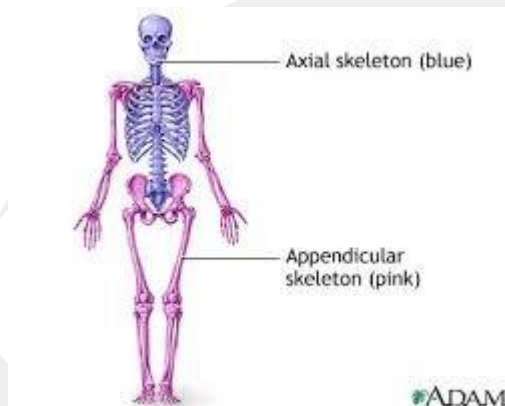


SUBJECT: NCFE health and fitness

UNIT: Content area 1 Structure and functions of the body systems



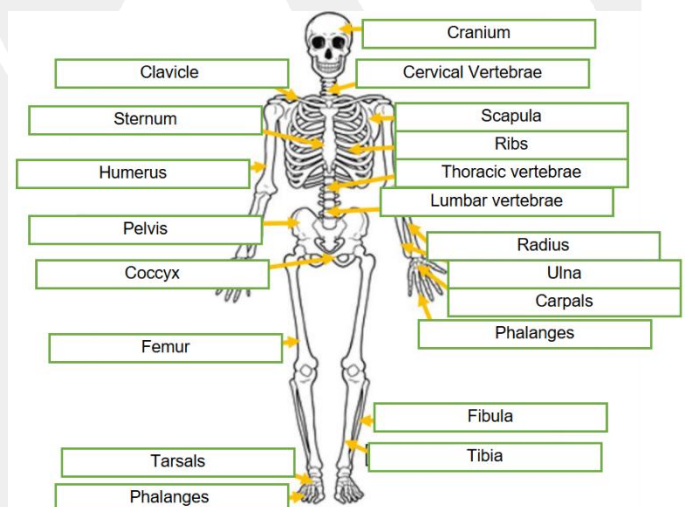
The axial and appendicular skeletal



Axial skeleton: The centre part of the skeleton containing of the cranium, sternum, ribs and vertebrae.

Appendicular Skeleton: The outer part of the skeleton, consist of all bones in the in the arms, legs and hips.

The structure of the skeleton:



Functions of the skeletal system

Support: Bones keep us upright and hold the rest of the body in place.

Movement: The skeletal helps the body move by the muscles somethings to pull against when we contract, we move.

Protection of vital organs: Certain parts of the skeleton provide protection to organs from external forces. For example, the ribs protect the heart and lungs from impact activities like rugby and boxing.

Storage of minerals: Bones store minerals like calcium and phosphorus. They help keep bones strong and help with movements.

Blood cell production: The inner marrow of bones such as the sternum and ribs produce white and red blood cells. Red blood cells carry oxygen to the working muscles while white blood cells fight off infection.

Shape/structure: The skeleton gives people their general shape like height and build. Taller people have longer leg and vertebrae bones while heavier people have larger clavicles and pelvises.

Types of bones

Long bones: The longest bones in the body like the humerus and femur.

Flat bones: Strong flat bones like the cranium, sternum and ribs that protect the vital organs.

Short bones: Roughly as long as they are wide. Help support and stability with little movement. Example's are carpals and tarsals.

Sesamoid bones: Small round bones found in tendons. The patella (knee cap) helps protect the knee joint.

Irregular bones: These bones are bones that do not fit into any category, for example, the vertebrae.

Types of joints

Fixed joints: These don't allow for movement, for example, the joints in your cranium and pelvis.

Slightly moveable joints: These joints are separated by a layer of connective tissue. For example, the joints between the vertebrae have a cartilage in which allows for little movement.

Synovial joints: