Big ideas	Sporting injuries, Common medical conditions, Components of fitness, Fitness testing, Training programme, Response of the body to exercise, Technology in sport science	
	Year 10	**Year 11**
Unit 1	**Topic: Components of fitness applied in sport.** Cardiovascular endurance/ stamina Muscular endurance Speed Strength Power Agility Balance Flexibility Coordination Reaction time ***Prior learning**:* Basic understanding of components of fitness E.G Shot putt- Power, practical PE performance (football, rugby, netball, rounders, cricket, athletics, softball, fitness suite) ***Future learning**:* Linking components to sporting examples to improve performance **Topic: Principles of training in sport.** FIIT principles SMART goals SPORT principles Methods of training Aerobic & Anaerobic exercises ***Prior learning**:* *Types of training, aerobic and anaerobic (science lessons),* ***Future learning**:* *Apply a training method to improve sporting performance* *Understand the advantages and disadvantages of each method or training*	**Topic: Different factors which influence the risk and severity of injury** Extrinsic factors and Intrinsic factors Coaching, Instructing & Leading Experience Communication skills Knowledge of techniques/rules/regulations Environment Equipment Individual variables Psychological factors Reasons for aggression ***Prior learning**:* Students will have basic knowledge of psychological factors, which has been accessed through character education lessons (Stress, Anxiety and Confidence). Students will know what level of fitness they are through Core PE & Elite lessons. ***Future learning**:* Students will know what types of nutrients they will need to intake to perform well in their sport and know how to prevent recurring injuries. **Topic: Warm up and cool down routines.** Key components of a warm up & cool down Physiological & Psychological benefits of a warm up & cool down Stretching ***Prior learning**:* Basic warm up and cool down during core and elite PE lessons. ***Future learning**:* Making the warm ups specific to the sport being taught/ played. Including static stretches for a cool down.

		Topic: Different types and causes of sports injuries. Acute injuries Soft tissue Hard tissue Strains Sprains Skin Damage Factures Dislocations Head injuries Chronic injuries Tendonitis Epicondylitis Shin splints Stress fractures ***Prior learning**:* *Basic knowledge of cuts, blisters, grazes & bruises.* ***Future learning**:* *Having a better understanding of different sporting injuries.*
Unit 2	**Topic: Organising and planning a fitness training programme.** Designing a fitness training programme Factors/ considerations to inform planning Applying principles of training Elements of a training programme ***Prior learning**:* Basic Warm up and cool down (core PE and elite) Use of equipment ***Future learning**:* To be able to apply a training session to improve performance for any sport **Topic: Evaluate own performance in planning and delivering a fitness training programme.** Goal setting Training methods Fitness component links correctly to skill test ***Prior learning**:* *Able to give feedback to peers in core and elite lessons. Have an understanding of fitness.* ***Future learning**:* *Develop and encourages Long life participation*	**Topic: Reducing risk, treatment and rehabilitation of sports injuries and medical conditions.** Safety Checks Strategies to help reduce the risk of sports injuries Medical conditions in sporting context Emergency action plan Responses and treatment to injuries SALTAPS on-field assessment routine DRABC Recovery position PRICE therapy X-ray Detect injury Treatment Therapies ***Prior learning**:* *Knowledge of basic hazards before taking part in sport. Rest, ice compression elevation (RICE)* ***Future learning**:* *Learn how to prevent them or recover from a sporting injury.*

		Topic: Causes, symptoms and treatment of medical conditions. Asthma Treatment Diabetes Epilepsy Seizures Cardiac arrest Hypothermia Heat exhaustion Dehydration ***Prior learning****:* Basic knowledge of dehydration symptoms & treatment, causes of heat exhaustion/ symptoms and treatments of heat exhaustion. ***Future learning****:* Learn how to prevent them or recover from a sporting injury.
Unit 3	**Topic: The cardio-respiratory system and how the use of technology supports different types of sports and their intensities.** Heart Pulse rate Lungs Diaphragm Blood vessels Blood pressure Respiratory system Internal respiration Gaseous Exchange ***Prior learning****:* *Science (*cardio-respiratory system), IT ***Future learning****:* *A clearer understanding of the Health benefits* **Topic: The musculo-skeletal system and how the use of technology supports different types of sports and their movements.** Short term effects cardio-respiratory and musculo-skeletal systems Long term effects cardio-respiratory and musculo-skeletal systems Technology in sport - Wearable - Lab - Field	**Topic: Revision** Question analysis Scenario analysis ***Prior learning****: All previously learnt topics as exam is synoptic so encompasses all knowledge* ***Future learning****: A-Level sport, Cambridge Technical Sport and Physical Activity, BTEC National Sport, BTEC National Sport and Exercise Science*

	*Linking to cardio-respiratory and musculo-skeletal systems ***Prior learning***: *Science (*musculo-skeletal system), IT ***Future learning***: *A clearer understanding of the Health benefits* **Topic: Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems.** Heart rate Breathing rate Range of movements of joints ***Prior learning***: *Science (heart, lungs, skeleton)* ***Future learning***: *A clearer understanding of the Health benefits (short)* **Topic: Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems**. Changes in muscle size and strength Changes to resting heart rate Changes to stroke volume Changing to cardiac output Changes in heart rate recovery Changes in flexibility Changes in muscle recovery Changes in DOMs Changes in lactic acid Changes in lung capacity Long term adaptations as a result of performing at different intensities ***Prior learning***: *Science (heart, lungs, skeleton)* ***Future learning***: *A clearer understanding of the Health benefits (long)*	