

CYQ/Park Centre Level2 Mandatory Units  
**Bones and Joints worksheet**

Answer sheet

The main functions of bone are:

- 1 PROTECTION OF VITAL ORGANS
- 2 MOVEMENT – ATTACHMENT POINTS FOR MUSCLES
- 3 STORAGE OF MINERALS – CALCIUM, PHOSPHORUS, MAGNESIUM
- 4 PRODUCTION OF RED BLOOD and WHITE CELLS
- 5 SHAPE

The Axial Skeleton consists of:

- 1 SKULL
- 2 SPINAL COLUMN, STERNUM, RIBS

The Pectoral or Shoulder girdle consists of which bones?

- 1 SCAPULA
- 2 CLAVICLE
- 3 STERNUM

The three bones fused together that form the Pelvis are:

- 1 ILEUM
- 2 ISCHIUM
- 3 PUBIS

The part of the spine that joins the two halves of the Pelvis is the SACRUM or SACRAL vertebrae. This is known as the SACRO ILIAC joint.

Excessive curvature of the thoracic region of the spine is known as KYPHOSIS.  
Excessive curvature of the lumbar region is called LORDOSIS.

**Bones and Joints worksheet**

What are two main functions of the nucleus of inter-vertebral discs of the spine? (*hard!*)

1 SHOCK ABSORPTION

2 KEEP A SPACE BETWEEN EACH VERTEBRA

The four types (think of shape or size) of bone are:

1 LONG

2 SHORT

3 FLAT

4 IRREGULAR

What are the three basic joint types?

1 IMMOVABLE (fibrous)

2 SLIGHTLY MOVABLE (cartilaginous)

3 FREELY MOVABLE (synovial)

Name the six types of synovial joint, and give an example of each:

1 BALL AND SOCKET - HIP

2 HINGE - KNEE

3 PIVOT – RADIUS/ULNA

4 CONDYLOID - WRIST

5 GLIDING - CARPALS

6 SADDLE - THUMB

What actions are possible at the elbow joint?

1 FLEXION AND EXTENSION (humerus and ulna)

2 PRONATION AND SUPINATION (radius and ulna)

**Bones and Joints worksheet**

Which two bones meet at the shoulder to form the gleno-humeral joint?

1 HUMERUS

2 SCAPULA (GLENOID CAVITY)

What movements can occur at the thoracic section of the spine? You may list up to five.

FLEXION EXTENSION LATERAL FLEXION LATERAL EXTENSION ROTATION

Give a description of the following:

Anterior means FRONT OF A SURFACE/BODY

Inferior means BELOW OR LOWER

Medial means TOWARDS MIDLINE THE BODY OR LIMB

Distal means FURTHEST END OF BONE

Superficial means NEAR TO SURFACE OF THE BODY

Lateral means TOWARDS THE SIDE OF THE BODY OR A LIMB

Synovial joints are made up of:

1 JOINT CAPSULE (sleeve-like capsule)

2 SYNOVIAL MEMBRANE (inner lining of capsule, secretes synovial fluid)

3 LIGAMENTS (give joints stability)

4 ARTICULAR CARTILAGE (buffer where bones meet)

5 PERIOSTEUM (outer lining of bone)