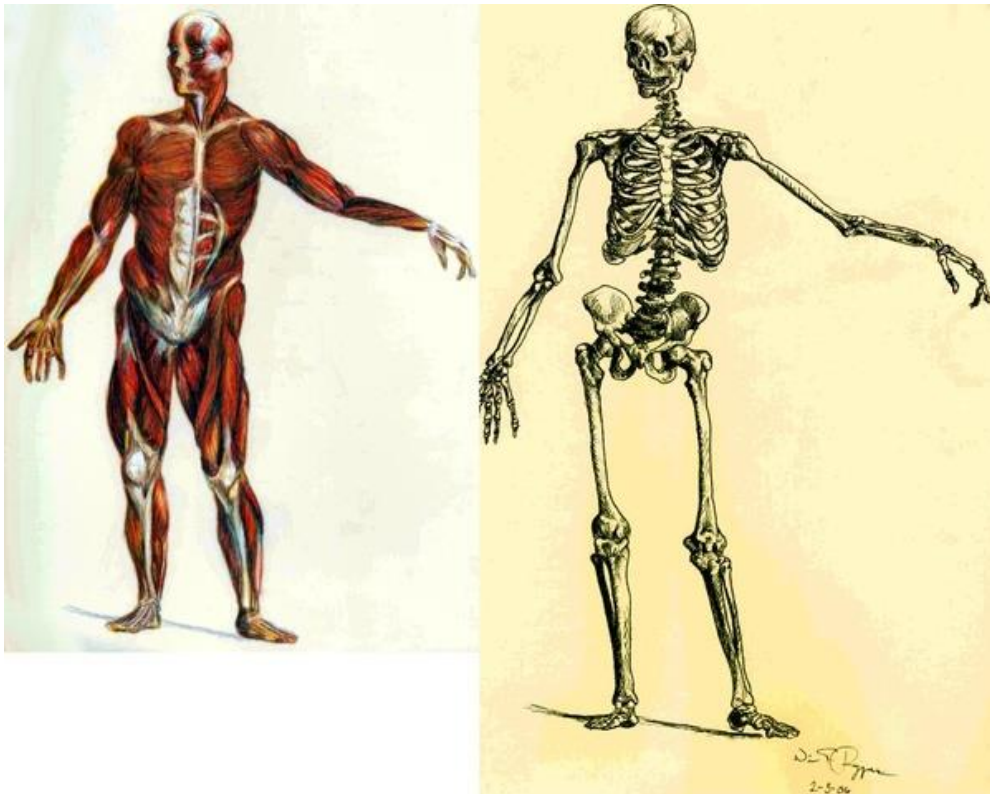


BTEC Sport Level 3

Anatomy and Physiology



Student name:

The roles of the skeletal system:

Complete the following (an example is given for the support role)

1 – Support

The skeleton holds the bodies' vital organs in place when playing sport. The vertebral column holds the body upright.

2 – Protection

3 – Attachment site for skeletal muscle

4 – Source of blood cell production

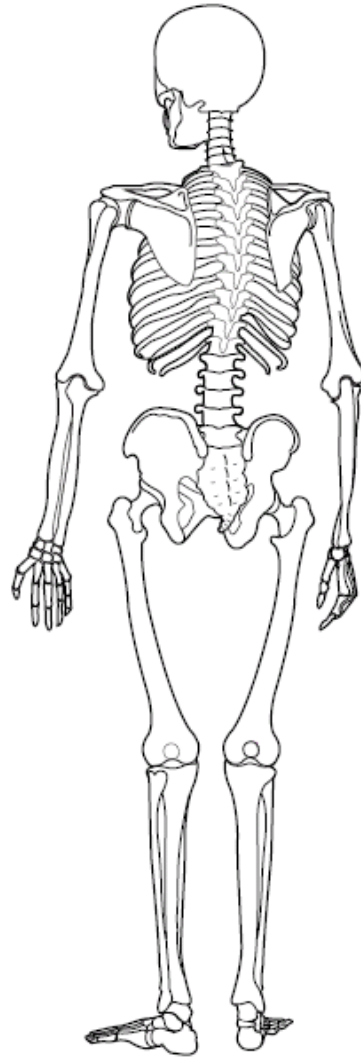
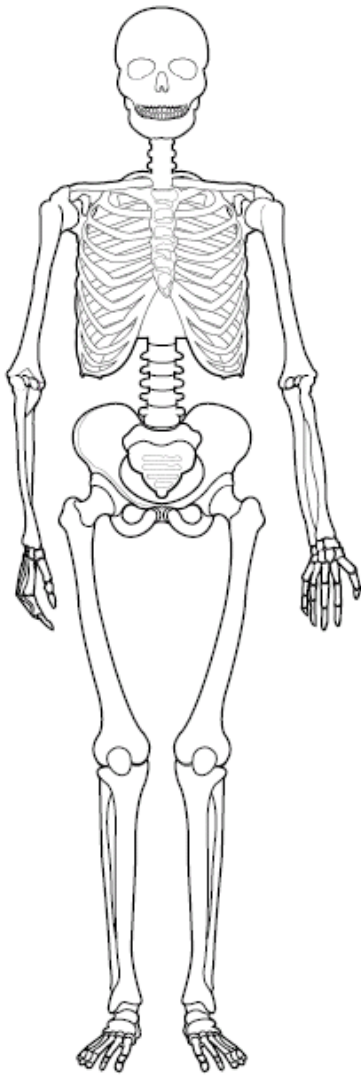
5 – Store of minerals

Using the following checklist and diagrams, label all of the bones on the skeleton below.

Tick against the bones once you have labelled them onto the diagram.

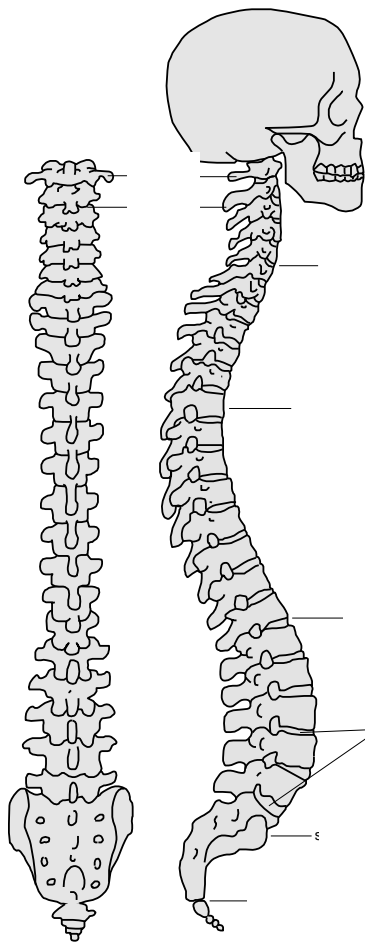
Bones	Tick when labelled
Cranium	
Clavicle	
Ribs	
Sternum	
Humerus	
Radius	
Ulna	
Scapula	
Ilium	
Pubis	
Ischium	
Carpals	
Metacarpals	
Phalanges	
Femur	
Patella	
Tibia	
Fibula	
Tarsals	
Metatarsals	
Phalanges	

The skeletal system:



Using the following checklist and diagram, label all of the bones on the vertebral column.

Bones	Tick when labelled
Cervical	
Thoracic	
Lumbar	
Sacrum	
Coccyx	



Describe the five types of bone.

1 – Long bones



Long bones are some of the longest bones in the body, such as the Femur, Humerus and Tibia. A long bone includes having a body which is longer than it is wide, with growth plates (epiphysis) at either end, having a hard outer surface of compact bone and a spongy inner known a cancellous bone containing bone marrow. Both ends of the bone are covered in hyaline cartilage to help protect the bone and aid shock absorption.

2 – Short bones

3 – Flat bones

4 – Sesamoid bones

5 – Irregular bones



Identify the bones being used in the action of throwing a javelin:



Identify the bones being used in the action of kicking a football:

JOINTS

Complete the table below:

Joint type	Movements available at the joint	Examples	Description of the joint structure
Hinge	Flexion / extension	Elbow Knee	The cylinder-shaped surface of one bone fits into the groove of another to form a hinge joint. This type of joint either bends (flexion) or straightens (extension) a limb.
Ball and socket			
Condylloid			
Saddle			
Gliding			
Pivot			