

Cambridge National in Sport Science

Years 9, 10 & 11

Scheme of Learning – from September 2022; Reviewed 11/09/24 and 09/07/25

Subject Leader: Mr. J. Nuttall

Topics by term	Unit Overview					
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	R181: Applying the principles of training: fitness and how it affects skill performance (PRACTICE)	R181: Applying the principles of training: fitness and how it affects skill performance (PRACTICE)	R181: Applying the principles of training: fitness and how it affects skill performance (PRACTICE)	R181: Applying the principles of training: fitness and how it affects skill performance	R181: Applying the principles of training: fitness and how it affects skill performance	R181: Applying the principles of training: fitness and how it affects skill performance
	<p><u>Vital Prerequisites</u></p> <ul style="list-style-type: none"> Students will need a basic grasp of IT, including use of Word, PowerPoint, Teams and Outlook. English language skills are vital to be able to write coursework comprehensively. A basic understanding of warm ups, cool downs, training principles, components of fitness is desirable – these are taught in Core PE from Year 7. <p><u>Why are we teaching this now?</u></p> <ul style="list-style-type: none"> R180 is synoptic so has to be scheduled last. That leaves R181 or R182 to be taught first. R181 is larger (40%) and therefore it fits the assessment window (May) better. 			<p><u>Vital Prerequisites</u></p> <ul style="list-style-type: none"> Students will need a basic grasp of IT, including use of Word, PowerPoint, Teams and Outlook. English language skills are vital to be able to write coursework comprehensively. A basic understanding of warm ups, cool downs, training principles, components of fitness is desirable – these are taught in Core PE from Year 7. <p><u>Why are we teaching this now?</u></p> <ul style="list-style-type: none"> R180 is synoptic so has to be scheduled last. That leaves R181 or R182 to be taught first. R181 is larger (40%) and therefore it fits the assessment window (May) better. 		

Year 10	R181: Applying the principles of training: fitness and how it affects skill performance	R181: Applying the principles of training: fitness and how it affects skill performance	R181: Applying the principles of training: fitness and how it affects skill performance	R182: The body's response to physical activity and how technology informs this	R182: The body's response to physical activity and how technology informs this	R182: The body's response to physical activity and how technology informs this
	<p style="text-align: center;"><u>Vital Prerequisites</u></p> <ul style="list-style-type: none"> ▪ Students will need a basic grasp of IT, including use of Word, PowerPoint, Teams and Outlook. ▪ English language skills are vital to be able to write coursework comprehensively. ▪ A basic understanding of warm ups, cool downs, training principles, components of fitness is desirable – these are taught in Core PE from Year 7. <p style="text-align: center;"><u>Why are we teaching this now?</u></p> <ul style="list-style-type: none"> ▪ R180 is synoptic so has to be scheduled last. That leaves R181 or R182 to be taught first. R181 is larger (40%) and therefore it fits the assessment window (May) better. 			<p style="text-align: center;"><u>Vital Prerequisites</u></p> <ul style="list-style-type: none"> ▪ Students should now be very familiar with IT software that is required to complete coursework after completing R181. ▪ Having completed R181, students will be more independent and be able to construct and compose their work better. ▪ A basic knowledge of human biology including human anatomy is very important. <p style="text-align: center;"><u>Why are we teaching this now?</u></p> <ul style="list-style-type: none"> ▪ R180 is synoptic so has to be scheduled last. That leaves R181 or R182 to be taught first. R181 is larger (40%) and therefore it fits the assessment window (May) better. R182 then fits the next assessment window (Jan) perfectly too. 		
Year 11	R180: Reducing the risk of sports injuries and dealing with common medical conditions	R180: Reducing the risk of sports injuries and dealing with common medical conditions	R180: Reducing the risk of sports injuries and dealing with common medical conditions	R180: Reducing the risk of sports injuries and dealing with common medical conditions	R180: Reducing the risk of sports injuries and dealing with common medical conditions	n/a
	<p style="text-align: center;"><u>Vital Prerequisites</u></p> <ul style="list-style-type: none"> ▪ Students will need good skills in note taking and revision. ▪ A knowledge of a wide range of sports is really important, including the ability to provide multiple examples across a variety of sporting disciplines. Prior knowledge of first aid, injuries and medical conditions is really useful. <p style="text-align: center;"><u>Why are we teaching this now?</u></p> <ul style="list-style-type: none"> ▪ This unit has been designed by the exam board to be synoptic. As such, R181 and R182 have to be completed first (or at least within the same assessment window). ▪ This is the most challenging unit and also the only examined element of the course. As such, it makes sense to complete it in Year 11 when students have matured. The style of learning also fits in well with their other GCSEs. 					

OCR Cambridge National in Sport Science (J828)

Specification	Big Questions	Topic Area: Main Items and Optional Learning Objectives	Outcomes	Key Terms/ Concepts Literacy Numeracy	Assessment and Homework Tasks	Resources	Personal Development Curriculum Links (SMSC, British Values, PSHE)
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R180: Reducing the risk of sports injuries and dealing with common medical conditions

Topic Area 1 – Different factors which influence the risk and severity of injury

	<p><u>Big Question 1:</u></p> <ul style="list-style-type: none"> How do different extrinsic factors influence the risk and severity of injury? <p><u>Big Question 2:</u></p> <ul style="list-style-type: none"> How do different intrinsic factors influence the risk and severity of injury? 	<ul style="list-style-type: none"> 1.1.1 Types of sports activity 1.1.2 Coaching / instructing / leading 1.1.3 Environment 1.1.4 Equipment 1.2.1 Individual variables 1.2.2 Psychological factors 1.2.3 Reasons for aggression 1.2.4 Mental strategies 	<p>By completing this unit students will prepare as a participant to take part in physical activity in a way which minimises the risk of injuries occurring.</p> <p>It will also prepare them to know how to react to common injuries that can occur during sport and physical activity, and how to recognise the symptoms of some common medical conditions.</p> <p><u>Topics include:</u></p>	<ul style="list-style-type: none"> Extrinsic factors Intrinsic factors Contact sports Non-contact sports Spotters Hypothermia Dehydration Heat exhaustion Veterans Fitness Training Flexibility Ability Technique Nutrition Hydration Psychological factors Motivation Arousal 	<p>This unit is externally assessed. It is synoptic and must be completed at the end of the course. There is a terminal assessment rule in place.</p> <p>The exam is out of 70 marks and students are allowed 1h15m. Section A has 25 marks and is multiple choice or short response questions. Section B has 45 marks and is medium-long response questions. It is worth 40% of the overall grade.</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others</p>
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			<ul style="list-style-type: none"> ▪ Different factors which influence the risk and severity of injury ▪ Warm up and cool down routines ▪ Different types and causes of sports injuries ▪ Reducing risk, treatment and rehabilitation of sports injuries and medical conditions ▪ Causes, symptoms and treatment of medical conditions. 	<ul style="list-style-type: none"> ▪ Anxiety ▪ Stress ▪ Confidence ▪ Aggression ▪ Direct aggression ▪ Channelled aggression ▪ Retaliation ▪ Anabolic steroids ▪ Mental rehearsal ▪ Imagery ▪ Selective attention 	<p>In Year 9 and Year 11, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<p>sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 2 – Warm up and cool down routines

<p><u>Big Question 3:</u></p> <ul style="list-style-type: none"> What are the key components of a warm up? <p><u>Big Question 4:</u></p> <ul style="list-style-type: none"> What are the physiological and psychological benefits of a warm up? <p><u>Big Question 5:</u></p> <ul style="list-style-type: none"> What are the key components and physiological benefits of a cool down? 	<ul style="list-style-type: none"> 2.1 Key components of a warm up 2.2.1 Physiological benefits of a warm up 2.2.2 Psychological benefits of a warm up 2.3 Key components of a cool down 2.4 Physiological benefits of a cool down 	<p>By completing this unit students will prepare as a participant to take part in physical activity in a way which minimises the risk of injuries occurring.</p> <p>It will also prepare them to know how to react to common injuries that can occur during sport and physical activity, and how to recognise the symptoms of some common medical conditions.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Different factors which influence the risk and severity of injury Warm up and cool down routines Different types and causes of sports injuries Reducing risk, treatment and rehabilitation of 	<ul style="list-style-type: none"> Warm up Dynamic stretches Adrenaline Lactic Acid Anaerobic Cool down Maintenance stretches Static stretches Proprioceptive neuromuscular facilitation (PNF) Delayed onset muscle soreness 	<p>This unit is externally assessed. It is synoptic and must be completed at the end of the course. There is a terminal assessment rule in place.</p> <p>The exam is out of 70 marks and students are allowed 1h15m. Section A has 25 marks and is multiple choice or short response questions. Section B has 45 marks and is medium-long response questions. It is worth 40% of the overall grade.</p> <p>In Year 9 and Year 11, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop</p>
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			<p>sports injuries and medical conditions</p> <ul style="list-style-type: none"> ▪ Causes, symptoms and treatment of medical conditions. 		<p>teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>		<p>positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 3 – Different types and causes of sports injuries

<p><u>Big Question 6:</u></p> <ul style="list-style-type: none"> ▪ What are the types and causes of acute injuries? 	<ul style="list-style-type: none"> ▪ 3.1.1 Overview of acute injuries ▪ 3.1.2 Soft tissue and hard tissue injuries ▪ 3.1.3 Strains ▪ 3.1.4 Sprains ▪ 3.1.5 Skin damage 	<p>By completing this unit students will prepare as a participant to take part in physical activity in a way which minimises the risk of injuries occurring.</p>	<ul style="list-style-type: none"> ▪ Acute injuries ▪ Sudden trauma ▪ Soft tissue injuries ▪ Hard tissue injuries ▪ Strains ▪ Sprains 	<p>This unit is externally assessed. It is synoptic and must be completed at the end of the course. There is a terminal assessment rule in place.</p>	<ul style="list-style-type: none"> ▪ ICT Classroom ▪ PowerPoint ▪ Knowledge Organiser ▪ EverLearner platform 	<p>Students develop a sense of enjoyment and fascination in learning about themselves,</p>
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	<p><u>Big Question 7:</u></p> <ul style="list-style-type: none"> What are the types and causes of chronic injuries? 	<ul style="list-style-type: none"> 3.1.6 Fractures 3.1.7 Dislocations 3.1.8 Head injuries 3.2.1 Overview of chronic injuries 3.2.2 Tendonitis 3.2.3 Epicondylitis 3.2.4 Shin splints 3.2.5 Stress fractures 	<p>It will also prepare them to know how to react to common injuries that can occur during sport and physical activity, and how to recognise the symptoms of some common medical conditions.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Different factors which influence the risk and severity of injury Warm up and cool down routines Different types and causes of sports injuries Reducing risk, treatment and rehabilitation of sports injuries and medical conditions Causes, symptoms and treatment of medical conditions. 	<ul style="list-style-type: none"> Ligaments Anterior cruciate ligament Abrasion Cut Laceration Contusion Blister Fracture Open fracture Closed fracture Dislocation Concussion Dementia Alzheimer's disease Chronic injuries Overuse injuries Tendonitis Epicondylitis Shin splints Stress fracture 	<p>The exam is out of 70 marks and students are allowed 1h15m. Section A has 25 marks and is multiple choice or short response questions. Section B has 45 marks and is medium-long response questions. It is worth 40% of the overall grade.</p> <p>In Year 9 and Year 11, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<ul style="list-style-type: none"> Student textbooks Access to Sports Hall 	<p>others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national</p>
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							and global communities. Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.
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Topic Area 4 – Reducing risk, treatment and rehabilitation of sports injuries and medical conditions

<p><u>Big Question 8:</u></p> <ul style="list-style-type: none"> How can you reduce the risk and severity of an injury or medical condition? <p><u>Big Question 9:</u></p> <ul style="list-style-type: none"> What are common responses and treatments to medical conditions? 	<ul style="list-style-type: none"> 4.1.1 Safety checks 4.1.2 Strategies to help reduce the risk of sports injuries and medical conditions 4.1.3 Emergency Action Plans (EAP) 4.2.1 SALTAPS 4.2.2 DRABC 4.2.3 Recovery position 4.2.4 PRICE 4.2.5 Use of 	<p>By completing this unit students will prepare as a participant to take part in physical activity in a way which minimises the risk of injuries occurring.</p> <p>It will also prepare them to know how to react to common injuries that can occur during sport and physical activity, and how to recognise the symptoms of some</p>	<ul style="list-style-type: none"> Hazard Risk Risk assessment Medical Screening Electrocardiogram (ECG) Emergency action plan (EAP) SALTAPS Acronym DRABC Recovery position PRICE Massage Ultrasound Electrotherapy 	<p>This unit is externally assessed. It is synoptic and must be completed at the end of the course. There is a terminal assessment rule in place.</p> <p>The exam is out of 70 marks and students are allowed 1h15m. Section A has 25 marks and is multiple choice or short response questions. Section B has 45 marks and is medium-</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their</p>
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- X-rays to detect injury
- 4.2.6 Overview of treatments/therapies
- 4.2.7 Different psychological effects of dealing with injuries and medical conditions including treatment and long-term rehabilitation

common medical conditions.

Topics include:

- Different factors which influence the risk and severity of injury
- Warm up and cool down routines
- Different types and causes of sports injuries
- Reducing risk, treatment and rehabilitation of sports injuries and medical conditions
- Causes, symptoms and treatment of medical conditions.

- Hydrotherapy
- Cryotherapy
- Contrast therapy
- Painkillers
- Analgesics
- Ibuprofen
- Support
- Kinesiology tape
- Neoprene
- Bandaging
- Immobilisation
- Cast
- Splint
- Sling

long response questions. It is worth 40% of the overall grade.

In Year 9 and Year 11, students will complete Week 3 termly assessments and end of topic tests (EOTTs).

Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.

learning, and showcase a willingness to reflect on their own and others sporting experiences.

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							and if you can discipline yourself to train and apply yourself.
Topic Area 5 – Causes, symptoms and treatment of medical conditions							
<p><u>Big Question 10:</u></p> <ul style="list-style-type: none"> What are the common causes, symptoms and treatments of medical conditions? 	<ul style="list-style-type: none"> 5.1 Asthma 5.2 Diabetes 5.3 Epilepsy 5.4 Sudden Cardiac Arrest (SCA) 5.5 Other medical conditions <ul style="list-style-type: none"> 5.5.1 Overview of hypothermia 5.5.5 Overview of heat exhaustion 5.5.9 Overview of dehydration 	<p>By completing this unit students will prepare as a participant to take part in physical activity in a way which minimises the risk of injuries occurring.</p> <p>It will also prepare them to know how to react to common injuries that can occur during sport and physical activity, and how to recognise the symptoms of some common medical conditions.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Different factors which influence the risk and severity of injury Warm up and cool down routines 	<ul style="list-style-type: none"> Asthma Inhaler Nebuliser Glucose Insulin Diabetes Ketones Diabetic ketoacidosis (DKA) Insulin-dependent Insulin-resistant Hypoglycaemia Hyperglycaemia Epilepsy Seizures Triggers Fatigue Anti-epileptic drugs (AEDs) Ketogenic diet Sudden cardiac arrest (SCA) Comotio cordis Electrolytes 	<p>This unit is externally assessed. It is synoptic and must be completed at the end of the course. There is a terminal assessment rule in place.</p> <p>The exam is out of 70 marks and students are allowed 1h15m. Section A has 25 marks and is multiple choice or short response questions. Section B has 45 marks and is medium-long response questions. It is worth 40% of the overall grade.</p> <p>In Year 9 and Year 11, students will complete Week 3 termly assessments</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a</p>	

			<ul style="list-style-type: none"> ▪ Different types and causes of sports injuries ▪ Reducing risk, treatment and rehabilitation of sports injuries and medical conditions ▪ Causes, symptoms and treatment of medical conditions. 		<p>and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>		<p>willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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R181: Applying the principles of training: fitness and how it affects skill performance

Topic Area 1 – Components of fitness applied in sport

<p><u>Big Question 1:</u></p> <ul style="list-style-type: none"> How are components of fitness relevant to different sports? <p><u>Big Question 2:</u></p> <ul style="list-style-type: none"> Can you justify why different components of fitness are relevant for different sports? <p><u>Big Question 3:</u></p> <ul style="list-style-type: none"> What fitness tests are used for each component of fitness? 	<ul style="list-style-type: none"> 1.1.1 The definition of, and suitable fitness tests used, to measure each component of fitness 1.1.2 Fitness component requirements of sports 1.1.3 Justification of most important components of fitness 1.2.1 Fitness tests for components of fitness 1.2.2 Collect and interpret the results of fitness tests 1.2.3 Strengths and areas of improvement of 	<p>By completing this unit, students will conduct a range of fitness tests, understand what they test and their advantages and disadvantages.</p> <p>Students will also learn how to design, plan and evaluate a fitness training programme.</p> <p>They will then interpret the data collected from these fitness tests and learn how best to feed this back.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Components of fitness applied in sport Principles of training in sport Organising and planning a fitness training programme Evaluate own performance in 	<ul style="list-style-type: none"> Cardiovascular endurance Stamina Muscular endurance Aerobic Speed Strength Power Agility Balance Flexibility Co-ordination Reaction time Maximum oxygen uptake (VO2 Max) Protocol Validity Reliability Maximal tests Sub-maximal tests Questionnaire PAR-Q 	<p>This is a mandatory, non-examined assessed (NEA) unit. Students will be entered for assessed in June of Year 10.</p> <p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through five practical tasks, each of which needs to be evidenced. It is out of 80 marks in total and is worth 40% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall (for multistage fitness test and training methods) Access to free weights. Fitness testing equipment: sit and reach box, grip dynamometer, benches for step test, stop watches, metronome, vertical jump board, skinfold callipers. 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities</p>
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	<p><u>Big Question 4:</u></p> <ul style="list-style-type: none"> Can you apply the components of fitness to a skilled performance? 	<p>each fitness component</p> <ul style="list-style-type: none"> 1.3.1 Devising skill based fitness tests 1.3.2 Conduct the tests devised 1.3.3 How to record results of skill based fitness tests <p>1.3 Application of components of fitness to skill performance</p>	<p>planning and delivery of a fitness training programme.</p>		<p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<ul style="list-style-type: none"> Bioelectrical Impedance Analysis machine, heart rate monitor Rating of Perceived Exertion Scale Published normative data tables for interpretation of fitness test results. Resources for reviewing performance, such as recording equipment. 	<p>that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 2 – Principles of training in sport

	<p><u>Big Question 5:</u></p> <ul style="list-style-type: none"> What are the principles of training? 	<ul style="list-style-type: none"> 2.1.1 The definition and application of each principle of training and goal setting 	<p>By completing this unit, students will conduct a range of fitness tests, understand what they test and their</p>	<ul style="list-style-type: none"> SPOR Specificity Progression Overload Reversibility FITT 	<p>This is a mandatory, non-examined assessed (NEA) unit. Students will be entered for assessed in June of Year 10.</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser 	<p>Students develop a sense of enjoyment and fascination in</p>
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	<p><u>Big Question 6:</u></p> <ul style="list-style-type: none"> What are SMART goals? 	<ul style="list-style-type: none"> 2.1.1 The definition and application of each principle of training and goal setting 	<p>advantages and disadvantages.</p> <p>Students will also learn how to design, plan and evaluate a fitness training programme.</p>	<ul style="list-style-type: none"> SMART Continuous training Aerobic training zone Fartlek training Interval training Work-to-rest ratio 	<p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p>	<ul style="list-style-type: none"> EverLearner platform Student textbooks Access to Sports Hall (for multistage fitness test and training methods) 	<p>learning about themselves, others and the sporting world around them.</p>
	<p><u>Big Question 7:</u></p> <ul style="list-style-type: none"> What are methods of training and their advantages/disadvantages? 	<ul style="list-style-type: none"> 2.2.1 Advantages and disadvantages of the structure of each training method 2.2.2 Aerobic exercise 2.2.3 Anaerobic exercise 	<p>They will then interpret the data collected from these fitness tests and learn how best to feed this back.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Components of fitness applied in sport Principles of training in sport Organising and planning a fitness training programme Evaluate own performance in planning and delivery of a fitness training programme. 	<ul style="list-style-type: none"> Circuit training Plyometric training Eccentric contraction Concentric contraction Resistance training Repetition Hypertrophy High-intensity interval training (HIIT) 	<p>The unit is assessed through five practical tasks, each of which needs to be evidenced. It is out of 80 marks in total and is worth 40% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<ul style="list-style-type: none"> Access to free weights. Fitness testing equipment: sit and reach box, grip dynamometer, benches for step test, stop watches, metronome, vertical jump board, skinfold callipers. Bioelectrical Impedance Analysis machine, heart rate monitor Rating of Perceived Exertion Scale 	<p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the</p>

						<ul style="list-style-type: none"> Published normative data tables for interpretation of fitness test results. Resources for reviewing performance, such as recording equipment. 	<p>local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 3 – Organising and planning a fitness training programme

<p><u>Big Question 8:</u></p> <ul style="list-style-type: none"> What factors should you consider when designing a fitness training programme? <p><u>Big Question 9:</u></p> <ul style="list-style-type: none"> How do you apply the principles of training to a fitness training programme? 	<ul style="list-style-type: none"> 3.1.1 Considerations to inform planning 3.1.2 Applying principles of training 	<p>By completing this unit, students will conduct a range of fitness tests, understand what they test and their advantages and disadvantages.</p> <p>Students will also learn how to design, plan and evaluate a fitness training programme.</p> <p>They will then interpret the data collected from these fitness tests and</p>	<ul style="list-style-type: none"> One rep max Adaptability Objective measures 	<p>This is a mandatory, non-examined assessed (NEA) unit. Students will be entered for assessed in June of Year 10.</p> <p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through five practical</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall (for multistage fitness test and training methods) 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity</p>
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	<p><u>Big Question 10:</u></p> <ul style="list-style-type: none"> How do you plan a fitness training programme? <p><u>Big Question 11:</u></p> <ul style="list-style-type: none"> How do you record your results from a fitness training programme? 	<p>3.2.1 Elements of training programmes</p> <p>3.2.2 How to monitor progress and adapt a programme</p> <p>3.3 Recording results from fitness training programme</p> <p>3.3.1 Post programme tests</p> <p>3.3.2 Achievement recognised</p>	<p>learn how best to feed this back.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Components of fitness applied in sport Principles of training in sport Organising and planning a fitness training programme Evaluate own performance in planning and delivery of a fitness training programme. 		<p>tasks, each of which needs to be evidenced. It is out of 80 marks in total and is worth 40% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<ul style="list-style-type: none"> Access to free weights. Fitness testing equipment: sit and reach box, grip dynamometer, benches for step test, stop watches, metronome, vertical jump board, skinfold callipers. Bioelectrical Impedance Analysis machine, heart rate monitor Rating of Perceived Exertion Scale Published normative data tables for interpretation of fitness test results. Resources for reviewing performance, such as 	<p>in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if</p>
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						recording equipment.	you work hard and if you can discipline yourself to train and apply yourself.
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Topic Area 4 – Evaluate own performance in planning and delivery of a fitness training programme

<p><u>Big Question 12:</u></p> <ul style="list-style-type: none"> What are the strengths and areas for improvement for your fitness training programme? 	<ul style="list-style-type: none"> 4.1 Effectiveness of a fitness training programme 	<p>By completing this unit, students will conduct a range of fitness tests, understand what they test and their advantages and disadvantages.</p> <p>Students will also learn how to design, plan and evaluate a fitness training programme.</p> <p>They will then interpret the data collected from these fitness tests and learn how best to feed this back.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> Components of fitness applied in sport Principles of training in sport 		<p>This is a mandatory, non-examined assessed (NEA) unit. Students will be entered for assessed in June of Year 10.</p> <p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through five practical tasks, each of which needs to be evidenced. It is out of 80 marks in total and is worth 40% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall (for multistage fitness test and training methods) Access to free weights. Fitness testing equipment: sit and reach box, grip dynamometer, benches for step test, stop watches, 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p>
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			<ul style="list-style-type: none"> ▪ Organising and planning a fitness training programme ▪ Evaluate own performance in planning and delivery of a fitness training programme. 		<p>and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<p>metronome, vertical jump board, skinfold callipers.</p> <ul style="list-style-type: none"> ▪ Bioelectrical Impedance Analysis machine, heart rate monitor ▪ Rating of Perceived Exertion Scale ▪ Published normative data tables for interpretation of fitness test results. ▪ Resources for reviewing performance, such as recording equipment. 	<p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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R182: The body's response to physical activity and how technology informs this

Topic Area 1 – The cardio-respiratory system and how the use of technology supports different types of sports and their intensities

<p><u>Big Question 1:</u></p> <ul style="list-style-type: none"> What is the function and role of the cardio-respiratory system? <p><u>Big Question 2:</u></p> <ul style="list-style-type: none"> How is technology used to inform us about the cardio-respiratory system? 	<ul style="list-style-type: none"> 1.1 Components, function and role of cardio-respiratory system during exercise <ul style="list-style-type: none"> 1.1.1 Components 1.1.2 Function and role 1.2.1 Technology that can inform how the cardio-respiratory system is responding whilst performing in sport during warm up and performance 1.2.2 Information that technology can give sports performers on their long-term participation in physical activity 1.2.3 The benefits and drawbacks of sports technology to the sports performer 	<p>By completing this unit, students will gain understanding of how both the cardio-respiratory and musculo-skeletal systems provide you with the energy and movements needed to keep you exercising and in turn how exercise helps develop both systems.</p> <p>Students will also learn about relevant technology and how this assists us in measuring changes in these systems.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> The cardio-respiratory system and how the use of technology supports different types of sports and their intensities 	<ul style="list-style-type: none"> Chambers Atria Ventricles Valves Deoxygenated Oxygenated Arteries Capillaries Alveoli Carbon dioxide Veins Trachea Lungs Bronchi Bronchioles Diaphragm Heart rate Radial pulse Carotid pulse Vasoconstriction Vasodilation Vascular shunt mechanism Cardiac output Stroke volume Systolic blood pressure Diastolic blood pressure Inhalation 	<p>This is an optional, non-examined assessed (NEA) unit. Students will be entered for assessed in January of Year 11.</p> <p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through three practical tasks, each of which needs to be evidenced. It is out of 40 marks in total and is worth 20% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities</p>
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			<ul style="list-style-type: none"> ▪ The musculo-skeletal system and how the use of technology supports different types of sports and their movements ▪ Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems ▪ Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems. 	<ul style="list-style-type: none"> ▪ Exhalation ▪ Intercostal muscles ▪ Internal respiration ▪ Diffusion ▪ Technology ▪ Wearable technology ▪ Laboratory-based technology ▪ Field-based technology ▪ Sphygmomanometer ▪ Spirometry traces ▪ Spirometer ▪ Vital capacity ▪ Pulse oximeter 	Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.		<p>that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 2 – The musculo-skeletal system and how the use of technology supports different types of sports and their movements

<p><u>Big Question 3:</u></p> <ul style="list-style-type: none"> ▪ What are the components and role of the musculo-skeletal system? 	<ul style="list-style-type: none"> ▪ 2.1 The components and role of the musculo-skeletal system in producing movement 	By completing this unit, students will gain understanding of how both the cardio-respiratory and musculo-skeletal	<ul style="list-style-type: none"> ▪ Ribcage ▪ Clavicle ▪ Scapula ▪ Humerus ▪ Radius ▪ Ulna 	This is an optional, non-examined assessed (NEA) unit. Students will be entered for assessed in January of Year 11.	<ul style="list-style-type: none"> ▪ ICT Classroom ▪ PowerPoint ▪ Knowledge Organiser 	Students develop a sense of enjoyment and fascination in
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	<p><u>Big Question 4:</u></p> <ul style="list-style-type: none"> How is technology used to inform us about the musculo-skeletal system? 	<ul style="list-style-type: none"> 2.1.2 The role of the components in producing the types of movement 2.2.1 Technology that can inform how the musculo-skeletal system is responding to short- and long-term participation in physical activity 2.2.2 The benefits and drawbacks of this technology to the sports performer 	<p>systems provide you with the energy and movements needed to keep you exercising and in turn how exercise helps develop both systems.</p> <p>Students will also learn about relevant technology and how this assists us in measuring changes in these systems.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> The cardio-respiratory system and how the use of technology supports different types of sports and their intensities The musculo-skeletal system and how the use of technology supports different types of sports and their movements Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems 	<ul style="list-style-type: none"> Cranium Ribs Sternum Vertebrae Femur Tibia Fibula Patella Deltoids Trapezius Latissimus dorsi Pectorals Biceps Triceps Abdominals Gluteals Hamstrings Quadriceps Gastrocnemius Soleus Synovial joint Hinge joint Gliding joint Pivot joint Connective tissue Cartilage Tendons Flexion Extension Abduction Adduction Rotation Circumduction Electromyography (EMG) 	<p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through three practical tasks, each of which needs to be evidenced. It is out of 40 marks in total and is worth 20% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<ul style="list-style-type: none"> EverLearner platform Student textbooks Access to Sports Hall 	<p>learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the</p>
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			<ul style="list-style-type: none"> Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems. 				<p>local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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Topic Area 3 – Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

<p><u>Big Question 5:</u></p> <ul style="list-style-type: none"> What are the short-term effects of exercise on the cardio-respiratory system? <p><u>Big Question 6:</u></p> <ul style="list-style-type: none"> What are the short-term effects of exercise on the 	<ul style="list-style-type: none"> 3.1 The different short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems 3.1 The different short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems 	<p>By completing this unit, students will gain understanding of how both the cardio-respiratory and musculo-skeletal systems provide you with the energy and movements needed to keep you exercising and in turn how exercise helps develop both systems.</p> <p>Students will also learn about relevant</p>	<ul style="list-style-type: none"> Anticipatory rise ROM 	<p>This is an optional, non-examined assessed (NEA) unit. Students will be entered for assessed in January of Year 11.</p> <p>Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.</p> <p>The unit is assessed through three</p>	<ul style="list-style-type: none"> ICT Classroom PowerPoint Knowledge Organiser EverLearner platform Student textbooks Access to Sports Hall 	<p>Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.</p> <p>Students are encouraged to use their imagination and creativity</p>
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	<p>musculo-skeletal system?</p>		<p>technology and how this assists us in measuring changes in these systems.</p> <p><u>Topics include:</u></p> <ul style="list-style-type: none"> ▪ The cardio-respiratory system and how the use of technology supports different types of sports and their intensities ▪ The musculo-skeletal system and how the use of technology supports different types of sports and their movements ▪ Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems ▪ Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems. 		<p>practical tasks, each of which needs to be evidenced. It is out of 40 marks in total and is worth 20% of the overall grade.</p> <p>In Year 9, students will complete Week 3 termly assessments and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>	<p>in their learning, and showcase a willingness to reflect on their own and others sporting experiences.</p> <p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if</p>
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you work hard and if you can discipline yourself to train and apply yourself.

Topic Area 4 – Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

Big Question 7:

- What are the long-term effects of exercise on the cardio-respiratory system?

Big Question 8:

- What are the long-term effects of exercise on the musculo-skeletal system?

- 4.1 The long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

- 4.1 The long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems

By completing this unit, students will gain understanding of how both the cardio-respiratory and musculo-skeletal systems provide you with the energy and movements needed to keep you exercising and in turn how exercise helps develop both systems.

Students will also learn about relevant technology and how this assists us in measuring changes in these systems.

Topics include:

- The cardio-respiratory system and how the use of technology

- Fast twitch fibres
- Slow twitch fibres
- Bradycardia
- Goniometer
- Lung capacity
- Tidal volume
- Bone density
- Capillarisation
- Heart disease
- Heart attack

This is an optional, non-examined assessed (NEA) unit. Students will be entered for assessed in January of Year 11.

Assessment is via an OCR-set assignment, which is marked by teachers and moderated by OCR examiners.

The unit is assessed through three practical tasks, each of which needs to be evidenced. It is out of 40 marks in total and is worth 20% of the overall grade.

In Year 9, students will complete Week 3 termly assessments

- ICT Classroom
- PowerPoint
- Knowledge Organiser
- EverLearner platform
- Student textbooks
- Access to Sports Hall

Students develop a sense of enjoyment and fascination in learning about themselves, others and the sporting world around them.

Students are encouraged to use their imagination and creativity in their learning, and showcase a willingness to reflect on their own and others sporting experiences.

			<p>supports different types of sports and their intensities</p> <ul style="list-style-type: none"> ▪ The musculo-skeletal system and how the use of technology supports different types of sports and their movements ▪ Short-term effects of exercise on the cardio-respiratory and musculo-skeletal systems ▪ Long-term effects of exercise on the cardio-respiratory and musculo-skeletal systems. 		<p>and end of topic tests (EOTTs).</p> <p>Homework is set on TheEverLearner platform where teachers can monitor student knowledge and progress. It is recommended that students do 30 minutes of homework for every hour they spend in class.</p>		<p>This course encourages a willingness to participate in sporting opportunities that will help to develop positive attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities.</p> <p>Students are taught that the only way you can achieve in sport to a high standard is if you work hard and if you can discipline yourself to train and apply yourself.</p>
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