

| Key Word | Definition/Explanation |
|---------------------------------------|---|
| A1: Components of Fitness: | |
| Aerobic Endurance | The ability to exercise continuously for extended periods without tiring |
| Muscular Endurance | Muscular endurance is the ability of a muscle or group of muscles to sustain repeated contractions against a resistance for an extended period of time without tiring |
| Flexibility | Is the range of motion/movement around a joint |
| Speed | The differential rate at which an individual is able to perform a movement or cover a distance in a period of time or how quickly an individual can move |
| Strength | The amount of force a muscle can exert against a resistance |
| Power | The ability to use strength at speed. This helps athletes to jump high, throw far or sprint quickly. |
| Body composition | The percentage of body weight which is fat, muscle or bone. |
| A2: Fitness Tests: | |
| Cooper 12-Minute Run | Maximal running test of aerobic fitness, in which participants try and cover as much distance as they can in 12 minutes |
| Sit-Up Test | Measures muscular endurance of the abdominals and hip-flexor muscles. How many sit-ups can you do in 1 minute |
| Grip Dynamometer Test | Measurement of hand and forearm muscular strength. |
| Sit and Reach Test | A test to measure flexibility (Lower back and hamstring flexibility) |
| Sergeant Jump Test/Vertical Jump Test | A test to measure power (in the legs) – It is a standing jump as high as you can go |
| 30 Meter Sprint Test | A test to measure speed – How fast you can run 30 meters in. |
| A2: Methods of Training | |
| Continuous Training | Any type of physical training that involves activity without rest intervals. Continuous training can be performed at low, moderate, or high exercise intensities – Should last at least 30 minute |
| Fartlek Training | Periods of fast running intermixed with periods of slower running |
| Interval Training | Physical training consisting of alternating periods of high- and low-intensity activity. |
| Circuit Training | A type of sports training that involves sets of different exercises done in order one after the other |
| Core Stability Training | Training to improve the capacity of the muscles of the torso to assist in the maintenance of good posture, balance, etc., especially during movement. |
| Free Weights | A weight, such as a barbell or dumbbell, that is not attached to another structural device and is raised and lowered by use of the hands, arms or legs |
| Resistance Training | Resistance training is any exercise that causes the muscles to contract against an external resistance with the expectation of increases in strength, tone, mass, and/or endurance |

| | |
|--|--|
| Static Stretching | Where you hold a stretch for an extended period of time. |
| Dynamic Stretching | Dynamic stretching is a form of active movement that isn't about holding a stretch but rather taking your body through ranges of motion that will better prepare you for your workout or sporting activity. |
| Proprioceptive Neuromuscular Facilitation (PNF) | A method of stretching muscles to maximize their flexibility that is often performed with a partner or trainer and that involves a series of contractions and relaxations with enforced stretching during the relaxation phase |
| Plyometrics | A form of exercise that involves rapid and repeated stretching and contracting of the muscles, designed to increase strength. |
| CrossFit | A high-intensity fitness programme incorporating elements from several sports and types of exercise. |
| Anaerobic Hill Sprints | Anaerobic strength-training exercise designed to improve muscle strength and efficiency and reduce the risk of injury |
| Sprint Training | Sprint training is an exercise regimen that burns fat, builds muscle, and boosts BMR (Basal Metabolic Rate) – It is a series of sprints |
| A3 – The FITT Principles and Principles of Training | |
| Frequency | How many times participants will train in relation to their current fitness levels and considering progression/overload |
| Intensity | Appropriate measurement scale to determine how hard participants works during each activity – intensity measurement; rate of perceived exertion (RPE), Percentage of Maximum Heart Rate (Maximum Heart Rate = 220 - age); |
| Time | Appropriate length for the session that encourages progressive overload and which is relative to the type of training |
| Type | Component of fitness or method of training participants choose to work on |
| | |
| Specificity | Choosing a training method that develops a specific component of fitness which benefits participation in sport or activity |
| Progressive Overload | Increasing participant workload over a period of time to encourage fitness improvement for their sport or activity |
| Overtraining | Being aware of the risk of injury due to fatigue caused by increasing training workload too quickly |
| Reversibility | Participants not being able to train and therefore decreasing in fitness and having to restart the programme at an appropriate level and having time away from their sport or activity |
| Participant Differences and Needs | Choosing a component of fitness based on fitness test data and relating the chosen fitness method(s) to their sport or activity |
| Training Zone | Working at the correct intensity of maximum heart rate to experience fitness improvement |

| | |
|---|--|
| A4: Understanding Fitness Programmes | |
| Person-Centred Approach | Personal information to aid training programme design (health-screening questionnaire, activity likes and dislikes, availability to exercise) |
| Aims | Overall aim that meets participant's main fitness, sport or activity goal |
| Objectives | How the participant will achieve their main goal |
| Safe Design | An appropriate training method selection and activities to meet main fitness goal |
| Components of a Session Plan | Warm-up Main activities Cool down |
| | |
| B1 - Macronutrients | |
| Carbohydrates | Is a macronutrient that provides energy for the body – It comes in 2 forms |
| Simple Carbohydrates | Fast release carbohydrates that provide energy quickly for a short period of time |
| Complex Carbohydrates | Slow release carbohydrates that provide energy slowly and over a longer period of time |
| Protein | Promotes muscle growth and repairs tissue/micro-tears after sport or activity to allow further training/reduced risk of injury |
| Fats | A natural oily substance occurring in animal bodies |
| Saturated Fats | A type of fat containing a high proportion of fatty acid molecules without double bonds, considered to be less healthy in the diet than unsaturated fat |
| Unsaturated Fats | A type of fat containing a high proportion of fatty acid molecules with at least one double bond, considered to be healthier in the diet than saturated fat. |
| Calories | A measurement of energy in food and drink |
| | |
| B2 - Micronutrients | |
| Vitamin A | Function – maintains normal eyesight to assist hand-eye coordination and positional awareness Natural source – liver, mackerel and milk products |
| Vitamin B1 | Function – converts food into energy to produce energy for exercise Natural source – rice, bran, pork, beef, peas, beans, soya beans |
| Vitamin C | Function – maintains an effective immune system to prevent illness so the performer can train on a regular basis Natural source – most fresh fruit and vegetables |
| Vitamin D | Function – to keep bones, teeth and muscles healthy |

| | |
|---|---|
| | Natural source – oily fish, red meat, liver, egg yolks, fortified foods |
| Potassium | Function – regulates fluid levels to ensure the performer is hydrated during exercise Natural source – bananas, yoghurt, sunflower seeds, potatoes |
| Iron | Function – increases the body’s oxygen-carrying capacity to enhance aerobic performance by delivering oxygen to working muscles Natural source – liver, lean meat, eggs, kidney beans, spinach |
| Calcium | Function – provides increased bone strength, which reduces the risk of injury in contact activities Natural source – milk and dairy products, whole grains, green vegetables. |
| B3 – Hydration | |
| Dehydration | A harmful reduction in the amount of fluid in the body |
| Recommended Daily Intake | The daily intake of water – 2 litres |
| B4 – Improving Nutrition for Sport | |
| Carbohydrate Loading | The process of using carbohydrates before a competition or event to provide lasting energy stores |
| Bowel Emptying | Consuming foods high in fibre (whole grains) and timing of food consumption to aid digestion and empty bowel before exercise. |
| Legal Supplements | Legal supplements that aid an athlete in a sporting event ie vitamin B and vitamin D, protein supplements, pre-workout supplements, glucose-based isotonic drinks, caffeine drinks |
| | |
| C1 – The impact of Motivation on Participation in Sport | |
| Motivation | The internal mechanisms and external stimuli that arouse and direct behaviour. |
| Intrinsic Motivation | Motivation that comes from internal factors |
| Extrinsic Motivation | When external factors provide the motivation to take part in fitness activity, tangible and intangible rewards. |
| C2 – The Impact Self-Confidence can have on Participation in Sport | |
| Self-confidence | The belief that a desired behaviour can be performed. |

| | |
|---|---|
| Positive Reinforcement | Leaders of sport and activity can provide extrinsic motivation through positive reinforcement |
| Positive Environment | Creating a positive environment so that participants feel comfortable exercising |
| Similar Ability | Working with a training partner of similar ability |
| Goal Setting | Setting realistic goals for the fitness session |
| Self-Talk | Positive self-encouragement during the fitness session. |
| C3 – The Impact of Anxiety on Participation in Sport | |
| Anxiety | The level of worry or nervousness a participant experiences. |
| State Anxiety | Anxiety refers to a particular situation, may arise when there is a high-pressure situation and the participant must perform |
| Trait Anxiety | The participant is tense and apprehensive as a character of their personality and therefore anxiety is a consistent feeling for them (the nervous system is continually activated in a number of situations). |
| Somatic Anxiety | Physical effects of anxiety that are brought on by state or trait anxiety - butterflies in the stomach, muscle tension, increased heart rate, increase sweat rate |
| Cognitive Anxiety | Psychological effects of anxiety that are brought on by state or trait anxiety – feeling worried, poor concentration levels, lack of sleep due to overthinking. |
| Familiarisation | Participants can choose music that lowers anxiety levels and motivates them to participate |
| Use of Music | Participants can choose music that lowers anxiety levels and motivates them to participate |
| Ability Levels | Fitness classes, outdoor activities and sports training are based on ability levels and therefore participants feel comfortable participating at the right level for them |
| Pre-Match Team Talk | To reassure players and reduce worry |