



YEAR 9 GCSE Curriculum Grid



PE

Year/Term	Unit	Intent
Autumn	The Structure and functions of the musculoskeletal system	<p>Students should develop knowledge and understanding of the key body systems and how they impact on health, fitness and performance in physical activity and sport.</p> <ul style="list-style-type: none"> • Bones • Structure of the skeleton • Functions of the skeleton • Structure of a synovial joint • Types of freely movable joints that allow different movements • How joints differ in design to allow certain types of movement at a joint
	Muscular system	<ul style="list-style-type: none"> • Muscles of the body • How the major muscles and muscle groups of the body work antagonistically on the major joints of the skeleton to affect movement in physical activity at the major movable joints
Spring	Respiratory system	<p>Students should develop knowledge and understanding of the key body systems and how they impact on health, fitness and performance in physical activity and sport.</p> <ul style="list-style-type: none"> • The pathway of air • Gaseous exchange • Blood vessels • Mechanics of breathing – the interaction of the intercostal muscles, ribs and diaphragm in breathing • Interpretation of a spirometer trace
	Cardiovascular system	<ul style="list-style-type: none"> • Structure of the heart • The cardiac cycle and the pathway of the blood • Cardiac output, stroke volume and heart rate
	Anaerobic and aerobic exercise	<ul style="list-style-type: none"> • Understanding the terms aerobic exercise (in the presence of oxygen) and anaerobic exercise (in the absence of enough oxygen) • The use of aerobic and anaerobic exercise in practical examples of differing intensities • Excess post-exercise oxygen consumption (EPOC)/oxygen debt as the result of muscles respiring anaerobically during vigorous exercise and producing lactic acid • The recovery process from vigorous exercise
	The short and long term effects of exercise	<ul style="list-style-type: none"> • Immediate effects of exercise (during exercise) • Short-term effects of exercise (up to 36 hours after exercise) • Long-term effects of exercise (months and years of exercising)



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Summer	Lever systems, examples of their use in activity and the mechanical advantage they provide in movement	<p>Students should develop knowledge and understanding of the basic principles of movement and their effect on performance in physical activity and sport.</p> <ul style="list-style-type: none">• First, second and third class lever systems within sporting examples• Mechanical advantage – an understanding of mechanical advantage in relation to the three lever systems• Analysis of basic movements in sporting examples
	Planes and axes of movement	<ul style="list-style-type: none">• Identification of the relevant planes (frontal, transverse, sagittal) and axes (longitudinal, transverse, sagittal) of movement used whilst performing sporting actions
	Demonstrate an understanding of how data are collected – both qualitative and quantitative	<p>Students should develop knowledge and understanding of data analysis in relation to key areas of physical activity and sport</p> <ul style="list-style-type: none">• Quantitative data• Methods for collecting quantitative data• Qualitative data• Methods for collecting qualitative data• Presenting data• Analysis and evaluation of data