

	<u>Topic</u>	<u>Key concept – what do I want the students to learn from this unit?</u>	<u>What knowledge will they acquire?</u>
YEAR 10 OVERVIEW			
Y10 - Half term 1-2	Applied Anatomy and Physiology	In this topic students will develop knowledge and understanding of the key body systems and how they impact on health, fitness and performance in physical activity and sport through the following content.	The functions of the skeleton applied to performance in physical activities and sports. Classification of bones Structure of the Skeletal system Classification of the Joints
Half term 1-2	Applied Anatomy and Physiology	The structure and functions of the musculoskeletal system.	Movement possibilities at joints dependant on joint Classification Role of Ligaments and Tendons Muscle Fibre Types Location and role of the voluntary muscular system to work with the skeleton to bring about specific movement during physical activity and sport. Antagonistic pairs of muscles (agonist and antagonist) to create opposing movement at joints to allow physical activities. Characteristics of fast and slow twitch muscle fibre types
Half Term 3-4	FORMAL ASSESSMENT		
	Applied Anatomy and Physiology	The structure and functions of the cardiorespiratory system	Structure of the cardiovascular system. Structure of arteries, capillaries and veins. The mechanisms required (vasoconstriction, vasodilation) and the need for redistribution of blood flow (vascular shunting) during physical activities compared to when resting
Half Term 3-4	Applied Anatomy and Physiology	The structure and functions of the cardiorespiratory system	Structure and Function of the Respiratory System – Air composition, Volumes, Structure of Lungs
	Applied Anatomy and Physiology	Anaerobic and aerobic exercise	Aerobic and Anaerobic Energy Production. Fats as fuel sources.
Half Term 3-4	Applied Anatomy and Physiology	The short- and long- term effects of exercise	Short-term effects of physical activity and sport on heart rate Short-term effects on lungs + Respiratory and Cardiovascular systems
FORMAL ASSESSMENT			

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Half Term 3-4	Applied Anatomy and Physiology	<p>Movement Analysis</p> <p>In this topic students will develop knowledge and understanding of the basic principles of movement and their effect on performance in physical activity and sport through the following content.</p> <p>Lever systems, examples of their use in activity and the mechanical advantage they provide in movement</p> <p>Planes and axes of movement</p>	<p>First, second and third class lever. Lever Systems. Body planes and axes. Movement patterns - body planes and axes. Definitions of fitness, health, exercise and performance Components of Fitness</p>
Half term 5	Applied Anatomy and Physiology	<p>Physical Training</p> <p>The components of fitness, benefits for sport and how fitness is measured and improved</p> <p>The principles of training and their application to personal exercise/ training programmes</p>	<p>Fitness Tests + Interpretation of Data Planning training using the principles of training. Training methods and training intensities + Training methods and components of fitness Training methods and components of fitness Long-term effects of aerobic and anaerobic training</p>
FORMAL ASSESSMENT			
Half term 6	Applied Anatomy and Physiology	<p>Physical Training</p> <p>How to optimise training and prevent injury</p>	<p>Long-term training effects and benefits + Long-term training effects and benefits: intercostal muscles Long-term training effects and benefits The use of a PARQ to assess personal readiness for training + Injury prevention Injuries can occur in physical activity and sport Performance-enhancing drugs (PEDs) x2 The purpose and importance of warm-ups and cool downs</p>
FORMAL ASSESSMENT			