Year 7 Cells and Movement

1 Keywords

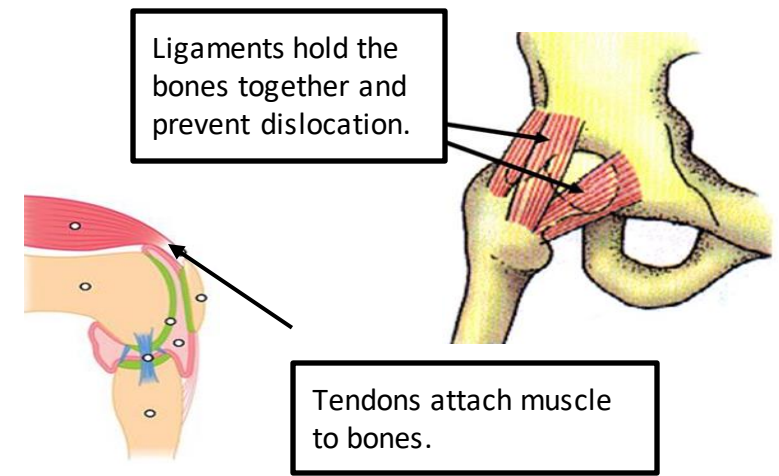|	
Bone marrow	Tissue found inside some bones where new blood cells are made.
Joint	Places where bones meet.
Hinge joint	A joint that can move back and forth – no turning E.g. Elbow, knee.
Ball and socket joint	A joint where the limb can rotate – can turn. E.g. shoulder, hip.
Ligament	Ligaments connect bones in joints.
Tendon	Tendons connect muscles to bones.
Antagonistic muscle	Antagonistic muscle pair: Muscles working in unison to create movement.
Cartilage	Cartilage is smooth tissue found at the which reduces friction between them.
Fracture	Break in the bone, can be a simple fracture or a compound fracture.

4. Organisation order smallest to largest:
   Cell / tissue / organ / organ system / organism.
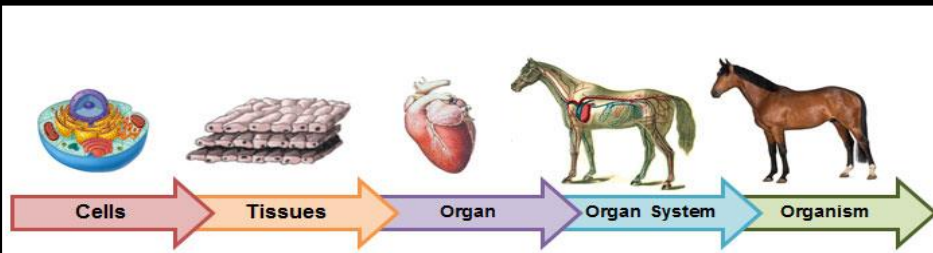
2 . Main bones in the body

Cranium
Jaw

Clavicle
Scapula

Sternum
Ribs
Vertebrae

Humerus
Radius
Ulna
Pelvis

Femur
Tibia
Fibula

Protects the brain

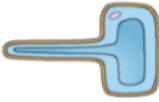Protects heart & lungs

Protects spinal cord

3. Tendons and Ligaments

Ligaments hold the bones together and prevent dislocation.
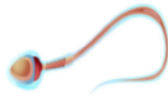
Tendons attach muscle to bones.

5 Keywords

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Cell	The unit of a living organism, contains parts to carry out life processes.
Uni-cellular	Living things made up of one cell.
Multi-cellular	Living things made up of many types of cell.
Tissue	Group of cells of one type.
Organ	Group of different tissues working together to carry out a job
Diffusion	The movement of substances from an area of high concentration to an area of low concentration

7. Specialised cells – designed for a specific function

Red blood cell	Sperm cell	Root hair cell
Palisade cell	Nerve cell	Egg cell

6 Animal cells and plant cells
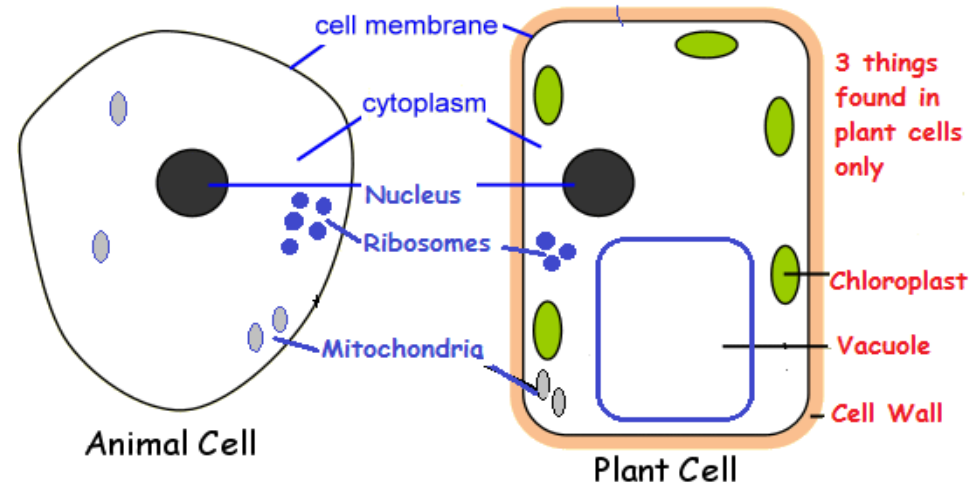
8 Organelles and their function:

Cell membrane	Controls the movement of substances in and out of the cell.
Nucleus	Contains genetic material (DNA) which controls cell's activities.
Cytoplasm	Jelly-like substance. Chemical reactions occur here.
Mitochondria	Where energy is <u>released</u> through respiration.
Ribosomes	Where proteins are made.
Cell wall	Strengthens the cell (made of cellulose)
Chloroplast	Absorbs light energy so the plant can make food through photosynthesis.
Vacuole	Contains liquid, and can be used by plants to keep the cell rigid and store substances.