Introduction

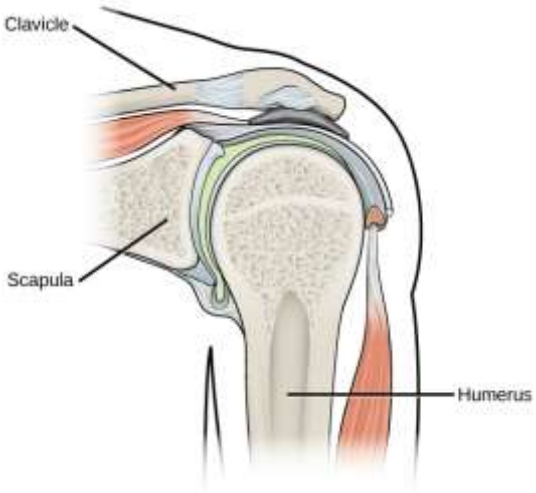
- There are many movements that take place in our body.
- Movement of hands and legs during playing, running, blinking of eyes, jumping, skipping etc.
- We are able to bend or rotate our body parts where two parts are likely to be joined together like elbow, shoulder, knee etc. these are called joints.
- There are many bones present in every part of our body. Bones cannot be bent. We can bend our body only at those places where bones join together.

Types of joints in Human Body

- All the bones in our body join to form a framework which gives shape to our body. This is called **Skeleton.**
- We can feel the number of bones present in many parts of our body**.**
- Even the fingers are made of many small bones joined together.
- The X-rays show the shapes of the bones present in our body. Human body is made of 206 bones.
- The skeleton contains skull, backbone, ribs, shoulder bones, arm bones, leg bones and hip bones.
- The skeleton contains a strong backbone which starts from the neck and moves downwards.
- The backbone consists of 33 small bones called vertebrae.
- There are some ribs attached to the upper part of the backbone forming a rib cage. There are 12 ribs on each side of the chest.
- Shoulder bones are present just below the neck on both sides of the skeleton.
- The portion of your body below the stomach is the pelvic bones This is the part we sit on.
- Different types of joints present in our body are:
    - Ball and socket joints
    - Pivotal joints
    - Hinge joints
    - Fixed joints

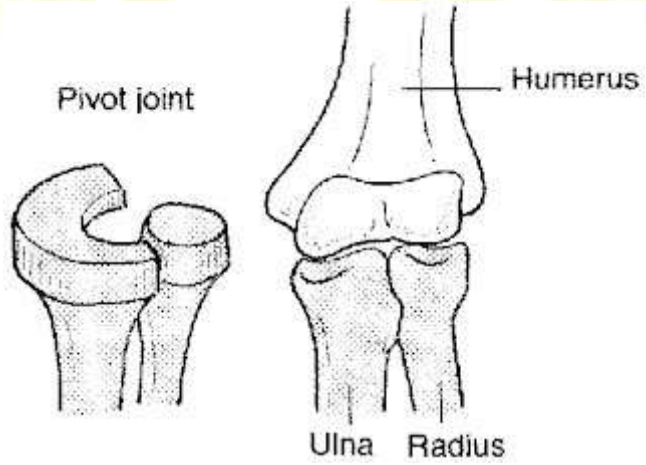
Ball and socket joint

- In this type of joint, one end of a bone is round shape like a ball which fits into a socket type end of another bone.
- This joint allows movement in all directions.
- These joints are found in shoulder and hips in human body.
- If we try to move our shoulder and hip, we will find that we can move both in all possible directions and can also rotate it.



Pivotal Joints

- In a pivotal joint, a cylindrical bone can rotate in a ring. This allows rotation around an axis.
- Our neck is joined with head by pivotal joint. It helps us to bend our head forward and backward and towards turn right or left.

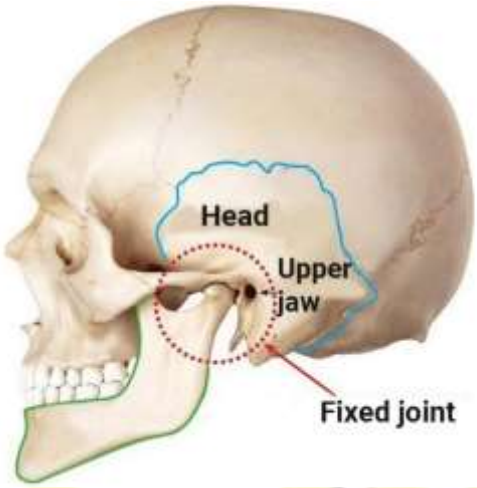


Hinge Joints

- This joint allows the movement in only one direction; forward and backward.
- This movement resembles with the movement of a door along its hinges.
- Hinge joint are present at elbow, knee, finger joint and jaws.

Fixed joints

- There are some joints in our body where bones are tightly held together and no movement is possible at all. These are called **Fixed Joints.**
- The function of these joints is to protect delicate organs.
- Fixed joints are present in our skull. The hard and strong skull protect brain which is a very delicate organ.
- The joint between the upper jaw and the rest of the head is a fixed joint.



Cartilage

- Cartilage is a type of soft and elastic bone which can be bent. It is firm but flexible bone found in many parts of the body.
- Ears are made of cartilage. Our ears are flexible because of presence of cartilages.
- Cartilage is also found between the joints of knee and hips.