



SUBJECT: SPORTS SCIENCE

Year Group	YEAR 10					
Rationale	Elite sport has fully embraced sport science and considers every minute detail of an athlete's training programme, rest time, environment and psychology in the pursuit of excellence. The Cambridge Nationals in Sport Science offer learners the opportunity to study key areas of sport science including anatomy and physiology linked to fitness, health, injury and performance; the science of training and application of training principles, and psychology in sport and sports performance.					
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic/Unit	R043: Anatomy & Function of the body (LO1)	R041: What can cause injury in the body (LO1)	R041: Importance of warm-ups & cool-downs (LO2)	R041: Sports injuries (LO3)	R041: Medical Conditions (LO4)	R041: Reducing the risk of sports injuries (LO1-4)
		R043: How anatomy links to health & fitness (LO2)	R042: How to train the body (LO1)	R042: What is fitness, how to train & test it. (LO2)	R042: Testing & assessing fitness (LO3)	R043: Immediate effects of exercise (LO3)
						R045: Healthy, balanced diet (LO1)
Knowledge	Know the key components of the musculo-skeletal and cardio-respiratory systems, their functions and roles	Understand different factors which influence the risk of injury	Understand how appropriate warm up and cool down routines can help to prevent injury	Know how to respond to injuries within a sporting context	Know how to respond to common medical conditions	See knowledge lists from previous terms
		Understand the importance of the musculo-skeletal and cardio-respiratory systems in health and fitness	Know the principles of training in a sporting context	Know how training methods target different fitness components	Be able to conduct fitness tests	Be able to assess the short-term effects of physical activity on the musculo-skeletal and cardio-respiratory systems
						Know about the nutrients needed for a healthy, balanced diet
Skills	ACQUIRE, DEVELOP & APPLY - Key components of the musculo-skeletal system and its function - Key components of cardio-respiratory system and its function - The role of the musculo-skeletal system in	UNDERSTAND IDENTIFY & EXPLAIN - Extrinsic factors which can influence the risk of injury - Intrinsic factors which can influence the risk of injury	UNDERSTAND, IDENTIFY & EXPLAIN - Physical/psychological benefits of a warm up - Key components of a warm up - Physical/Psychological benefits of a cool down - Key components of a cool down - Specific needs which a warmup and cool down must consider	UNDERSTAND, IDENTIFY & EXPLAIN - Acute and chronic injuries - Types, causes and treatment of common sports injuries - How to respond to injuries and medical conditions in a sporting context - Emergency Action Plans (EAP) in a sporting context	UNDERSTAND, IDENTIFY & EXPLAIN - The symptoms of common medical conditions - How to respond to these common medical conditions	- Revision Techniques - Exam Techniques - Retrieval Practice - Interleaving and Spacing Techniques



	producing movement ▪ The role of the cardio-respiratory system during physical activity	ACQUIRE, DEVELOP & APPLY • Benefits of cardio-respiratory fitness in everyday life • Benefits of muscular strength and flexibility • Benefits of muscular endurance	ACQUIRE, DEVELOP & APPLY • The principles of training in a sporting context	ACQUIRE, DEVELOP & APPLY • Aerobic and anaerobic exercise • The components of fitness • Specific training methods for each of the fitness components	ACQUIRE, DEVELOP & APPLY • Be able to conduct fitness tests • How to interpret the results of fitness tests	ACQUIRE, DEVELOP & APPLY • Different short-term effects of Key components of the musculo-skeletal system and its function • Ways to measure and record the short-term effects of physical activity on the musculo-skeletal and cardiorespiratory Systems
						ACQUIRE, DEVELOP & APPLY • Characteristics of a balanced diet • What nutrients are (e.g. chemicals a living organism needs in order to live and grow) • Food sources of nutrients
Assess-ments	Centre assessed unit out of 20 marks.	Written exam out of 30 marks	Written exam out of 45 marks	Written exam out of 60 marks	Written exam out of 60 marks	Written exam out of 60 marks
		Centre assessed unit out of 10 marks	Centre assessed unit out of 10 marks	Centre assessed unit out of 15 marks	Centre assessed unit out of 15 marks	Centre assessed unit out of 15 marks
						Centre assessed unit out of 8 marks