

## A Level Physical Education- Glossary of Key Terms

This glossary, organised into specification topic areas, contains key words to help support your AO1 knowledge.

	<b>Year 12 Topics</b>
	<b>Year 13 Topics</b>

### 3.1.1 Anatomy and Physiology

<b>3.1.1.2 Cardiovascular System</b>	
<b>Adrenaline</b>	Stress hormone that is released by the sympathetic nerves and cardiac nerve during exercise. It stimulates the SAN (pacemaker) which results in an increase in HR.
<b>Angina</b>	Chest pain that occurs when the blood supply through the coronary arteries to the muscles of the heart is restricted.
<b>Arterio-Venous Difference</b>	The difference between the oxygen content of the arterial blood arriving at the muscles and the venous blood leaving the muscles.
<b>Atheroma</b>	A fatty deposit found in the inner lining of an artery.
<b>Atherosclerosis</b>	Occurs when arteries harden and narrow as they become clogged up by fatty deposits.
<b>Atrioventricular Node</b>	Relays impulse between the upper and lower sections of the heart.
<b>Baroreceptors</b>	Sensors in tissues (nerve endings) that respond to the stretching of the arterial wall caused by changes in BP. Increase in BP causes a decrease in HR.
<b>Blood Pressure</b>	The force exerted by the blood against the vessel wall.
<b>Bohr Shift</b>	When an increase in blood carbon dioxide and a decrease in PH reduces the affinity of haemoglobin for oxygen.
<b>Bradycardia</b>	A decrease in resting heart rate to below 60bpm.
<b>Bundle of His</b>	A collection of heart muscle cells that transmit electrical impulses from AVN via bundle branches to ventricles.
<b>Cardiac Hypertrophy</b>	The thickening of the muscular wall of the heart so that it becomes bigger and stronger, larger ventricular cavity.
<b>Cardiac Output</b>	The volume of blood pumped out by the heart ventricles per minute.
<b>Cardiovascular Drift</b>	Characterised by a progressive decrease in stroke volume and blood pressure, together with a progressive rise in heart rate during prolonged exercise in a warm environment.
<b>Chemoreceptors</b>	Found in the carotid arteries, sense a change in chemicals. Detect an increase in CO <sub>2</sub> in the blood. An increase in CO <sub>2</sub> will result in the sympathetic nervous system being stimulated.
<b>Diastole</b>	When the heart relaxes to fill with blood.
<b>Diastolic Pressure</b>	The pressure in the arteries when the ventricles are relaxing.
<b>Ejection Fraction</b>	The percentage of blood pumped out by the left ventricle per beat.
<b>Haemoglobin</b>	Iron containing pigment found in red blood cells which combines with oxygen to form oxyhaemoglobin.
<b>Heart Disease</b>	Referred to as coronary heart disease- The leading cause of deaths in the world. Occurs when the coronary arteries become blocked/narrowed by a collection of fatty deposits.
<b>Heart Rate</b>	The number of times the heart contracts per minute.
<b>High Blood Pressure</b>	Caused by extra force exerted against the blood vessel walls. If untreated can lead to heart attacks, heart failure, kidney disease, stroke or dementia.
<b>Medulla Oblongata</b>	Part of brain that regulates breathing and HR

<b>Mitochondria</b>	Location of the muscle where aerobic respiration takes place.
<b>Myogenic</b>	The capacity of the heart to generate its own impulses.
<b>Myoglobin</b>	Iron containing pigment in slow-twitch muscle fibres which has a slightly higher affinity for oxygen than haemoglobin. It stores oxygen in muscle fibres, can be used quickly during exercise.
<b>Parasympathetic Nervous System</b>	Nervous System that makes the heart beat slower.
<b>PH</b>	A measure of acidity. (Values less than 7 indicate acidity).
<b>Plasma</b>	The fluid part of the blood that surrounds blood cells, transporting them.
<b>Proprioceptors</b>	sensory nerve endings in the muscles, tendons and joints that detect muscle movement. Increase causes increase in HR
<b>Pulmonary System</b>	Deoxygenated blood from the heart to the lungs and oxygenated blood back to the heart.
<b>Purkinje Fibres</b>	Muscle fibres that conduct impulses in the walls of the ventricles
<b>Sino-Atrial Node</b>	A small mass of cardiac muscle found in the wall of the right atrium that generates the heartbeat. (The pacemaker).
<b>Starling's Law</b>	Increased venous return, causes greater diastolic filling, which causes the heart muscle to stretch further leading to a more forceful contraction and increased ejection fraction.
<b>Steady State</b>	Where the athlete is able to meet the demands with the oxygen supply.
<b>Stroke</b>	Occurs when the blood supply to the brain is cut off.
<b>Stroke Volume</b>	The volume of blood pumped out by the heart ventricles in each contraction.
<b>Sympathetic Nervous System</b>	Nervous System that makes the heartbeat faster.
<b>Systemic System</b>	Oxygenated blood to the body from the heart and then the return of deoxygenated blood from the body to the heart.
<b>Systole</b>	When the heart contracts.
<b>Systolic Pressure</b>	The pressure in the arteries when the ventricles are contracting.
<b>Vascular Shunt</b>	Redistribution of cardiac output.
<b>Vasoconstriction</b>	When the blood vessel narrows to decrease blood flow.
<b>Vasodilation</b>	When the blood vessel widens to increase blood flow into the capillaries.
<b>Venous Return</b>	The return of blood to the right side of the heart via the vena cava.

### 3.1.1.3 Respiratory System

<b>Cilia</b>	Microscopic hair like projections that help sweep away fluids and particles.
<b>Concentration Gradient</b>	Explains difference between high and low conc. The steeper this gradient (difference between concentration levels at high and low areas) the faster diffusion occurs.
<b>COPD</b>	Chronic and debilitating disease and is the name for a collection of diseases such as Emphysema.
<b>Diffusion</b>	The movement of gas molecules from an area of high concentration or partial pressure to an area of low concentration or partial pressure.
<b>Expiration</b>	Breathing out.
<b>Expiratory Reserve volume</b>	Volume of air that can be forcibly expired after a normal breath. Slight decrease during exercise.

<b>External Respiration</b>	Gaseous exchange between the lungs and blood.
<b>Gaseous Exchange</b>	The movement of oxygen from the air into the blood, and carbon dioxide from the blood into the air.
<b>Inspiration</b>	Breathing in.
<b>Inspiratory Reserve Volume</b>	Volume of air that can be forcibly inspired after a normal breath. Decreases during exercise.
<b>Internal Respiration</b>	Gaseous exchange between the blood in the capillaries and the body cells.
<b>Minute Ventilation</b>	Volume of air breathed in or out per minute. Big increase during exercise.
<b>Partial Pressure</b>	The pressure exerted by an individual gas when it exists within a mixture of gases.
<b>Residual Volume</b>	Volume of air that remains in the lungs after maximum expiration. Remains the same during exercise.
<b>Spirometer</b>	Device used to measure volume of air inspired and expired by lungs.
<b>Tidal Volume</b>	Volume of air breathed in or out per breath. Increases during exercise.

### 3.1.1.4 Neuromuscular System

<b>Aerobic</b>	Exercise that is low to medium intensity where the oxygen demand of the muscles can be met.
<b>All or None Law</b>	Sequence of impulses has to be of sufficient intensity to stimulate all of the muscle fibres in a motor unit in order for them to contract. If not, none will contract.
<b>Anaerobic</b>	Exercise at high intensity such as sprinting where the demand for oxygen by the muscles is so high that it cannot be met.
<b>Autogenic Inhibition</b>	Where there is a sudden relaxation of the muscle in response to high tension. Golgi tendons are the receptors involved.
<b>Golgi Tendon Organs</b>	Activated when there is tension in a muscle.
<b>Hypertrophy</b>	Where the muscle becomes bigger and stronger.
<b>Isometric Contraction</b>	Where there is tension in a muscle but no visible movement.
<b>Motor Neurones</b>	Transmit the brains instructions as electrical impulses to the muscles.
<b>Motor Unit</b>	A motor neurone and its muscle fibres.
<b>Muscle Spindles</b>	Detect how far and how fast a muscle is being stretched and produce the stretch reflex.
<b>Neuromuscular Junction</b>	Where the motor neurone and the muscle fibre meet.
<b>Spatial Summation</b>	When the strength of a contraction changes by altering the number and size of the muscle's motor units.
<b>Tetanic Summation</b>	A sustained muscle contraction caused by a series of fast repeating stimuli.
<b>Type 1 Muscle Fibres</b>	Slow contraction speeds. Adapted to low intensity exercise, producing most of their energy aerobically.
<b>Type IIa Muscle Fibres</b>	Fast oxidative glycolytic- More resistant to fatigue than type 1 fibres. Suited to longer high intensity exercise e.g. 1500m.
<b>Type IIX Muscle Fibres</b>	Fast glycolytic- These fibres fatigue much quicker than type IIa and are used for highly explosive events where quick, short burst of energy are needed e.g. 100m.
<b>Wave Summation</b>	Where there is a repeated nerve impulse with no time to relax so a smooth, sustained contraction occurs rather than twitches.

### 3.1.1.4 Musculoskeletal System

<b>Agonist</b>	Responsible for the movement that is occurring.
<b>Antagonist</b>	Works in opposition to the agonist (important for coordination).
<b>Articulating Bones</b>	Refers to the bones that meet and move at the joint.
<b>Concentric Contraction</b>	When a muscle shortens under tension.
<b>Dorsi Flexion</b>	Pulling toes up onto the shin.
<b>Eccentric Contraction</b>	When the muscle lengthens under tension.
<b>Extension</b>	Increasing the angle between bones of a joint.
<b>Flexion</b>	Decreasing the angle between bones of a joint.
<b>Frontal Plane</b>	Vertical plane, which divides the body into front and back halves.
<b>Horizontal Abduction</b>	Movement of a limb forwards while it is held parallel to the ground.
<b>Horizontal Adduction</b>	Movement of a limb backwards while it is held parallel to the ground.
<b>Hyperextension</b>	Increasing the angle beyond 180 degrees between bones of a joint.
<b>Isometric Contraction</b>	When a muscle is under tension but there is no visible movement.
<b>Longitudinal Axis</b>	Runs from top to bottom.
<b>Plantar-Flexion</b>	Pointing the toes/pushing up onto your toes.
<b>Sagittal Axis</b>	Runs from front to back.
<b>Sagittal Plane</b>	Vertical plane, which divides the body into right and left halves.
<b>Transverse Plane</b>	Divides the body into upper and lower halves.

### 3.1.1.6 Energy Systems

<b>Aerobic System</b>	When exercise intensity is low and oxygen supply is high, the aerobic system breaks down glucose into CO <sub>2</sub> and water, producing 38 molecules of ATP.
<b>Altitude Training</b>	Usually done at 2500m+ above sea level where the partial pressure of oxygen is lower.
<b>Anaerobic Glycolytic System</b>	An energy system used to produce high powered energy for high intensity effort in events such as 400m.
<b>ATP</b>	The only useable form of energy in the body.
<b>ATP-PC System</b>	An energy system that uses phosphocreatine as its fuel to release energy for high intensity, short duration exercise.
<b>Beta Oxidation</b>	Where fatty acids undergo a series of chemical reactions and are converted into acetyl coenzyme A which is the entry molecule for the Krebs cycle.
<b>Coupled Reaction</b>	When energy required by one process is supplied by another process.
<b>Cycle Ergometer</b>	A stationary bike that measures how much work is being performed.
<b>Direct Gas Analysis</b>	Measures the concentration of oxygen that is inspired and the concentration of carbon dioxide that is expired.
<b>Electron Transport Chain</b>	Involves a series of chemical reactions in the cristae of the mitochondria where hydrogen is oxidised to water and 34 ATP are produced.

<b>Energy Continuum</b>	A term which describes the type of respiration used by physical activities. Whether it is aerobic or anaerobic respiration depends on the intensity and duration of the exercise.
<b>EPOC</b>	The amount of oxygen consumed during recovery above that which would have been consumed at rest during the same time.
<b>Fast Component</b>	The restoration of ATP and phosphocreatine stores and the restoration of myoglobin with oxygen,
<b>Glycolysis</b>	A process in which glucose is converted to pyruvate to produce energy,
<b>HIIT Training</b>	High intensity interval training involving short burst of maximum intensity exercise followed by a recovery period of low to moderate intensity exercise.
<b>Indirect Calorimetry</b>	A technique that provides an estimation of energy expenditure from the amount of carbon dioxide produced and oxygen consumed during rest and steady-state exercise.
<b>Krebs Cycle</b>	A series of cyclical chemical reactions that take place using oxygen in the matrix of a mitochondria.
<b>Lactate Sampling</b>	Sampling involves taking a tiny blood sample and a handheld device analyses the blood and indicates how much lactate is present.
<b>Lactate Threshold</b>	The point during exercise at which lactic acid quickly accumulates in the blood.
<b>OBLA</b>	The point when lactate levels go above 4 millimoles per litre.
<b>Oxygen Consumption</b>	The amount of oxygen we use to produce ATP.
<b>Oxygen Deficit</b>	The difference between the oxygen required during exercise and the oxygen supplied and utilised. Occurs at the onset of exercise.
<b>Phosphocreatine</b>	An energy-rich phosphate compound found in the sarcoplasm of the muscles.
<b>Plyometrics</b>	Involves repeated rapid stretching and contracting of muscles to increase power.
<b>Respiratory Exchange Ratio</b>	The ratio of carbon dioxide produced to the oxygen consumed.
<b>SAQ Training</b>	Exercises performed with maximum force at high speed with energy being produced anaerobically e.g. Zig Zag runs and foot ladders.
<b>Sarcoplasm</b>	The fluid that surrounds the nucleus of a muscle and is the site where anaerobic respiration takes place.
<b>Slow Component</b>	Longer lasting component of EPOC involving oxygen consumption to provide energy to remove lactic acid.
<b>Sub Maximal Oxygen Deficit</b>	When there is not enough oxygen available at the start of exercise to provide all the energy (ATP) aerobically.
<b>The Cori Cycle</b>	The process where lactic acid is transported in the blood to the liver where it is converted to blood glucose and glycogen.
<b>VO2 Max</b>	The maximum amount of oxygen that can be taken in, transported and used by the body per minute. Measured in millilitres for each kilogram body weight each minute (ml/kg/min).

### 3.1.2 Skill Acquisition

3.1.2.1 Skill, Skill Continuums and Transfer of Skills	
<b>ACEFACE</b>	A= Aesthetically Pleasing, C= Consistent, E= Efficient, F=Fluent, A=Accurate, C=Controlled, E=Economical.
<b>Bilateral Transfer</b>	Learning of one skill is passed across the body from limb to limb.
<b>Closed Skill</b>	Performed in a predictable environment.
<b>Complex Skill</b>	Requires decision making and lots of info processed.
<b>Discrete Skill</b>	Clear beginning and end.
<b>Externally Paced Skill</b>	No control over start and speed of skill.
<b>Fine Skill</b>	Uses smaller muscle groups.
<b>Gross Skill</b>	Uses large muscle groups.
<b>High Organised Skill</b>	Not broken easily into parts.
<b>Low Organised Skill</b>	Easily broken into parts.
<b>Negative Transfer</b>	When learning of one skill hinders learning of another.
<b>Open Skill</b>	Performed in an unpredictable environment.
<b>Positive Transfer</b>	When learning of one skill helps the learning of another.
<b>Self-Paced Skill</b>	Control over start and speed of skill.
<b>Serial Skill</b>	Several discrete skills to make a more integrated movement.
<b>Simple Skill</b>	Requires few decisions when being performed.
<b>Skill</b>	Learned ability to bring about predetermined results (minimum outlay of time/energy).
<b>Transfer</b>	Effect of learning/performance of 1 skill on learning and performance of another.
<b>Zero Transfer</b>	When the learning of one skill has no impact on the learning of another.

3.1.2.2 Impact of Skill Classification on Structure of Practice for Learning	
<b>Chaining</b>	Linking subroutines together when practicing.
<b>Distributed Practice</b>	Rest intervals.
<b>Massed Practice</b>	No rest intervals.
<b>Mental Practice</b>	Going over the skill in the mind without movement.
<b>Progressive Part Practice</b>	Practicing the first part of a skill then adding parts gradually.
<b>Varied Practice</b>	Changing the practice type and drills .
<b>Whole Practice</b>	Practicing the skill in its entirety.
<b>Whole-Part-Whole Practice</b>	Assessing skill, identifying weakness, practicing, putting back together.

### 3.1.2.3 Principles and Theories of Learning and Performance

<b>Annoyer</b>	Action that creates unease to promote the avoidance of incorrect responses.
<b>Associative</b>	2nd stage, motor programme developed, performance is smoother.
<b>Attention</b>	Making demonstration attractive to the performer.
<b>Autonomous</b>	Final stage, used by expert, movements detailed and specific
<b>Behaviourist Theory</b>	How actions can be linked to stimuli.
<b>Cognitive</b>	1st stage, used by a novice, understanding explored by trial and error.
<b>Constructivism</b>	Building up learning in stages, based on current level of performance.
<b>Insight Learning</b>	Using experience/ understanding to solve problems about the whole skill.
<b>Inter-Psychological Development</b>	Learning by the association with others.
<b>Intra-Psychological Development</b>	Learning using others to develop knowledge.
<b>Learning</b>	The permanent change in behaviour as a result of practice.
<b>Motivation</b>	Having the drive to do the task.
<b>Motor Production</b>	Having the mental and physical ability to do the task.
<b>Negative Reinforcement</b>	Taking away an unpleasant stimulus after the correct response
<b>Observational Learning</b>	Acceptable and unacceptable behaviour can be learned by watching and copying other.
<b>Operant Conditioning</b>	Use of reinforcement to ensure correct responses are repeated.
<b>Performance</b>	Temporary occurrence, change with time due to external/internal influences.
<b>Positive Reinforcement</b>	Pleasant stimulus after the correct response.
<b>Punishment</b>	Unpleasant stimulus to prevent incorrect actions reoccurring.
<b>Retention</b>	Remembering the demonstration and being able to recall it.
<b>Satisfier</b>	Action that promotes a pleasant feeling so that responses are repeated.
<b>Social Development</b>	Learning by the association with others.
<b>Zone of Proximal Development</b>	Next stage learning based on needs, expectations and ability.

### 3.1.2.3 Principles and Theories of Learning and Performance

<b>Extrinsic Feedback</b>	extrinsic (from an outside source), intrinsic (from within)
<b>Feedback</b>	information to aid error correction
<b>Intrinsic Feedback</b>	Feedback from within e.g. muscle tension.
<b>Knowledge of Performance</b>	Feedback about the technique
<b>Knowledge of Results</b>	Feedback about the outcome
<b>Manual Guidance</b>	Physically supporting a performer during movement.
<b>Mechanical Guidance</b>	Using artificial aids to help a performer improve performance.

<b>Negative Feedback</b>	Feedback that provides error correction
<b>Positive Feedback</b>	positive (encouragement) negative (error correction)
<b>Verbal Guidance</b>	Using words to explain a task.
<b>Visual Guidance</b>	Guidance that can be seen, a demonstration.

<b>3.1.2.5 Memory models- 3.1.2.5.1 General Information Processing and 3.1.2.5.2 Efficiency of Information Processing</b>	
<b>Anticipation</b>	Pre-Judging a stimulus.
<b>Association</b>	Linking the stored actions of a skill to a stored emotion or other action.
<b>Central Executive</b>	The control centre of the working memory model- It uses three other systems to control all the information moving in and out of the memory system.
<b>Choice Reaction Time</b>	More than one stimulus and more than one response to choose from.
<b>Chunking</b>	Breaking the skilled action into parts or sub-routines.
<b>DCR</b>	Detection, comparison, recognition.
<b>Decision Making</b>	Where a performer must make a decision based on all the information collected from the display.
<b>Display</b>	The sporting environment and everything in it.
<b>Effector Mechanism</b>	The network of nerves that sends coded impulses to the muscles.
<b>Episodic Buffer</b>	Coordinates the sight, hearing and movement information from the working memory into sequences to be sent to the long term memory.
<b>Feedback</b>	Information used during or after the response to aid movement correction.
<b>Hick's Law</b>	Reaction time increases as the number of choices increases.
<b>Information Processing</b>	The methods by which data from the environment are collected and utilised.
<b>Initial Conditions</b>	Information from the environment.
<b>Input</b>	Information picked up by the senses.
<b>Kinesthesia</b>	The inner sense that gives information about body position and muscular tension.
<b>Long Term Memory</b>	Receives information from the working memory and has an unlimited capacity for the storage of motor programmes.
<b>Motor Programmes</b>	A set of movements stored in the memory that specify the components of a skill.
<b>Movement Time</b>	The time taken to complete the task.
<b>Output</b>	The response to stimuli e.g. movement, caused by the information obtained in input stage.
<b>Perception</b>	The process of coding and interpreting sensory information.
<b>Phonological Loop</b>	Deals with auditory information from the senses and helps produce the memory trace.
<b>Psychological Refractory Period</b>	A delay when a second stimulus is presented before the first has been processed.
<b>Reaction Time</b>	The time taken from the onset of a stimulus to the onset of a response.
<b>Recall Scheme</b>	Initiates movement,
<b>Receptor Systems</b>	The senses that pick up information from the display- Sight, auditory, touch, balance, kinesthesia.
<b>Recognition Schema</b>	Control movement, happens during the action.
<b>Response Outcome</b>	Feedback about the result.

<b>Response Specifications</b>	Information about what to do.
<b>Response Time</b>	The time taken from the onset of a stimulus to the completion of a task. Response time= Reaction time + Movement time.
<b>Selective Attention</b>	Filtering relevant information from irrelevant information.
<b>Sensory Consequences</b>	Information about the feel of the movement.
<b>Simple Reaction Time</b>	One specific response to one stimulus.
<b>Single Channel Hypothesis</b>	Stimuli can only be processed one at a time. Other stimuli have to wait to be processed.
<b>Spatial Anticipation</b>	Where and what is going to happen.
<b>Stimuli</b>	The important and relevant items of information from the display.
<b>Temporal Anticipation</b>	When it is going to happen.
<b>Translatory Mechanism</b>	Adapting and comparing coded information to memory so that decisions can be made.
<b>Visuospatial Sketchpad</b>	Used to temporarily store visual and spatial information.

### 3.1.3 Sport and Society

3.1.3.1.1 Pre-Industrial (Pre-1780)	
<b>Feudal System</b>	A way of structuring society around a relationship derived from the holding of land in exchange for service or labour.
<b>Mob Football</b>	An unruly form of football played by the lower classes.
<b>Popular Recreation</b>	The sport and pastimes of people in pre-industrial Britain.
<b>Real Tennis</b>	Upper-class activity of the time, with strict rules and moral code.

3.1.3.1.2 Industrial and Post-Industrial (1780–1900)	
<b>Amateur</b>	A person who plays sport for the love of it and receives no financial gain.
<b>Athleticism</b>	Physical endeavour with moral integrity.
<b>Codification</b>	The gradual organisation and defining of the rules.
<b>Dr William Penny Brookes</b>	The founder of the Wenlock Olympian Games in 1850.
<b>Industrial Patronage</b>	Factory teams were set up by factory owners as a way of decreasing absenteeism and encouraging loyalty in the workforce.
<b>Industrial Revolution</b>	Marked a change in Britain from a feudal, rural society into an industrialised, machine-based, capitalised society, controlled by a powerful urban middle class.
<b>Philanthropists</b>	Kind, generous, middle-class individuals who had a social conscience and were keen to try to provide for a better life among the working class.
<b>Professional</b>	A person who plays sport for financial gain.
<b>Public Provision</b>	Local council provision of facilities for the masses to participate.
<b>Rational Recreation</b>	Sports pastimes for the lower classes which were designed by the middle classes to be well ordered, organised and controlled.
<b>Social Control</b>	The way in which people's thoughts, feelings, appearance and behaviour are regulated in social systems.
<b>Urbanisation</b>	Large numbers of people migrating/moving from rural areas into towns and cities, seeking regular work in the factories.

3.1.3.1.3 Post World War II (1950 to Present)	
<b>Commercialisation</b>	The process of attempting to gain money from an activity e.g. sport.
<b>Globalisation</b>	The process whereby nations are increasingly being linked together and people are becoming more interdependent via improvements in communication and travel.
<b>Golden Triangle</b>	The golden triangle refers to the relationship between sport, business and media.
<b>Lawn Tennis</b>	Originally called 'Sphairistike' and played on an hourglass shaped court before its name and court shape were quickly replaced.
<b>Media</b>	An organised means of communication by which large numbers of different people can be reached quickly.
<b>Merchandising</b>	The practice in which the brand or image from one 'product' is used to sell another, e.g. professional sports teams/performers promote various products.
<b>Open Era</b>	When professional tennis players were allowed to compete alongside amateurs and earn money.
<b>Social Media</b>	Online apps and websites which allow users to interact by sharing content and taking part in social networking.
<b>Sponsorship</b>	When a company pays for their products to be publicly displayed or advertised, usually as an attempt to increase the sales of their goods.

### 3.1.3.2.1 Sociological Theory Applied to Equal Opportunities

<b>Channelling</b>	minorities pushed away from certain sports due to stereotypical assumptions.
<b>County Sport Partnership</b>	network of local agencies working to increase participation.
<b>Discrimination</b>	Unfair treatment of person, to act upon a prejudice.
<b>Equal Opportunities</b>	Right to access regardless of race, age, sex, mental/physical ability.
<b>Ethnic Groups</b>	People with racial, religious or linguistic traits in common.
<b>Gender</b>	The biological aspect of a person either a male or female.
<b>Gender Socialisation</b>	Learning to conform to culturally defined gender roles through socialisation.
<b>Inequality</b>	The unfair treatment or uneven distribution of resources or opportunities.
<b>Institution</b>	Established organisation founded for religious, educational or social purpose.
<b>Integration</b>	Able-bodied and disabled people take part in the same activity, same time.
<b>Internalisation</b>	The learning of values and attitudes that are incorporated within yourself.
<b>Prejudice</b>	An unfavourable opinion of an individual based on inadequate facts.
<b>Primary Socialisation</b>	Socialisation during early childhood through influence of immediate family.
<b>Race</b>	The physical characteristics of individual.
<b>Racism</b>	Belief that races have distinct hereditary characteristics give some superiority.
<b>Rooney Rule</b>	To interview minority confidence head-coaching operation jobs.
<b>Secondary Socialisation</b>	Socialisation in teenage years through influence of peer groups, friends and school.
<b>Segregation</b>	People with disabilities taking part separately e.g. Paralympics.
<b>Sexism</b>	The belief that one sex is inferior to the other (usually women).
<b>Social Action theory</b>	A way of viewing socialisation, emphasising social action.
<b>Social Change</b>	An alteration in the social order of society.
<b>Social Class</b>	Groups dependent on income and power within a society.
<b>Social Issues</b>	Problems that affect many people within a society.
<b>Social Stratification</b>	Where society is divided into levels based on social characteristic.
<b>Socialisation</b>	Lifelong process where members of society learn norms, values, ideas, roles.
<b>Society</b>	Organised group of people with a shared common interest.
<b>Stacking</b>	Disproportionate concentration of ethnic minorities in certain positions/teams.
<b>Stereotyping</b>	Standardised image, making generalised opinions about a group.
<b>Whole Sport Plans</b>	Document submitted to Sport England outlining each NGBs strategies over 4 years.

### 3.2.1 Exercise Physiology

3.2.1.1 Diet and Nutrition and their effect on Physical Activity and Performance	
<b>Amino Acids</b>	Used in all body cells to build proteins.
<b>Balanced Diet</b>	A diet consisting of a variety of foods with an adequate intake of nutrients.
<b>Buffering</b>	The ability of the blood to compensate for the build-up of lactic acid or hydrogen ions to maintain the pH level.
<b>Caffeine</b>	Naturally occurring stimulant that increases mental alertness.
<b>Cholesterol</b>	A type of fat found in the blood.
<b>Complex Carbohydrates</b>	These are found in nearly all plant-based foods and usually take longer for the body to digest. They are most commonly found in bread, pasta, rice and vegetables.
<b>Creatine</b>	A compound the body can make naturally which supplies energy for muscular contraction and to increase athletic performance.
<b>Diuretic</b>	Increases the production of urine.
<b>Electrolytes</b>	Salts and minerals found in the blood that can conduct electrical impulses in the body.
<b>Fats</b>	A natural oily substance occurring in animal bodies, especially when deposited as a layer under the skin or around certain organs.
<b>Fibre</b>	An important component which causes bulk in the small intestine, helping prevent constipation and aiding digestion.
<b>Glucose</b>	Simple sugar, major source of energy for the body's cells.
<b>Glycaemic Index</b>	Ranks carbohydrates according to their effect on our blood glucose levels.
<b>Glycogen</b>	The stored form of glucose found in the muscles and the liver.
<b>Glycogen Loading</b>	Dietary manipulation to increase glycogen stores beyond normal.
<b>HDL</b>	Transport excess cholesterol to the liver where it is broken down.
<b>Hydrogen Ions</b>	Responsible for the acidity of the blood.
<b>Lactic Acid</b>	By-product of anaerobic respiration and as it accumulates it causes fatigue.
<b>LDL</b>	Transport cholesterol to tissues, 'bad cholesterol', cause increased heart disease.
<b>Minerals</b>	Minerals assist bodily functions. They tend to be dissolved by the body as ions and are called electrolytes.
<b>Proteins</b>	These are a combination of many chemicals called amino acids and are important for muscle growth and repair.
<b>Simple Carbohydrates</b>	Found in fruits and are easily digested by the body. They are also often found in processed foods and products with refined sugar.
<b>Sodium Bicarbonate</b>	White soluble compound used as an antacid to increase the buffering capacity of the blood to lactic acid.
<b>Vitamins</b>	Essential nutrients that your body needs in small amounts to work properly.

3.2.1.2 Preparation and Training Methods in relation to Maintaining Physical Activity and Performance	
<b>1 Rep Max (1RM)</b>	Maximum amount a performer can lift in one repetition.
<b>Active Stretching</b>	Involves the performer stretching one joint personally.
<b>Ballistic Stretching</b>	Bouncing movements to stretch the body further.
<b>Circuit Training</b>	A series of stations organised to work on different body areas for a set time/repetitions.
<b>Competition Period</b>	Where skills and techniques are refined.

<b>Continuous Training</b>	Low intensity exercise for long periods of time without rest.
<b>Double Periodisation</b>	Planning a periodisation training programme to peak twice during a year.
<b>Fartlek Training</b>	Pace of the run is varied to stress the aerobic and anaerobic energy systems.
<b>Frequency</b>	The number of times you train per week.
<b>Intensity</b>	How hard you train.
<b>Interval Training</b>	Intervals of high intensity work are followed by periods of rest/recovery.
<b>Macrocycle</b>	Period of training involving a long term performance goal.
<b>Mesocycle</b>	Usually a 4-12-week period of training with focus such as power.
<b>Microcycle</b>	A week or few days of training sessions.
<b>Objective</b>	Involves facts.
<b>Passive Stretching</b>	Involves an external force helping a performer to stretch.
<b>Peaking</b>	Planning/organising training the form is at peak for a major competition.
<b>Perceived Rating of Exertion</b>	Giving opinion about how hard you feel you are working.
<b>Periodisation</b>	Dividing the training year into specific sections for specific purpose.
<b>PNF Stretching</b>	Advanced flexibility training method- Passive stretch where the stretch position is held by something other than the agonist muscle e.g. partner.
<b>Preparation Period</b>	Preseason training where fitness is developed.
<b>Progressive Overload</b>	Gradually increasing the intensity of training to increase adaptations.
<b>Qualitative Data</b>	Descriptive and looks at the way people think or feel.
<b>Quantitative Data</b>	Can be written down or measured with numbers.
<b>Recovery</b>	Rest days to allow the body to recover.
<b>Reliability</b>	Means the test can be repeated accurately.
<b>Reps</b>	The number of times you do an exercise.
<b>Reversibility</b>	If training stops then adaptations build will be lost.
<b>Sets</b>	The number of cycles of repetitions (reps)
<b>Specificity</b>	Making training relevant to the required body parts, energy systems and fibre types.
<b>Subjective</b>	Involves opinion.
<b>Tapering</b>	Reducing the volume and intensity of training prior to competition.
<b>Time</b>	How long you train for.
<b>Transition Period</b>	End of season training, rest and recovery take place.
<b>Type</b>	What method of training you use.
<b>Validity</b>	When the test actually measures what it sets out to do.
<b>Weight Training</b>	A series of resistance exercises through use of resistance e.g. free weights.

### 3.2.1.3 Injury Prevention and the Rehabilitation of Injury

<b>Achilles Tendonitis</b>	Tendonitis is an over-use injury that causes pain and inflammation of the Achilles tendon.
<b>Acute Injury</b>	A sudden injury caused by a specific impact or traumatic event where a sharp pain is felt immediately.
<b>Chronic Injury</b>	Often referred to as an overuse injury that can develop slowly and last a long time.
<b>Cold Therapy</b>	A useful strategy post exercise to target minor aches and pains and improve recovery times.
<b>Compression Garments</b>	Designed to improve blood circulation and prevent medical problems such as deep vein thrombosis.
<b>Cryotherapy</b>	The use of cold temperatures to treat an injury.
<b>Deep Vein Thrombosis</b>	A blood clot in one of the deep veins in the body.
<b>Dislocation</b>	Occurs when the ends of the bones are forced out of position.
<b>Fascia</b>	A layer of fibrous connective tissue which surrounds the muscle or group of muscles.
<b>Fracture</b>	A break or crack in a bone- There are 6 different forms of fracture.
<b>Hydrotherapy</b>	Warm water training to improve blood circulation, relieve pain and relax muscles. Helps to make exercise easier when recovering from an injury.
<b>Hyperbaric Chambers</b>	Pressurised chamber (like an aeroplane) which increase oxygen uptake to supply the injury in an effort to reduce injury recovery times.
<b>Non-REM sleep</b>	Means there is no rapid eye movement. It consists of three stages of sleep which get progressively deeper.
<b>Proprioceptive Training</b>	Subconscious process using a system of receptor nerves located in the muscles, joints and tendons. Helps performers to improve body kinesthesia.
<b>Protective Equipment</b>	Wearing equipment in sport to reduce injury risk e.g. Shin Pads.
<b>Screening</b>	Used to help identify those at risk of complications from exercise, prepare performers for sport, enhance performance and reduce injury.
<b>Soft Tissue</b>	Includes tendons, ligaments, muscles, nerves and blood vessels.
<b>Sprain</b>	Occurs when the ligaments are stretched too far or tear.
<b>Strain</b>	Occurs when muscle fibres are stretched too far and tear.
<b>Stress Fracture</b>	An over-use injury where the area becomes tender and swollen. Occurs when the muscles become fatigued so are no longer able to absorb the added shock of exercise.
<b>Taping and Bracing</b>	Wearing adhesive tape or a brace e.g. wrist support to improve support/stability of a joint.
<b>Tennis Elbow</b>	Over-use injury that occurs in the muscles attached to the elbow causing tiny tears to appear on the outside of the elbow.

### 3.2.2 Biomechanical Movement

3.2.2.1 Biomechanical Principles	
<b>Area of Base Support</b>	The larger the base, the greater the stability.
<b>Centre of Mass</b>	The point of balance.
<b>Distance</b>	The length of the path a body follows moving from point A to point B.
<b>Ground Reaction Force</b>	Equal/opposite force exerted when force applied to the ground.
<b>Inertia</b>	Resistance object has to change in its state of motion.
<b>Line of Gravity</b>	This is the line extending vertically downwards from the centre of mass.
<b>Linear Motion</b>	Straight/curved motion, moving same distance/speed/direction.
<b>Newton's First Law</b>	Force is required to change the state of motion.
<b>Newton's Second Law</b>	Magnitude of force determines the size/direction of acceleration.
<b>Newton's Third Law</b>	For every action (force) there is an equal and opposite reaction (force).
<b>Scalar Quantity</b>	Measurements described in terms of size and magnitude only.
<b>Speed</b>	The rate of change of position.
<b>Time</b>	The time taken to complete an action or travel a set distance.

3.2.2.2 Levers	
<b>Effort</b>	The force applied by the user of the lever system.
<b>First Class Lever</b>	Fulcrum between effort and resistance.
<b>Force Arm</b>	The length of the line between fulcrum and effort.
<b>Fulcrum</b>	The point about which the lever rotates.
<b>Mechanical Advantage</b>	Force arm is longer than resistance arm.
<b>Mechanical Disadvantage</b>	Resistance arm is longer than force arm.
<b>Resistance</b>	The weight to be moved by the lever system.
<b>Resistance Arm</b>	Length of line between fulcrum and resistance.
<b>Second Class Lever</b>	Resistance between fulcrum and effort.
<b>Third Class Lever</b>	Effort between fulcrum and the resistance

3.2.2.3 Linear motion	
<b>Acceleration</b>	Measured in metres/second squared and is the rate of change of velocity.
<b>Air Resistance</b>	A force that acts in the opposite direction to the motion of a body travelling through the air.
<b>Displacement</b>	Measured in metres. The shortest route in a straight line between the start and finish.
<b>Distance</b>	Measured in metres. The path a body takes as it moves from the start to finish position.
<b>External Force</b>	Comes from outside the body.
<b>Friction</b>	Occurs when two or more bodies are in contact with one another.

<b>Impulse</b>	Impulse= force X time.
<b>Internal Force</b>	Comes from the skeletal muscles.
<b>Mass</b>	The quantity of matter the body possesses.
<b>Momentum</b>	Momentum (kgm/s)= Mass (kg) X Velocity (m/s).
<b>Net Impulse</b>	A combination of positive and negative impulses.
<b>Reaction Force</b>	This occurs when two bodies are in contact with one another.
<b>Scalar Quantity</b>	When measurements are only described in terms of size or magnitude.
<b>Speed</b>	A measurement in metres/seconds of the body's movement per unit of time with no reference to direction.
<b>Vector Quantity</b>	When measurements are described in terms of magnitude and size.
<b>Velocity</b>	Measured in metres/second and is the rate of change of displacement.
<b>Weight</b>	The gravitational force exerted on an object. Weight= mass x acceleration due to gravity and is measured in Newtons (N).

#### 3.2.2.4 Angular Motion

<b>Angular Acceleration</b>	The rate of change of angular velocity.
<b>Angular Displacement</b>	The smallest change in angle between the start and finish point of a rotation.
<b>Angular Momentum</b>	The quantity of rotation a body possesses.
<b>Angular Motion</b>	Movement around a fixed point.
<b>Angular Velocity</b>	The rate of change of angular displacement.
<b>Moment of Inertia</b>	Resistance of a body to angular motion.
<b>Radian</b>	The unit of measurement for angles.
<b>Torque</b>	The rotational consequence of a force.

#### 3.2.2.5 Projectile Motion

<b>Horizontal Component</b>	The horizontal motion of an object.
<b>Horizontal Displacement</b>	The shortest distance from the starting point to the finishing point in a line parallel to the ground.
<b>Optimal Angle of Release</b>	Angle between the horizontal and the direction of the projectile at release.
<b>Parabola</b>	A curve with matching left and right hand sides.
<b>Projectile Motion</b>	Refers to the movement of either an object or the human body through the air.
<b>Vertical Component</b>	The upward motion of an object.

#### 3.2.2.6 Fluid Mechanics

<b>Angle of Attack</b>	The tilt of a projectile relative to the air flow.
<b>Bernoulli Principle</b>	Where air molecules exert less pressure the faster they travel and more pressure when they travel slower.
<b>Drag Force</b>	A force that that acts in opposition to motion.
<b>Fluid Mechanics</b>	The study of an object or the human body as it travels through liquid or gas.

<b>Form Drag</b>	Relates to the impact of the fluid environment on an object.
<b>Lift Force</b>	Causes a body to move perpendicular to the direction of travel.
<b>Streamlining</b>	Involves shaping a body so it can move as effectively and quickly through fluid as possible.
<b>Surface Drag</b>	Friction between the surface of an object and the fluid environment.

### 3.2.3 Sports Psychology

3.2.3.1.1 Aspects of Personality	
<b>Credulous Approach</b>	Link between personality and behaviour is accepted.
<b>Extrovert</b>	Have loud and bright personalities.
<b>Interactionist Perspective</b>	Trait & social learning to predict behaviour in specific situation.
<b>Lewin's Formula</b>	$B = f(P \times E)$ : behaviour is a function of personality and the environment.
<b>Personality</b>	A person's unique psychological make-up.
<b>Sceptical Approach</b>	Link between personality and behaviour is doubted.
<b>Social Learning Theory</b>	Behaviour is learned from significant others by socialization.
<b>Trait Theory</b>	innate characteristics produce consistent behaviour

3.2.3.1.2 Attitudes	
<b>Affective Component</b>	Relate to feelings and interpretation (e.g. enjoyment).
<b>Attitude</b>	A value aimed at an attitude object
<b>Behavioural Component</b>	The action of the performer.
<b>Cognitive Component</b>	A belief (e.g. Belief in the ability to win).
<b>Cognitive Dissonance</b>	New information given to create unease and motivate change.
<b>Persuasion</b>	An effective communication to promote change.
<b>Triadic Model</b>	Three parts of an attitude - cognitive, affective, behavioural.

3.2.3.1.3 Arousal	
<b>Arousal</b>	a level of activation, a degree of readiness to perform.
<b>Catastrophe Theory</b>	arousal beyond optimum will cause dramatic reduction in performance.
<b>Cognitive Anxiety</b>	psychological anxiety (decreased concentration, worry).
<b>Dominant Response</b>	the standout response that the performer thinks is correct.
<b>Drive Theory</b>	as arousal increases, so does performance.
<b>Inverted U Theory</b>	arousal beyond optimum will cause dramatic reduction in performance.
<b>Peak Flow</b>	Ultimate intrinsic experience from positive mental attitude, confidence, focus.
<b>Somatic Anxiety</b>	physiological anxiety (increased muscular tension/HR).
<b>Zone of Optimal Functioning</b>	Area of controlled arousal and high-level performance.

3.2.3.1.4 Anxiety	
<b>Anxiety</b>	A level of nerves and irrational thinking.
<b>Competitive State Anxiety</b>	Nervous response to specific sporting situations.
<b>Competitive State Anxiety Inventory</b>	A questionnaire used by sports psychologists to measure anxiety.

<b>Competitive Trait Anxiety</b>	A disposition to suffer from nervousness in most situations.
<b>Observation</b>	Gaining a measure of anxiety simply by watching performer.
<b>Questionnaire</b>	A set of questions to measure or assess something, in this case anxiety.
<b>SCAT Test</b>	Questionnaire used by sport psychologists to measure anxiety.

### 3.2.3.1.5 Aggression

<b>Aggression</b>	Intend to harm outside the rules, hostile behaviour.
<b>Aggressive Cue Hypothesis</b>	Suggests aggression is caused by a learned trigger.
<b>Assertion</b>	Well-motivated behaviour inside the rules.
<b>Catharsis</b>	Cleansing of the emotions, using sport as outlet for aggression.
<b>Instinct Theory</b>	When aggression is spontaneous and innate.
<b>Instrumental Aggression</b>	Has an intent to harm but is within the rules.

### 3.2.3.1.6 Motivation

<b>Extrinsic Motivation</b>	Motivation from an outside source.
<b>Intangible Rewards</b>	Non- physical. E.g. feedback/encouragement.
<b>Intrinsic Motivation</b>	Motivation from within.
<b>Motivation</b>	A drive to succeed.
<b>Tangible Rewards</b>	Can be touched or held, physical. E.g. certificate/medal.

### 3.2.3.1.7 Achievement Motivation Theory

<b>Achievement Motivation</b>	The tendency to approach or avoid competitive situations. Summed up as the Drive to succeed minus the fear of failure.
<b>Approach Behaviour</b>	Known as NACH, they welcome competition and evaluation.
<b>Need to Achieve (NACH)</b>	The need to achieve, approach behaviour. The player welcomes competition.
<b>Avoidance Behaviours</b>	Known as NAF; avoid competition and evaluation.
<b>Need to Avoid Failure (NAF)</b>	The need to avoid failure, avoidance behaviour. The player avoids risk.
<b>Attributing Success Internally</b>	Giving a reason for success that is due to the responsibility of the player.

### 3.2.3.1.8 Social Facilitation

<b>Audience</b>	Those who just watch the event.
<b>Co-Actors</b>	Doing the same task but are not involved in direct competition.
<b>Competitive Co-Actors</b>	Those who are in direct competition.
<b>Evaluation Apprehension</b>	The perceived fear of being judged.
<b>Social Facilitation</b>	The positive effect of the presence of others on performance.
<b>Social Inhibition</b>	The negative effect of the presence of others on performance.

<b>Social Reinforcers</b>	Those who have a direct influence on the event.
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### 3.2.3.1.9 Group Dynamics

<b>Actual Productivity</b>	The outcome of group performance.
<b>Faulty Processes</b>	Things that go wrong, reduce group outcomes and prevent potential.
<b>Potential Productivity</b>	The best performance based on player ability and resources.
<b>Ringelmann Effect</b>	When group performance decreases the group size.
<b>Social Cohesion</b>	Individuals relating to each other to interact in the group.
<b>Social Loafing</b>	Individual loss of motivation due to loss of performance identification.
<b>Task Cohesion</b>	Individuals working together to achieve an end result.
<b>Team</b>	A group that has interaction, shared goals, identity and communication.

### 3.2.3.1.10 Importance of Goal Setting

<b>Goal Setting</b>	Setting targets.
<b>Outcome Goal</b>	A goal set against the performance of others and based on result.
<b>Performance Goal</b>	Setting a goal to better own performance rather than comparing others.
<b>Process Goal</b>	Based on improving technique.
<b>Task Orientate Goal</b>	Getting a better performance.

### 3.2.3.1.11 Attribution Theory

<b>Attribution</b>	A perception of the reason for an outcome of an event.
<b>Attribution Retraining</b>	Changing the reasons given for success and failure.
<b>External Attribute</b>	Outside the performer's control.
<b>Internal Attribute</b>	Within the performer's control.
<b>Learned Helplessness</b>	Using internal stable reasons for losing.
<b>Mastery Orientation</b>	State of mind when the performer is high in confidence, believes in their own ability and thinks success is repeatable, while failure is temporary and changeable.
<b>Self-Serving Bias</b>	Using external and/or unstable reasons for losing.
<b>Stable Attribute</b>	Unlikely to change in the short-term.
<b>Unstable Attribute</b>	Can change in a short amount of time.

### 3.2.3.1.12 Self-Efficacy and Confidence

<b>Competitive Orientation</b>	The degree to which a performer is drawn to challenging situations.
<b>Confidence</b>	A belief in the ability to master a task.
<b>Emotional Arousal</b>	A perception of the effects of anxiety on performance.
<b>Objective Sporting Situation</b>	The performance considers the situation in which the task is being undertaken.
<b>Performance Accomplishments</b>	What you have achieved already.

<b>Self-Efficacy</b>	A belief in the ability to master a specific sporting situation.
<b>State Confidence</b>	A belief in the ability to master a specific sporting moment.
<b>Trait Confidence</b>	A belief in the ability to do well in a range of sports.
<b>Verbal Persuasion</b>	Encouragement from others.
<b>Vicarious Experience</b>	Seeing others do the task.

### 3.2.3.1.13 Leadership

<b>Actual Behaviour</b>	What the leader decides to do in relation to leadership style.
<b>Autocratic Approach</b>	Leader makes the decisions.
<b>Democratic</b>	Decisions are made by group consultation.
<b>Emergent Leader</b>	Appointed from within the group.
<b>Leader</b>	Someone who has influence in helping others to achieve their goals.
<b>Person-Orientated Leadership</b>	Concerned with inter-personal relationships.
<b>Preferred Behaviour</b>	What the group wants.
<b>Prescribed Leader</b>	Appointed from outside the group.
<b>Required Behaviour</b>	What the situation demands.
<b>Task Leadership</b>	Concerned with getting results.

### 3.2.3.1.14 Stress Management

<b>Attentional Control</b>	Using four different attentional styles; broad, narrow, internal, external.
<b>Attentional Narrowing</b>	Limiting the amount of information being processed, missing some important cues.
<b>Attentional Wastage</b>	Limiting the amount of information being processed, the result of attentional narrowing.
<b>Biofeedback</b>	Uses measuring devices to help the athlete recognise the physical changes that will happen when under stress.
<b>Centring</b>	A form of breathing control, when, at opportune times, the sports performer can learn to relax the shoulders and chest whilst concentrating on the slow movement of the abdominal muscles as they take deep controlled breaths.
<b>Cognitive Effects of Stress</b>	These are psychological.
<b>Cue Utilisation</b>	The ability to process information is directly linked to the level of arousal.
<b>Eustress</b>	A positive response of the body to a threat.
<b>Imagery</b>	Recreating a successful image of a past performance and recalling the feeling of the movements in the mind.
<b>Mental Rehearsal</b>	The process of going over the movements in the mind before the action takes place.
<b>Positive Self-Talk</b>	When a performer replaces negative thoughts with positive ones.
<b>Progressive Muscular Relaxation</b>	A physical technique, often conducted with the use of recorded instructions, when the performer alternates between a state of tension in a group of muscles to a state of relaxation in those same muscles.
<b>Psychological Skills Training</b>	The performer can train and practice using any of the methods of cognitive stress management.
<b>Somatic Effects of Stress</b>	These are physiological.
<b>Stress</b>	A negative response of the body to a threat causing anxiety.

<b>Stressor</b>	The cause of stress.
<b>Thought Stopping</b>	Using a learned action or trigger to remove negative and irrational thoughts.
<b>Visualisation</b>	Involves using a mental image of performing the skill successfully which is then locked in and re-lived when the skill is performed for real.

### **3.2.4 Sport and Society and the Role of Technology in Physical Activity and Sport**

<b>3.2.4.1 Concepts of Physical Activity and Sport</b>	
<b>Characteristics</b>	Key features used to identify a particular concept (e.g. enjoyment in physical recreation or serious about sport).
<b>Continuum</b>	A scale representing gradual change.
<b>Leisure</b>	Free time during which individuals can choose what to do.
<b>Outdoor Education</b>	Activities which take place in the natural environment and utilise nature/geographical resources such as mountains, rivers, lakes etc.
<b>Participation Levels</b>	An emphasis on taking part recreationally with enjoyment as a key motivator to participate.
<b>Perceived Risk</b>	A challenge that stimulates a sense of danger and adventure for beginners or inexperienced performers in a safe environment, with danger minimised via stringent safety measures.
<b>School Games</b>	Initiative to increase participation in school sport from intra/inter-school level through to county and national levels.
<b>School Sport</b>	Extra-curricular competitive sport.
<b>School Sport Partnerships</b>	The creation of increased opportunities for school sport via junior/primary schools working together with secondary schools and further education providers.
<b>Sporting Development Continuum</b>	Participation in various forms of physical activity at various stages of development.

<b>3.2.4.2 Development of Elite Performers in Sport</b>	
<b>Elite</b>	The best, highest level sports performers at 'excellence' level.
<b>Mentor</b>	An individuals who helps or guides another person's development.
<b>National Governing Body (NGB)</b>	An organisation which has responsibility for managing its own particular sport.
<b>Performance Pathway Team</b>	A combination of EIS and UK sport expertise to identify and develop world class talent.
<b>Personal Qualities</b>	The attributes and personality characteristics of an individual person.
<b>Sexism</b>	Discrimination on the basis of sex/gender.
<b>Socio-Economic Status</b>	An individual's position in the social structure, which depends on their job, level of income and area they live in.
<b>Sports Equity</b>	Fairness in sport; equality of access for all; recognising inequalities in sport and takin steps to address them.
<b>Talent Identification</b>	The multi-disciplinary screening of athletes in order to identify those with the potential for world class success.

<b>3.2.4.3 Ethics in Sport</b>	
<b>Amateurism</b>	Participating in sport for the love of it, receiving no financial gain; it is based on the concept of athleticism.
<b>Citing</b>	Players can be cited (i.e. reported) for dangerous play, whether they are seen by the referee or not.
<b>Gamesmanship</b>	Bending the rules and stretching them to their absolute limit without getting caught; using whatever dubious methods possible to achieve the desired result.
<b>Negative Deviance</b>	Behaviour that goes against the norms and has a detrimental effect on individuals and society in general.

<b>Positive Deviance</b>	Behaviour which is outside the norms of society but with no intent to harm or break the rules. It involves over-adherence to the norms or expectations of society.
<b>Simulation</b>	Trying to deceive an official by over-acting.
<b>Sportsmanship</b>	Conforming to the rules, spirit and etiquette of a sport.
<b>Win Ethic</b>	Lombardian ethic which demonstrates a 'win at all cost' approach to competitive sport.

<b>3.2.4.4 Violence in Sport</b>	
<b>Football Hooliganism</b>	Unruly, violent and destructive behaviour by over-zealous supporters of association football clubs.
<b>Hooliganism</b>	Acts of vandalism and violence in public places committed especially by youths.
<b>Television Match Official</b>	Rugby league use a TMO who is a referee who can review plays by looking at TV footage as an when asked to do so by the on-field referee.
<b>Violence in Sport</b>	Physical acts committed to harm others in sport.

<b>3.2.4.5 Drugs in Sport</b>	
<b>BALCO</b>	Bay area laboratory cooperative.
<b>Doping</b>	The use of banned performance enhancing drugs by athletics competitors.
<b>Erythropoietin (EPO)</b>	A hormone which is naturally produce by the kidneys but can also be artificially produced to increase performance in endurance athletes such as long distance cyclists.
<b>Stimulants</b>	Drugs that induce a temporary improvement in mental and physical function.
<b>Tetrahydrogestrinone (THG)</b>	A banned steroid used to increase power which was tweaked by chemists to make it undetectable by normal tests.
<b>WADA</b>	World Anti-Doping Agency.
<b>Whereabouts System</b>	A system designed to support out of competition testing which requires athletes to supply the details of their whereabouts so that they can be located at any time for random drug testing.

<b>3.2.4.6 Sport and the Law</b>	
<b>Damages</b>	Individuals seeking legal redress and compensation for loss of earnings must prove that they have suffered an actual injury as a result of the deliberate, reckless actions of an opponent.
<b>Duty of Care</b>	A legal obligation imposed on someone if they are responsible for a group of people.
<b>Duty of Care Applied to Coaches</b>	This requires coaches to take such measures as are 'reasonable' in the circumstances to ensure that individuals will be safe to participate in an activity.
<b>In Loco Parentis</b>	'In the place of a parent'. It is the authority parents sign to another adult who will be taking care of their child.
<b>Negligence</b>	Conduct that falls below a 'reasonable person standard' and leads to a breach of the duty of care, which results in foreseeable harm to another.
<b>Restraint of Trade</b>	Action that interferes with free competition in a market. In sport, this might involve a clause in a contract which restricts a person's right to carry out their profession.
<b>Sports Law</b>	The laws, regulations and judicial systems that govern sports and athletes who perform in them.

<b>3.2.4.7 Impact of Commercialisation on Physical Activity and Sport and The Relationship between Sport and the Media</b>	
<b>Commercialisation</b>	The treating of sport as a commodity, involving the buying and selling of assets, with the market as a driving force behind sport.
<b>High Socio-Economic Demographic</b>	A sport played or watched by individuals with high levels of disposal income.
<b>OFCOM</b>	The communications regulator in the UK.
<b>Ring-Fenced</b>	A number of sporting events at national and international level must be available for viewing on TV rather than satellite and subscription channels.

<b>Sponsorship</b>	Provision of funds, money and/or support for a commercial return.
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### 3.2.4.8 The Role of Technology in Physical Activity and Sport

<b>3G Surfaces</b>	Third-generation artificial synthetic grass pitches.
<b>Biomechanics</b>	Used to analyse the sporting impact of body movements.
<b>Calorimetry</b>	Measurement of the heat/energy eliminated or stored in any system.
<b>Compression Clothing</b>	Items such as elasticated leggings, socks or shirts worn to promote recovery by improving circulation. They can decrease the pain suffered from muscle soreness/stiffness and decrease the time for muscle repair.
<b>Data Integrity</b>	Maintaining and ensuring the accuracy and consistency of data over its entire lifetime.
<b>Data Integrity using Sports Analytics</b>	Refers to the validity of data (i.e. it's relevance/meaningfulness).
<b>G Forces</b>	Forces acting on the body as a result of acceleration or gravity.
<b>Game Golf</b>	A lightweight GPS device which captures accurate shot locations and calculates club performance during a round of golf.
<b>GPS</b>	Global positioning system- A space based navigation system that provides location and time information.
<b>Indirect Calorimetry</b>	The measurement of the amount of heat/energy generated in an oxidation reaction by determining the intake or consumption of oxygen by measuring the amount of CO <sub>2</sub> released and translating these quantities into a heat equivalent.
<b>Metabolic Cart</b>	A device which works by attaching headgear to a subject while they breathe a specific amount of oxygen over a period of time.
<b>Notational Match Analysis</b>	Used to record aspects of individual or team performance.
<b>Objective Data</b>	Fact-based information which is measurable and useable.
<b>Performance Analysis</b>	The provision of objective feedback to a performer who is trying to get a positive change in performance.
<b>Qualitative Data</b>	Descriptive and looks at the way people think or feel.
<b>Quantitative Data</b>	Can be written down or measured with numbers.
<b>Reliability</b>	Are consistent/similar results achieved when the test is repeated?
<b>Research</b>	A systematic process of investigation and study carried out with the aim of advancing knowledge.
<b>Resting Energy Expenditure (REE)</b>	The amount of energy, usually expressed in kcal, required for a 2 hour period by the body during rest.
<b>Smart Wearable Fitness and Sports Device</b>	Device that is worn or attached to a performer's body while in use to provide instant feedback on aspects such as distance covered, heart rate etc.
<b>Software and Hardware</b>	Software= Any set of computer machine-readable instructions which direct a computer's processor to perform specific operations. Computer hardware is the physical component of computers.
<b>Sports Analytics</b>	Studying data from sport performances to try to improve performance.
<b>Subjective Data</b>	Data based on personal opinion which is less measurable and often less useable.
<b>Validity</b>	Does the data measure what it sets out/intends to measure?
<b>Video Motion Analysis</b>	A technique used to get information about moving objects from video.