### St. Michael and All

## Angels Primary School



## **PE: Healthy Lifestyles**

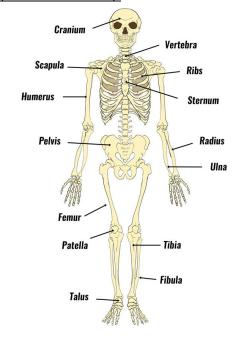
Functions of the Skeletal System (why we need bones)

#### The skeletal system has five functions:

- Structure provides rigidity, which gives the body shape and supports the weight of the muscles and organs. Without this structure, the body would collapse in on itself.
- Movement the muscular and skeletal systems work together as the musculoskeletal system, which enables body movement and stability.
- 3) Protection the most obvious example of the functions of the skeleton's protective properties is the human skull. The vertebrae and ribs also have protective functions by encasing delicate structures like the spinal cord, heart and lungs.
- 4) Blood cell production red and white blood cells are made in the red marrow of bones.
- 5) Mineral storage the body uses calcium constantly and, if there isn't enough calcium in the diet, it will consistently take calcium from the bone to compensate – leading to osteoporosis.

#### Skeletal System (bones of the body)

#### The major bones of the body:



# Warm Up and Cool Down Reasons why we warm up:

#### Prepare mentally

 Prepare physically. As your body temperature increases you'll loosen your joints and increase blood flow to your muscles. This means less stress on joints and tendons. Warm, well lubricated joints prepare the body to execute sudden and/or explosive movements with ease. You'll reduce the likelihood of acute injury and perform with greater power too. Warm muscles also reduce the incidence of overuse injuries.

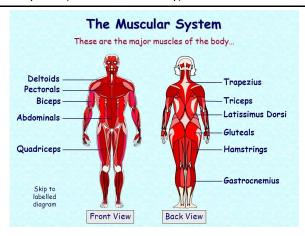
#### A warm up consists of:

- 1) Pulse raiser. Slowly increase the heart rate e.g. jogging.
- 2) Mobility. Increasing rage of movement at a joint.
- 3) Stretching muscles in the body.
- 4) Dynamic movements. Changing in speed and direction.
- 5) Skill rehearsal. Practicing the skills related to the sport.

#### A cool down consist of:

- 1) Gentle jogging.
- 2) Stretching.

#### Muscular System (muscles of the body)



#### Body's Response to Exercise

Muscles need energy to contract. While exercising, the muscles need additional energy as:

- the breathing rate and volume of each breath increases to bring more oxygen into the body and remove the carbon dioxide produced.
- the heart rate increases, to supply the muscles with extra oxygen and remove the carbon dioxide produced.
- a working muscle also generates heat that it needs to get rid of.

#### Characteristics of a St. Michael and All Angels Sportsperson

The six School Games Values – Passion, Self-Belief, Respect, Honesty, Determination and Teamwork.

Olympic Values of respect, excellence and friendship and the Paralympic Values of determination, inspiration, courage, and equality.

School values of co-operation, freedom, determination, friendship, tolerance, positivity, patience, happiness, humility, trust, responsibility, unity, peace, respect, courage, appreciation, empathy, love, honesty, understanding and care.