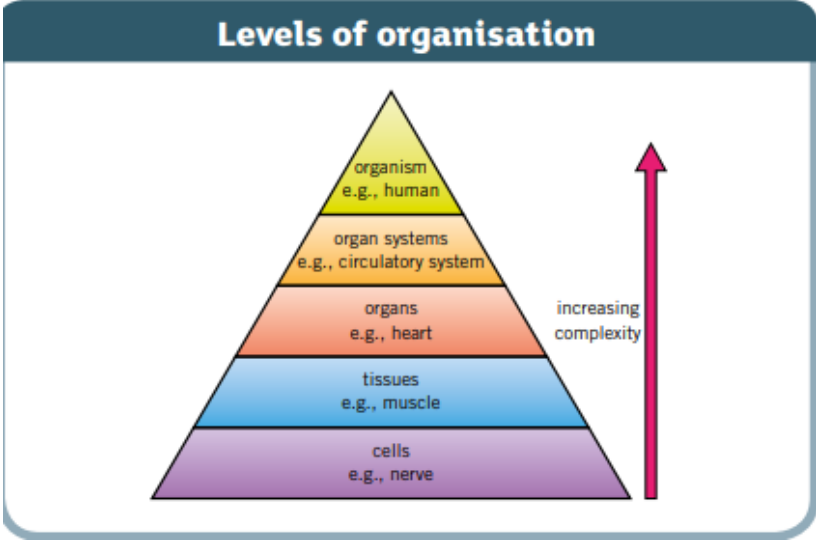


Knowledge Organiser: 8.1 Movement



Movement

Joints occur between bones and allow movement, there are three main types of joints

Hinge <i>For back and forward movement, e.g. knees</i>	Ball and socket <i>For movement in all directions e.g. hips</i>	Fixed <i>Do not allow movement, e.g. skull</i>
---	--	---

Joints have three main types of tissue:

Ligaments <i>Connect bone to bone</i>	Cartilage <i>Coats the end of bones as a protection</i>	Tendons <i>Connects bone to muscle</i>
---	---	--

- ### Key Terms (To learn)
- Antagonistic muscle pair
 - Bone
 - Bone marrow
 - Cell
 - Cartilage
 - Joints
 - Ligaments
 - Muscular skeletal system
 - Organ
 - Organism
 - Organ system
 - Skeleton
 - Tissue
 - Tendons

Muscles

- **Muscles** are a type of tissue which allows movement
- They pull on tendons which in turn pull on bones to allow movement
- Muscles like the triceps and biceps are known as **antagonistic muscle pairs**, they work together –as one contracts, the other will relax

Organs

- An organ is a group of tissues that have the same function
- They can work with other organs in an **organ system**, such as the respiratory system which uses organs like the heart and lungs to transfer oxygen around the body
- Vital organs are the organs that need to keep functioning for an **organism** to stay alive, e.g. the heart

The skeleton

- The **skeleton** is made up of 206 **bones** which are a type of **tissue**
- Bones have a blood supply and are a living tissue
- The skeleton is part of the **muscular-skeletal system**
- The four main functions of the skeleton are:
 - To support the body – to keep you upright and hold **organs** in place
 - Protect organs – such as the skull protecting the brain
 - Movement – by working with muscles to allow you to move
 - Making blood cells – the **bone marrow** produces red and white blood cells