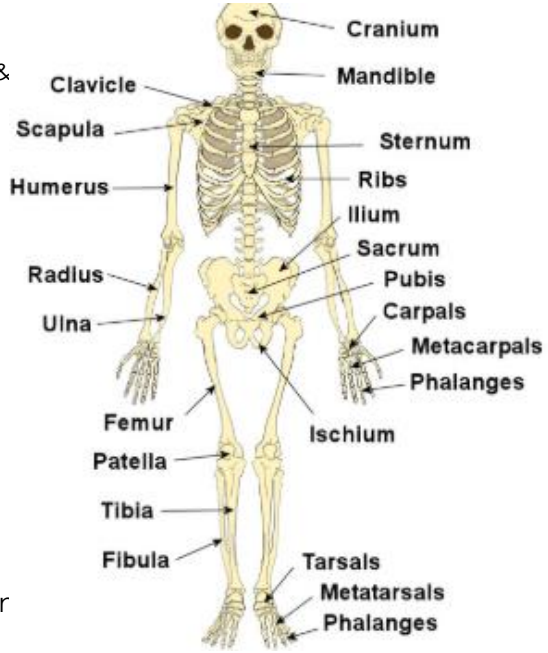
Knowledge Organiser- Unit 1- Body Systems- Skeleton

Know It

Skeleton & Joints

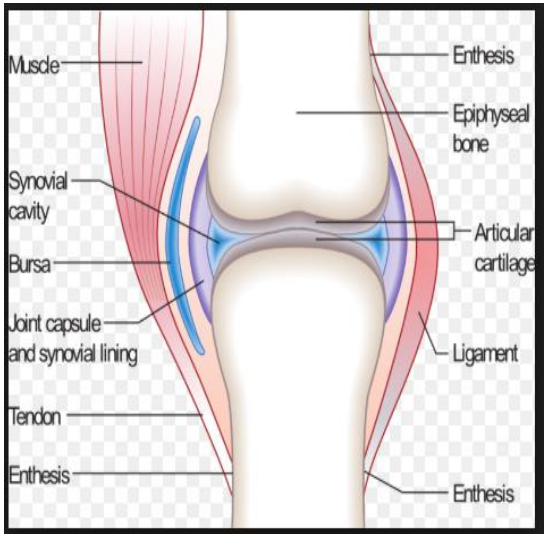
You need to be able to name & classify each bone to the parts of the skeleton- Axial & Appendicular.

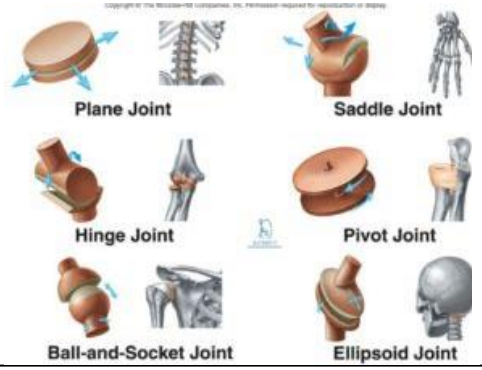


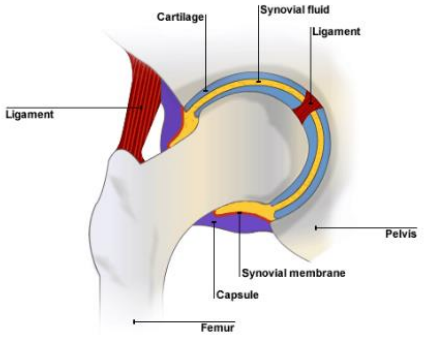
Types of bones-
Long
Short
Flat
Irregular
Sesamoid

Functions-
1. Shape
2. Support
3. Protection
4. Movement
5. Blood Cell productior
6. Mineral Storage

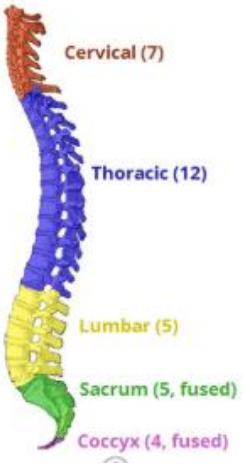
Joints-
- Articular/ hyaline cartilage covers the end of bones and enables bones to move next to each other without friction.
- Ligaments- hold bone to bone
- Synovial Membrane- lines the joint and produces synovial fluid which helps reduce friction.
- Menisci- tissue which lines between cartilage and sits within synovial fluid. They are our shock absorbers.
- Bursae- fluid sacks between bones to help protect and support movement.
- Joint capsules- protective layers around the joint.



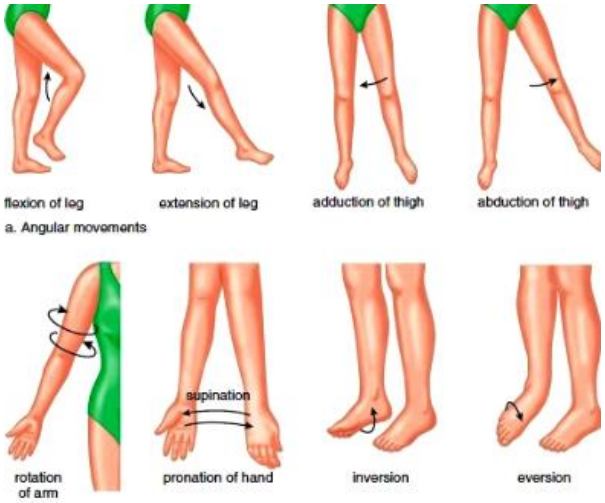




The Vertebral Column-



Movement at a joint-



The effects of exercise on the skeletal system-

Short-
Increased production of synovial fluid

Long-
Improved bone density
Increase strength of ligaments
Reduced risk of bone disease
Negatives- increased risk of stress fractures and back pain.
Warming up & Cool down-
Can reduce impact on joints
Less likely to sustain bone injury due to impact.

Key Words-

Axial Skeleton
Appendicular Skeleton
Vertebral Column
Synovial
Flexion & Extension
Lateral & Medial
Abduction and Adduction
Circumduction
Pronation & Supination
Dorsiflexion & Plantar Flexion