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| **What will we be learning?****Paper 1****Section 2 - Physical Training** | **Why this? Why now?****GCSE PHYSICAL EDUCATION****SECTION 2 (Paper 1)**This unit is taught in Year 10 but will also link as synoptic topic to paper 2 in Year 11. There is also a practical element to this unit that will link into the AEP written coursework.You will develop your knowledge and understanding of the components of fitness required for physical activities and sports and how each can be measured. You will also be able to apply knowledge of training principles to personal exercise/training programmes to improve fitness, along with the knowledge of how to optimise training and helping to prevent injury. | **Key Words:**Cardiovascular enduranceStaminaSpeedStrengthPowerAgilityBalanceFlexibilityCoordinationReaction timeNormative dataVo2 MaxMitochondriaMyoglobinFast/ Slow Twitch Muscle FibresAnaerobicAerobicCooper 12 minute runMultistage fitness testRuler drop testIllinois Agility runStork stand testVertical/ Standing Broad jump test30m SprintSit up/ press up testGrip dynamometer test/ 1 rep maxStretchingWarm up/ cool downSPORFITTTraining HazardsPPE |
| **What will we learn?****2.1. Components of Fitness**The components of fitnessDefinitions of each component of fitness Knowledge of suitable tests for each component of fitnessCollection and use of data relating to the components of fitnessApplication of practical examples for each of the components of fitness**2.2. Applying the principles of training**The principles of training - SPORDefinitions of each of the principles of training Application of these principles to practical examples (training programmes)Optimising training - FITT principleDifferent types of training Key components of a warm up and cool downPhysical benefits of a warm up and cool down**2.3 Preventing injury in Physical** Prevention of injuryHazards in various physical activity and sports settings |
| **What opportunities are there for wider study?****Sixth form studies*** Cam Tech Sport
* A level PE

**Careers/degree courses*** Sports science
* Physiotherapy
* PE teacher
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| **How will I be assessed?*** Paper 1 (30%) 60 marks – 1 hour
* AEP Written Coursework
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| **2.1 COMPONENTS OF FITNESS****Components of fitness*** Know the definition and be able to apply practical examples of:
	+ Cardiovascular endurance/stamina – Cooper 12-minute run/ multistage fitness test
	+ Muscular endurance – Press up/ sit up test
	+ Speed – 30m sprint test
	+ Strength – Grip strength dynamometer/ 1 rep maximum
	+ Power – Standing broad jump/ vertical jump test
	+ Agility – Illinois agility test
	+ Balance – Stork stand test
	+ Flexibility – Sit and reach test
	+ Coordination – Wall throw test
	+ Reaction time – Ruler drop test
 | The Mental Health Benefits of Exercise - HelpGuide.org |
| **2.2 APPLYING THE PRINCIPLES OF TRAINING****Principles of training*** Know the following definitions of principles of training and be able to apply them to personal exercise/ training programmes:
	+ Specificity
	+ Overload
	+ Progression
	+ Reversibility

**Optimising training*** Know the definition of the elements of FITT (Frequency, Intensity, Time, Type) and be able to apply these to person exercise/ training programmes.
* Know the different types of training, definitions, and examples of – Continuous, fartlek, interval, circuit, weight, plyometrics, HITT
* Understand the key components of a warm-up and be able to apply examples: pulse raising, mobility, stretching, dynamic movements, skill rehearsal.
* Understand the key components of a cool down and be able to apply examples: low intensity exercise, stretching.
* Know the physical benefits of a warm-up, including effects on: warming up muscles/preparing the body for physical activity, body temperature, heart rate, flexibility of muscles and joints, pliability of ligaments and tendons, blood flow and oxygen to muscles, the speed of muscle contraction.
* Know the physical benefits of a cool down, including: helps the body’s transition back to a resting state, gradually lowers heart rate, gradually lowers temperature, circulates blood and oxygen, gradually reduces breathing rate, increases removal of waste products such as lactic acid, reduces the risk of muscle soreness and stiffness, aids recovery by stretching muscles.
 | Principles of Training - Overload, Specificity, Reversability & Variance |
| **2.3 PREVENTING INJURY IN PHYSCIAL ACTIVITY AND TRAINING****Prevention of injury*** Understand how the risk of injury in physical activity and sport can be minimised and be able to apply examples, including: personal protective equipment, correct clothing/footwear, appropriate level of competition, lifting and carrying equipment safely, use of warm up and cool down.
* Know potential hazards in a range of physical activity and sport settings and be able to apply examples, including: sports hall, fitness centre, playing field, artificial outdoor areas, swimming pool.
 | How to Prevent Sports Injuries - OrthoBethesda |