

Anatomy and Physiology

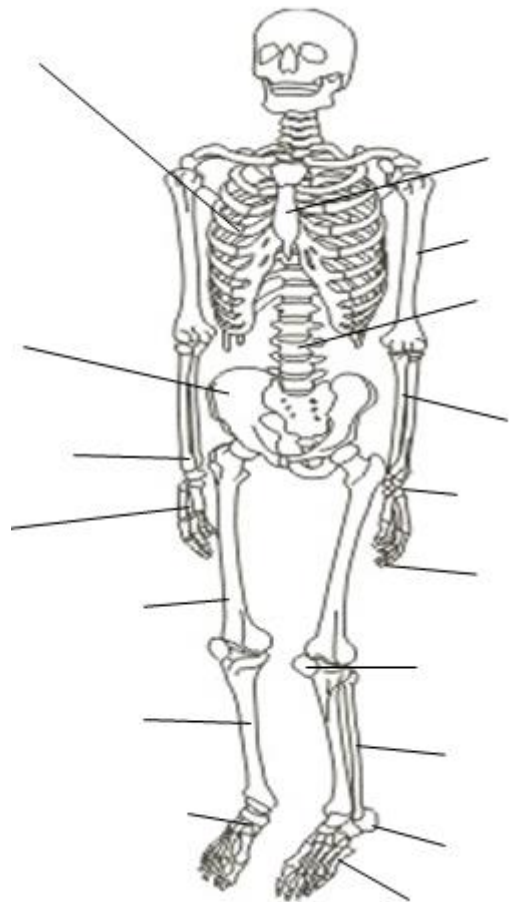
The Skeletal System

To start this section of the course an overview of the skeletal system is needed.

Task 1- Label the bones of the skeleton.

Movements of the body

Task 2- One of the functions of the skeleton is to aid in movement of the body. For each of the movements stated below, give a definition and a specific sporting example.



1. Flexion: _____

2. Abduction: _____

3. Circumduction: _____

4. Rotation: _____

5. Horizontal Extension: _____

6. Dorsiflexion and plantar flexion: _____

Some key terms that PE students should already know before A-Level.

Fill in the blanks on the next two pages

Key term	Definition
Aerobic exercise	
	The working muscle in an antagonistic pair
Antagonist	
	Tubular structures that carry blood around the body
Breathing rate	
Capillarisation	
	The volume of blood pumped out of the hear per minute
Cardiovascular system	
	A disease where blood vessels become narrowed/blocked and blood flow to the heart is reduced. Possibly caused by a high fat diet
Double circulatory system	
	Movement when the angle at a joint increases. A straightening of a limb
Fartlek training	
	Muscle tiredness when the body has a lack of energy
FITT principle	
	The range of movement available at a joint.
Frontal plane	

	The movement of gases taking place at the alveoli and capillaries.
	Number of heart beats per minute
HIIT	
Hypertrophy	
	A by-product of exercise produced in the muscle tissues during strenuous exercise where the anaerobic energy system is in use.
	A short band of tough and flexible tissue that connects bones together and stabilise a joint.
Mechanical advantage (levers)	
	The volume of gas inhaled or exhaled from the lungs per minute
Overload principle	
	When you exercise the blood is diverted from inactive areas to the muscles that are being used. This action is completed through vasodilation and vasoconstriction.
Sagittal plane	
Stroke volume	
Synovial joint	
	A tough yet flexible band of connective tissue, which joins muscle to bone
Tidal Volume	
Transverse plane	