

Term / Length of Unit	Outline	Assessment	Home Learning	Resources	Year 10 GCSE PE 24 25 Knowledge/Skills End Points	Reading/Literacy	Strategy
Autumn 1 4 Lessons MR	Physical Training How to optimise training and prevent injury	Lesson Tasks Questioning EOU tests Assessed HL tasks	Worksheets Exam Questions Revision tasks	PPTs Exam Questions Worksheets Exam Papers Revision Activities	<ul style="list-style-type: none"> <li>Injury prevention through correct application of the principles of training to avoid overuse injuries; correct application and adherence to the rules of an activity during play/participation; use of appropriate protective clothing and equipment; checking of equipment and facilities before use, all as applied to a range of physical activities and sports.</li> <li>Injuries that can occur in physical activity and sport: concussion, fractures, dislocation, sprain, torn cartilage, and soft tissue injury (strain, tennis elbow, golfers' elbow, abrasions)</li> <li>RICE (rest, ice, compression, elevation)</li> <li>Performance-enhancing drugs (PEDs) and their positive and negative effects on sporting performance and performer lifestyle, including anabolic steroids, beta blockers, diuretics, narcotic analgesics, peptide hormones (erythropoietin (EPO), growth hormones (GH), stimulants, blood doping.</li> </ul> <p>NEW EOU TEST (ADAPT EOU TEST TO CHECK PROGRESS EARLY ON)</p>	<p><u>Subject specific words.</u></p> <p>Injury prevention Adherence to rules Concussion Fractures Dislocation Sprain Torn cartilage Soft tissue injuries RICE PED's</p> <p><u>Academic Vocab:</u> Identify, describe, discuss, explain, justify, state, analyse, evaluate, impact, recommend, compare.</p>	<p>Across all topic areas</p> <p>Visual images</p> <ul style="list-style-type: none"> <li>Handouts</li> <li>Video evidence</li> <li>Diagrams</li> <li>Power points</li> <li>Revision guides</li> <li>Glossary</li> <li>Common words</li> <li>Model answers</li> </ul> <p>Demonstrations</p> <ul style="list-style-type: none"> <li>Practical lessons</li> <li>Active theory</li> <li>Self and peer demonstrations</li> <li>Video evidence</li> </ul> <p>Verbal</p> <ul style="list-style-type: none"> <li>Teacher explanations</li> <li>Peer/buddy teaching</li> <li>Scaffolding with keywords</li> <li>Prompts</li> <li>Revise in 5</li> </ul> <p>Extended questioning</p> <ul style="list-style-type: none"> <li>Home learning</li> <li>FAR</li> <li>End of unit tests</li> <li>Assessed tasks</li> <li>Scenario questions</li> </ul>

Autumn 1 5 Lessons TT	Movement analysis Levers, Planes and Axes				<ul style="list-style-type: none"> <li>• Lever systems, examples of their use in activity and the mechanical advantage they provide in movement.</li> <li>• First, second- and third-class levers and their use in physical activity and sport</li> <li>• Mechanical advantage and disadvantage (in relation to loads, efforts and range of movement) of the body's lever systems and the impact on sporting performance.</li> <li>• Movement patterns using body planes and axes: sagittal, frontal and transverse plane and frontal, sagittal, vertical axes applied to physical activities and sporting actions.</li> <li>• Movement in the sagittal plane about the frontal axis when performing front and back tucked or piked somersaults.</li> <li>• Movement in the frontal plane about the sagittal axis when performing cartwheels.</li> <li>• Movement in the transverse plane about the vertical axis when performing a full twist jump in trampolining.</li> </ul> <p>EOU TEST</p>	Levers, planes axes. First, second- and third-class levers. Mechanical advantage and disadvantage. Sporting examples, Somersault, cartwheel and full twist.	
Autumn 1 & 2 5 Lessons HE	Anatomy & Physiology Skeletal System				<p><b>Skeletal System</b></p> <ul style="list-style-type: none"> <li>• The functions of the skeleton applied to performance in physical activities and sports.</li> <li>• Classification of bones - applied to performance in physical activities and sports. Structure of the skeleton/regions of the vertebral column and their classification and use applied to performance in physical activities and sports.</li> <li>• Classification of joints and their impact on the range of possible movements Movement possibilities at joints dependant on joint classification and examples of physical activity and sporting skills and techniques that utilise these movements in different sporting contexts. The role of ligaments and tendons, and their relevance to participation in physical activity and sport.</li> </ul>	Classification Vertebral column Ligaments Tendons Structure Function Joints and movement	

<p>Autumn 2 5 Lessons MR</p>	<p>Muscular System</p>				<p><b>Muscular System</b></p> <ul style="list-style-type: none"> <li>• Classification and characteristics of muscle types and their roles when participating in physical activity and sport.</li> <li>• Location and role of the voluntary muscular system to work with the skeleton to bring about specific movement during physical activity and sport, and the specific function of each muscle.</li> <li>• Antagonistic pairs of muscles and their ability to create opposing movement at joints to allow physical activities.</li> <li>• Characteristics of fast and slow twitch muscle fibre types</li> <li>• Short-term effects of physical activity and sport on lactate accumulation, muscle fatigue, and the relevance of this to the player/performer</li> <li>• Long-term effects of aerobic and anaerobic training and exercise and the benefits to the muscular-skeletal system</li> <li>• Long-term training effects: able to train for longer and more intensely.</li> <li>• Long-term training effects and benefits: for performance of the muscular-skeletal system: increased bone density, increased strength of ligaments and tendons, muscle hypertrophy, the importance of rest for adaptations to take place, and time to recover before the next training session.</li> </ul> <p>EOU TEST</p> <p><b>The structure and functions of the cardiorespiratory system</b> <b>Cardiovascular system</b></p> <ul style="list-style-type: none"> <li>• Functions of the cardiovascular system applied to performance in physical activities. Structure of the cardiovascular system and their role in maintaining blood circulation during performance in physical activity and sport</li> <li>• Structure of arteries, capillaries and veins and how this relates to function and importance during physical</li> </ul>	<p>Classification Voluntary muscles Function of muscles Antagonistic pairs Fast and slow twitch fibres Short and long term Lactate Fatigue Aerobic and anaerobic Bone density Strength of connective tissue Hypertrophy Adaptions</p>	
<p>Spring 1 6 Lessons TT</p>	<p>Cardiovascular system</p>				<p>Functions Structures Blood vessels Components of the blood</p>		

<p>Spring 1 &amp; 2 6 Lessons HE</p>	<p>Respiratory system</p>				<p>activity and sport in terms of blood pressure, oxygenated, deoxygenated blood and changes due to physical exercise</p> <ul style="list-style-type: none"> <li>• Function and importance of red and white blood cells, platelets and plasma for physical activity and sport</li> </ul> <p>The mechanisms required (vasoconstriction, vasodilation) and the need for redistribution of blood flow (vascular shunting) during physical activities compared to when resting.</p> <p>Short-term effects of physical activity and sport on heart rate, stroke volume and cardiac output, and the importance of this to the player/performer</p> <p>Long-term training effects and benefits: for performance of the cardiovascular system: decreased resting heart rate, faster recovery, increased resting stroke volume and maximum cardiac output, increased size/strength of heart, increased capillarisation, increase in number of red blood cells, drop in resting blood pressure due to more elastic muscular wall of veins and arteries,</p> <p><b>Respiratory system</b></p> <ul style="list-style-type: none"> <li>• Location of main components of respiratory system and their role in movement of oxygen and carbon dioxide into and out of the body</li> <li>• Composition of inhaled and exhaled air and the impact of physical activity and sport on this composition</li> <li>• Structure of alveoli to enable gas exchange and the process of gas exchange to meet the demands of varying intensities of exercise (aerobic and anaerobic)</li> </ul> <ul style="list-style-type: none"> <li>• Vital capacity and tidal volume and change in tidal volume due to physical activity and sport, and the reasons that make the change in tidal volume necessary.</li> <li>• Short-term effects of physical activity and sport on depth and rate of breathing, and the importance of this to the player/performer</li> <li>• Long term effects - increased lung capacity/volume and vital capacity, increased</li> </ul>	<p>Vasodilation and vasoconstriction. Blood shunting Resting HR, Recovery rate, stroke volume, cardiac output, capillarisation,</p> <p>Components Functions Inhalation Exhalation Structures Gas exchange Aerobic and anaerobic Vital capacity Tidal volume Short and long term effects. Alveoli, intercostal muscles Recovery rate, removal of CO<sub>2</sub>, Short and long term effects.</p>	
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YEAR 10 PPE					<p>number of alveoli, increased strength of diaphragm and external intercostal muscles</p> <ul style="list-style-type: none"> <li>• How the respiratory and cardiovascular systems work together to allow participation in, and recovery from, physical activity and sport: oxygen intake into lungs, transfer to blood and transport to muscles, and removal of carbon dioxide.</li> <li>• Interpretation of graphical representations of heart rate, stroke volume and cardiac output values at rest and during exercise</li> <li>• Long-term effects of aerobic and anaerobic training and exercise and the benefits to the Cardiovascular and respiratory systems and performance.</li> <li>• Long-term training effects: able to train for longer and more intensely.</li> </ul> <p>EOU TEST YEAR 10 PPE</p>		
Spring 2 & Summer 1 6 Lessons MR	<p>Physical Training</p> <p>Recap/revisit year 9 SS ONLY 6 LESSONS</p> <p>PAR-Q, Warm-ups and cool down, mental preparation, the use of goal setting (SMART) and Use of Data</p>				<p>How to optimise training and prevent injury</p> <ul style="list-style-type: none"> <li>• The use of a PARQ to assess personal readiness for training and recommendations for amendment to training based on PARQ.</li> </ul> <p>Warm-ups &amp; cool down</p> <ul style="list-style-type: none"> <li>• The purpose and importance of warm-ups and cool downs to effective training sessions and physical activity and sport</li> <li>• Phases of a warm-up and their significance in preparation for physical activity and sport</li> <li>• Activities included in warm-ups and cool downs.</li> </ul> <p>Mental preparation for exercise</p> <ul style="list-style-type: none"> <li>• Mental preparation for performance: warm up, mental rehearsal</li> </ul> <p>Use of goal setting, SMART targets</p> <ul style="list-style-type: none"> <li>• The use of goal setting to improve and/or optimise performance.</li> <li>• Principles of SMART targets (specific, measurable, achievable, realistic, time-bound) and the value of each principle in improving and/or optimising performance</li> </ul>	<p><u>Subject Specific words:</u> Components Fitness testing Principles of training FITT Methods of training Rest &amp; recovery Reversibility Thresholds of training SMART targets</p> <p><u>Academic Vocab:</u> Identify, describe, explain, justify, state, analyse, evaluate, recommend.</p>	

	<p>Health, fitness, and exercise.</p> <p>Components of fitness and fitness testing.</p> <p>Principles and methods of training.</p>				<ul style="list-style-type: none"> <li>• Setting and reviewing targets to improve and/or optimise performance.</li> </ul> <p>The relationship between health and fitness and the role that exercise plays in both.</p> <ul style="list-style-type: none"> <li>• Definitions of fitness, health, exercise and performance and the relationship between them</li> </ul> <p>The components of fitness, benefits for sport and how fitness is measured and improved.</p> <ul style="list-style-type: none"> <li>• Components of fitness and the relative importance of these components in physical activity and sport.</li> <li>• Fitness tests: the value of fitness testing, the purpose of specific fitness tests, the test protocols, the selection of the appropriate fitness test for components of fitness and the rationale for selection</li> </ul> <p>Collection and interpretation of data from fitness test results and analysis and evaluation of these against normative data tables</p> <p>Fitness tests for specific components of fitness:  cardiovascular fitness – Cooper 12-minute tests (run, swim), Harvard Step Test, agility – Illinois agility run test, strength – grip dynamometer, muscular endurance – one minute sit-up, one-minute press-up, speed – 30m sprint, power – vertical jump, flexibility – sit and reach</p> <ul style="list-style-type: none"> <li>• How fitness is improved</li> </ul> <p>The principles of training and their application to personal exercise/training programmes</p> <p><b>Principles of training:</b> Principles, FITT, overtraining, reversibility, thresholds of training (aerobic target zone: 60–80% and anaerobic target zone: 80%–90% calculated using simplified Karvonen formula i.e. <math>(220 - (\text{your age}) = \text{Max HR}; (\text{Max HR}) \times (60\% \text{ to } 80\%) = \text{aerobic training zone}; (\text{Max HR}) \times (80\% \text{ to } 90\%) = \text{anaerobic training zone})</math>)</p> <p>Factors to consider when deciding the most appropriate training methods and training intensities for different physical activities and sports (fitness/sport requirements, facilities available, current level of fitness)</p> <p><b>Training methods</b> for specific components of fitness: continuous, Fartlek, circuit, interval, plyometric,</p>		
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	Aerobic and Anaerobic respiration				<p>weight/resistance. Fitness classes for specific components of fitness, physical activity, and sport (body pump, aerobics, Pilates, yoga, spinning). The advantages and disadvantages of different training methods</p> <p><b>Anaerobic and aerobic exercise</b></p> <ul style="list-style-type: none"> <li>• Energy: the use of glucose and oxygen to release energy aerobically with the production of carbon dioxide and water, the impact of insufficient oxygen on energy release, the by-product of anaerobic respiration (lactic acid)</li> <li>• Energy sources: fats as a fuel source for aerobic activity, carbohydrates as a fuel source for aerobic and anaerobic activity</li> </ul> <p>Use of data</p> <ul style="list-style-type: none"> <li>• Develop knowledge and understanding of data analysis in relation to key areas of physical activity and sport.</li> <li>• Demonstrate an understanding of how data is collected in fitness, physical and sport activities – using both qualitative and quantitative methods.</li> <li>• Present data (including tables and graphs)</li> <li>• Interpret data accurately.</li> <li>• Analyse and evaluate statistical data from their own results and interpret against normative data in physical activity and sport.</li> </ul>		
Summer 1 & 2 10 Lessons MR/TT/HE	PEP				<p>Book computer room – Home learning linked to PEP</p> <p>Should have approx. 4 lessons of Summer 1 plus 10 lessons of Summer 2</p>		