

<u>Timeline</u>	<u>Topic</u>	Key concepts and knowledge	Skills development	<u>Rationale</u>
Half term	Applied Anatomy and	In this topic students will develop	PPE Principle	To learn about physiological
1-2	Physiology	knowledge and understanding of	Present their work in a neat manner.	structures and their functions.
		the key body systems and how they	Analyse their verbal responses and improve	To learn the fundamentals of
		impact on health, fitness and	them.	describing movement
		performance in physical activity	Use Feedback to help them reflect on their work	
		and sport through the following	and improve it.	
		content.		
		The Structure and Functions of the		
		musculoskeletal system		
		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	PPE Principle Present their work in a neat manner. Analyse their verbal responses and improve them. Use Feedback to help them reflect on their work and improve it.	To learn about physiological structures and their functions. To learn the fundamentals of describing movement
Half Term 3-4	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	PPE Principle Present their work in a neat manner. Analyse their verbal responses and improve them. Use Feedback to help them reflect on their work and improve it.	To learn about physiological structures and their functions and the effect of exercise



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	PPE Principle Present their work in a neat manner. Analyse their verbal responses and improve them. Use Feedback to help them reflect on their work and improve it.	To learn about physiological structures and their functions and the effect of exercise
		Anaerobic and aerobic exercise Aerobic and Anaerobic Energy Production. Fats as fuel sources.	PPE Principle Present their work in a neat manner. Analyse their verbal responses and improve them. Use Feedback to help them reflect on their work and improve it.	Pupils will develop their knowledge and understanding of the short and long-term effects of exercise on muscles and bones, the heart and the respiratory system. They will
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	PPE Principle Present their work in a neat manner. Analyse their verbal responses and improve them. Use Feedback to help them reflect on their work and improve it.	understand the physiological adaptations that can occur due to training. This provides pupils with a rationale for the importance of maintaining an active lifestyle due to the physical benefits to someone's health (paper 2).



Half Term	Applied Anatomy and	Movement Analysis	PPE Principle	Students will develop knowledge
3-4	Physiology		Present their work in a neat manner.	and understanding of the basic
		Lever systems, examples of their	Analyse their verbal responses and improve	principles of movement and
		use in activity and the mechanical	them.	their effect on performance in
		advantage they provide in	Use Feedback to help them reflect on their work	physical activity and sport. Pupil
		movement	and improve it.	need to be able to analyse
				movement and describe it.
		Planes and axes of movement		
		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		



Half term	Applied Anatomy and	Physical Training	PPE Principle	Pupils learn about the factors
5	Physiology		Present their work in a neat manner.	that affect training and training
		The components of fitness, benefits	Analyse their verbal responses and improve	intensity. This will allow them to
		for sport and how fitness is	them.	complete their personal exercise
		measured and improved	Use Feedback to help them reflect on their work	plan.
			and improve it.	
		The principles of training and their		
		application to personal		
		exercise/ training programmes		
		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		



Half term	Applied Anatomy and	Physical Training	PPE Principle	Pupils learn about the factors
6	Physiology		Present their work in a neat manner.	that affect training and training
		How to optimise training and	Analyse their verbal responses and improve	intensity. This will allow them to
		prevent injury	them.	complete their personal exercise
		Long-term training effects and	Use Feedback to help them reflect on their work	plan.
		benefits +	and improve it.	
		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		