

# Year 10 GCSE Revision - Physical Education

## Paper 1 – Fitness and Body Systems

<p>Functions of the Skeleton for Sport</p> <p>Classification of bones</p> <p>The Structure of the skeletal System (including vertebral column)</p> <p>Joints</p> <p>Joints and Movement</p> <p>Ligaments and Tendons</p> <p>Muscles Types</p> <p>Location and role of the main voluntary muscles</p> <p>Antagonistic Pairs</p> <p>Fast and Slow Twitch muscle fibres</p> <p>Important functions of the cardiovascular system</p>	<p>The five components of fitness</p> <p>Cardiovascular fitness</p> <p>Muscular Strength</p> <p>Muscular Endurance</p> <p>Flexibility</p> <p>Body Composition (including BMI)</p> <p>Agility</p> <p>Balance</p> <p>Co-ordination</p> <p>Power</p> <p>Reaction time</p> <p>Speed</p> <p>Fitness tests</p> <p>Cooper 12-minute run test</p> <p>Harvard Step test</p> <p>Hand Grip Strength Test</p> <p>One Minute Press Up Test</p> <p>One Minute Sit Up test</p> <p>30m Sprint</p> <p>Vertical Jump/Sargent Jump Test</p> <p>Sit &amp; Reach</p>	
<p>The Heart</p> <p>The structure of the heart</p> <p>Blood Pressure</p> <p>The Structure of Blood Vessels</p> <p>Blood Distribution</p> <p>Vascular Shunting</p> <p>Vasoconstriction</p> <p>Vasodilation</p> <p>Red &amp; White blood cells, platelets and plasma</p> <p>The Respiratory System</p> <p>Inhaled and exhaled air</p> <p>Vital Capacity and Tidal Volume</p> <p>Main Components of respiratory system</p> <p>Structure of alveoli</p> <p>Gas exchange</p> <p>Oxygen debt</p>	<p>The principles of training</p> <p>Individual needs</p> <p>Specificity</p> <p>Progressive overload</p> <p>FITT</p> <p>Overtraining</p> <p>Reversibility</p> <p>Thresholds of training</p>	
<p>Energy</p> <p>Aerobic respiration</p> <p>Anaerobic respiration</p> <p>Lactic Acid</p> <p>Energy Sources</p> <p>Fats</p> <p>Carbohydrates (Complex &amp; Simple)</p> <p>Free Sugars</p>	<p>Long term effects of aerobic and anaerobic training</p> <p>Effects and benefits for the musculo-skeletal system</p> <p>Effects and benefits for the cardio-respiratory system</p>	
<p>Effects of exercise on the muscles (Fatigue &amp; Cramp)</p> <p>Effects of exercise on the heart</p> <p>Heart Rate</p> <p>How heart rate varies</p> <p>Maximum heart rate</p> <p>Stroke volume</p> <p>Cardiac Output</p> <p>Effects on you breathing</p> <p>Interpreting graphs</p>	<p>PARQ</p> <p>Preventing Injuries</p> <p>Warm up &amp; Cool Down</p> <p>Protective Equipment and Clothing</p> <p>Checking Equipment and Facilities</p> <p>Playing to the rules of competition</p>	<p><b>Injuries that occur in physical activity and sport</b></p> <p>Concussion</p> <p>Fractures</p> <p>Dislocations</p> <p>Sprains</p> <p>Torn Cartilage</p> <p>Sort Tissue Injury</p>
	<p>Performance Enhancing Drugs</p> <p>Anabolic Steroids</p> <p>Beta Blockers</p> <p>Diuretics</p> <p>Narcotics and Analgesics</p> <p>Peptide Hormones, including EPO</p> <p>Growth Hormones</p> <p>Stimulants</p> <p>Blood Doping</p>	