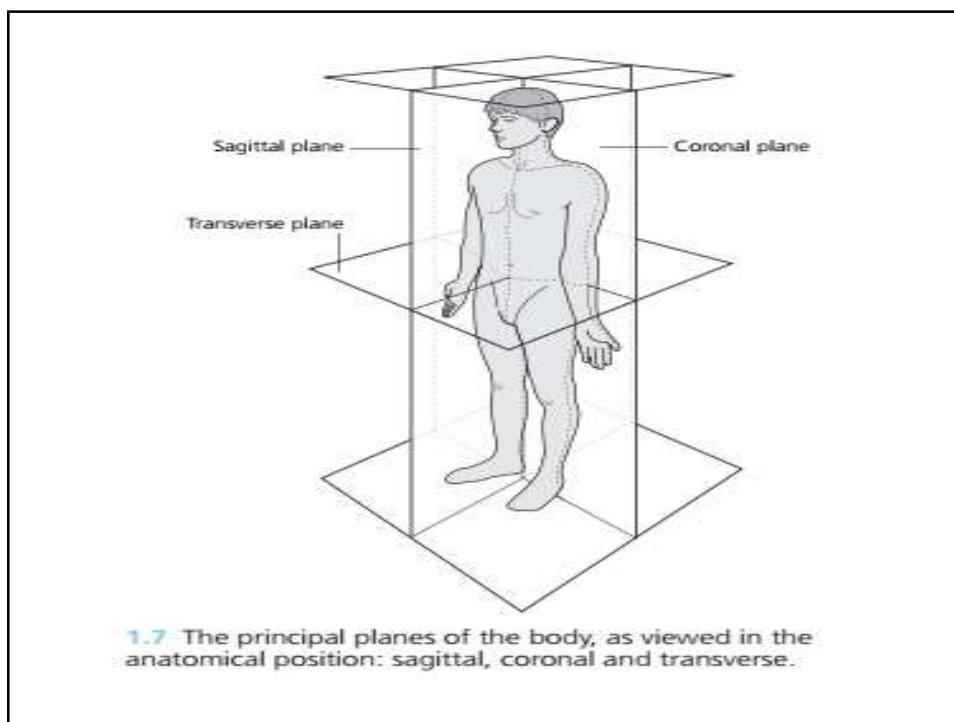
Medial means facing towards the median plane or midline of the body, and lateral away from the median plane.



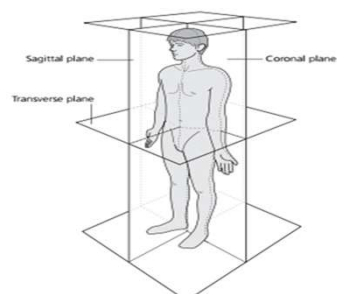
The principal planes of the body are named sagittal, coronal and transverse;

### **Sagittal planes**

- pass vertically through the body from front to back

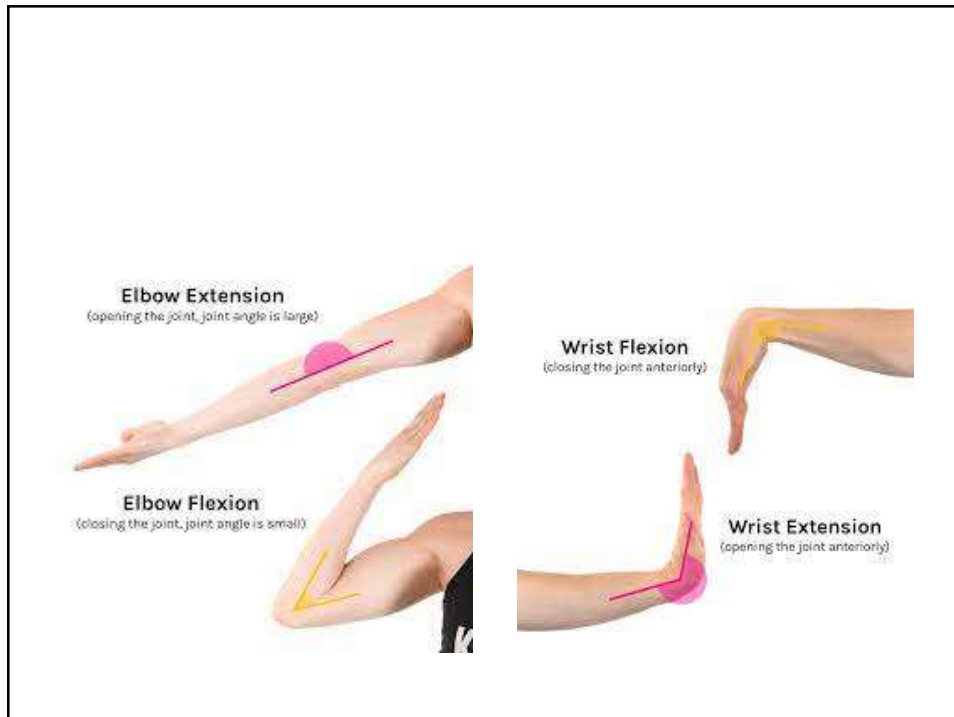


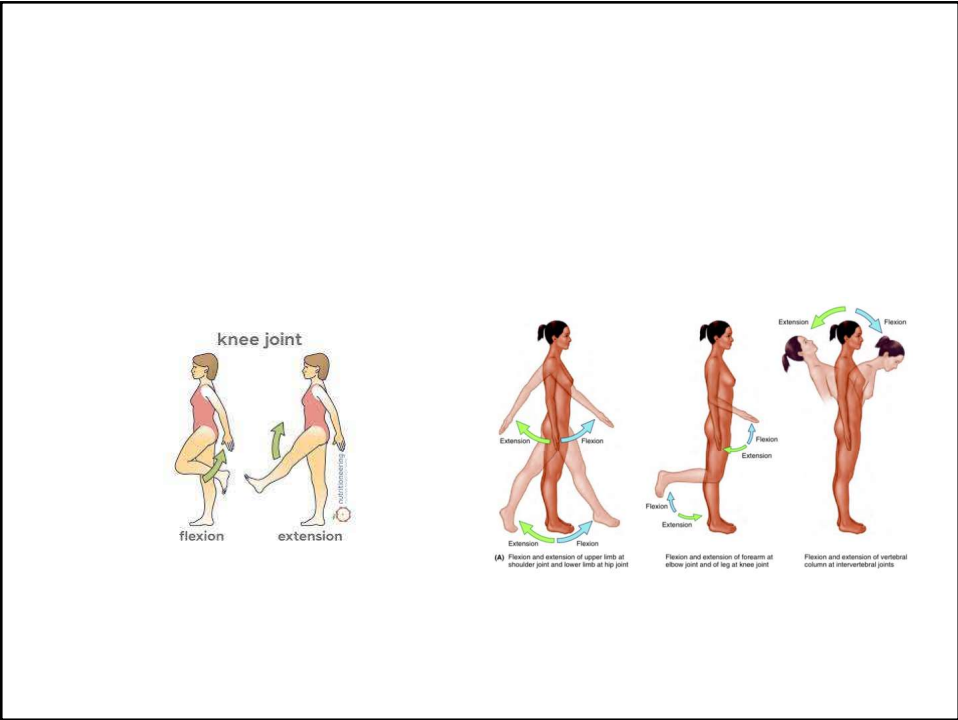
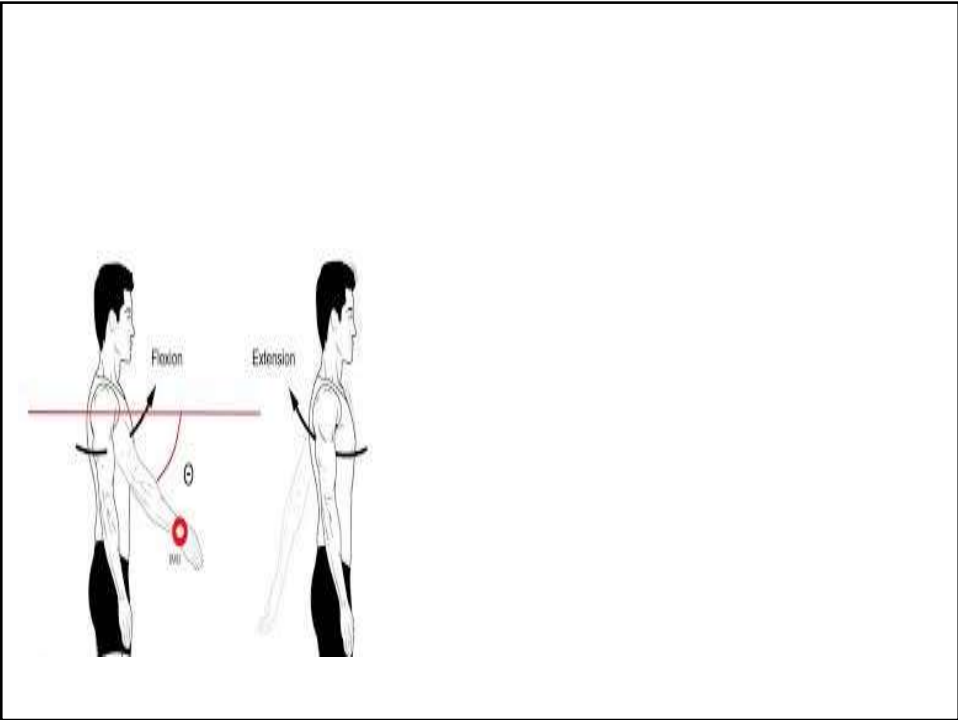
**Coronal planes** are also orientated vertically, corresponding to a frontal view, at right angles to the sagittal planes; **transverse planes** pass horizontally across the body



**1.7** The principal planes of the body, as viewed in the anatomical position: sagittal, coronal and transverse.

Flexion and extension are joint movements in the **sagittal plane**, most easily imagined in hinge joints like the knee, elbow and the joints of the fingers and toes. In elbows, knees, wrists and fingers **flexion means bending the joint and extension means straightening it**. In shoulders and hips flexion is movement in an anterior direction and extension is movement posteriorwards. In the ankle flexion is also called plantarflexion (pointing the foot downwards) and extension is called dorsiflexion (drawing the foot upwards).



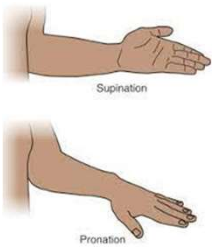


**Circumduction is a composite movement made up of a rhythmic sequence of all the other movements.**

it is possible only for ball-and-socket joints such as hip and shoulder.








Supination

Pronation

- Pronation and supination are also rotatory movements, but the terms are applied only to movements of the forearm and the foot.

Abduction and adduction are movements in the coronal plane, away from or towards the median plane.



**Abduction**  
(Moving away from the midline)

**Adduction**  
(Moving towards the midline)