

Be REFLECTIVE: Review your learning



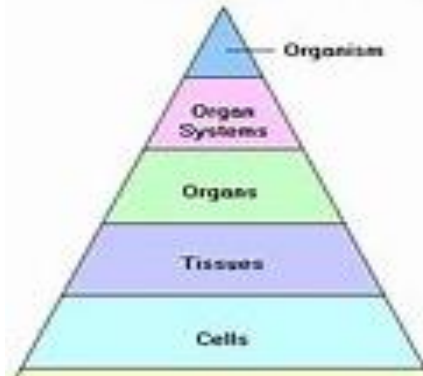
# KNOWLEDGE ORGANISER

## BIOLOGY : Movement

Name: \_\_\_\_\_

### 1. Organisation

Structural Organization of the Body



**Organism** – group of organ systems working together eg animal

**Organ system** – group of organs working together eg circulatory system

**Organ** – group of tissues working together eg heart

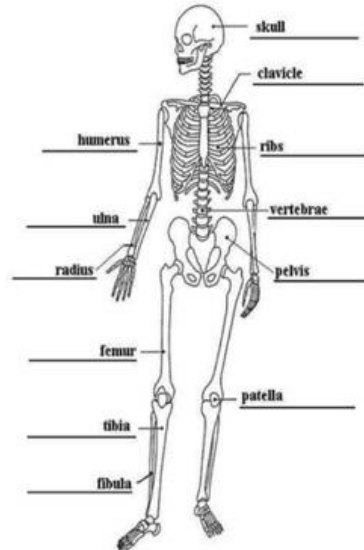
**Tissue** – group of similar cells working together eg muscle tissue

**Cell** – building blocks of life eg muscle cells

### 2. Skeleton

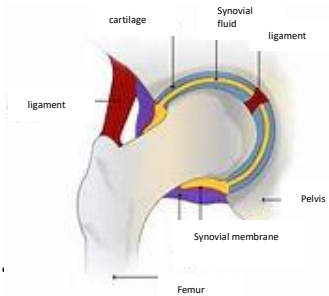
The skeleton is made up of bones. The skeleton has four important functions –

1. to protect organs,
2. to help the body move,
3. to support the body
4. to make red and white blood cells.



### 3. Movement of joints

Joints occur where 2 or more bones join together. Different types of joint allow movement in different directions. For example, ball and socket joints in the hip and shoulder allow movement in all directions. Cartilage covers the end of the bones in joints to stop the bones from rubbing together. Ligaments attach bone to bone. You can measure muscle strength using a Newton scale. The harder you push on the scale the greater the force exerted on the Newton scale.



### 4. Movement of muscles

Muscles are attached to bones by tendons. When a muscle contracts it shortens and pulls on the bone. If the bone is part of a joint this will cause the bone to move. Pairs of muscles work together to control movement at a joint. They are called antagonistic muscles, this means when one muscle contracts (eg biceps) the other muscle in the pair relaxes (eg the triceps).

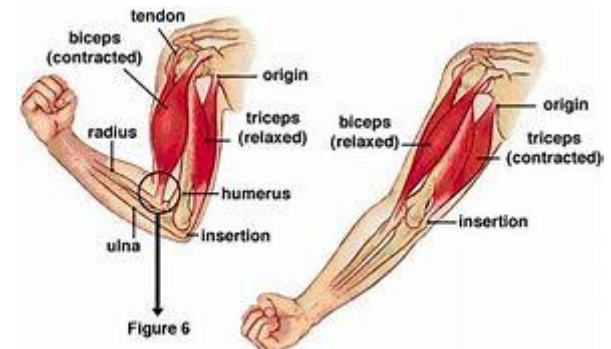


Figure 6