



Year 9 GCSE Specification

Student Content	What students need to learn	
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.		
<i>Students will have one theory lesson every other week</i>		
Topic 1 An introduction to the structure of the skeletal system	1.1 The function and classification of the skeleton applied to performance in physical activity and sport: 1. Protection: Of vital organs 2. Movement: Muscle attachment and movement Long (Leverage/Movement), Short (Weight Bearing), Flat (Protection), Irregular (Protection) How they are applied to performance in physical activity and sport on the skeletal system: Increased bone density, increased strength of ligaments and tendons.	Lesson 1 PowerPoint – Year 9 GCSE 1 Worksheet 1 Task 1 Homework 1
	1.2 Structure of the skeleton & Classification of joints: Cranium, Clavicle, Scapula Ribs, Sternum, Humerus, Radius, Ulna, Carpals, Metacarpals, Phalanges, Pelvis, Femur, Patella, Tibia, Fibula, Tarsals, Metatarsals, Phalanges	Lesson 2 PowerPoint – Year 9 GCSE 2 Worksheet 2 Task 2 Homework 2
	1.3 Introduction to joints, classification of joints & movements possible: 1. The role of tendons and ligaments 2. Hinge – Elbow and Knee Ball and socket – Shoulder and hip 3. Range of movement available at the joint Long term effects and benefits for the skeletal system from participation in physical activity and sport:	Lesson 3 PowerPoint – Year 9 GCSE 3 Worksheet 3 Task 3 Homework 3
Topic 2 An introduction to the structure of the muscular system	2.1 Location the voluntary muscular system to work with the skeleton to bring about specific movement during physical activity and sport (deltoid, biceps, triceps, pectoralis major, latissimus dorsi, external obliques, hip flexors, gluteus maximus, quadriceps, hamstrings, gastrocnemius and tibialis anterior)	Lesson 4 PowerPoint – Year 9 GCSE 4 Worksheet 4 Task 4 Homework 4
	2.2 Antagonistic pairs of muscles (agonist and antagonist) to create opposing movement at joints to allow physical activities.	Lesson 5 PowerPoint – Year 9 GCSE 5 Worksheet 5 Task 5 Homework 5



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	(for example the bicep/triceps, flexion/extension)The role of each specific muscle and the movement during physical activity and sport.	
	2.3 Long-term training effects and benefits for performance of the muscular system: Muscular hypertrophy, the importance of rest for adaptations to take place, and time to recover before the next training session	Lesson 6 PowerPoint – Year 9 GCSE 6 Worksheet 6 Task 6 Homework 6
Topic 3 An introduction to the structure of the cardiovascular system	3.1 Functions of the cardiovascular system applied to performance in physical activities: transport of oxygen, carbon dioxide, waste products and nutrients.	Lesson 7 PowerPoint – Year 9 GCSE 7 Worksheet 7 Task 7 Homework 7
	3.2 Long-term training effects and benefits: for performance of the cardiovascular system: Decreased resting heart rate Faster recovery increased size / strength of heart	Lesson 8 PowerPoint – Year 9 GCSE 8 Worksheet 8 Task 8 Homework 8
Topic 4 An introduction to the structure of the respiratory system	4.1 Location of main components of respiratory system (lungs, bronchi, bronchioles, alveoli, diaphragm) and their role in movement of oxygen and carbon dioxide into and out of the body. Structure of alveoli to enable gas exchange.	Lesson 9 PowerPoint – Year 9 GCSE 9 Worksheet 9 Task 9 Homework 9
	4.2 Long-term training effects and benefits: for performance of the respiratory system: Increased lung capacity/volume and vital capacity, increased number of alveoli and an increased strength of the diaphragm.	Lesson 10 PowerPoint – Year 9 GCSE 10 Worksheet 10 Task 10 Homework 10
Topic 5 An introduction to physical training	5.1 Fitness tests: the value of fitness testing and fitness tests for specific components of fitness: Cardiovascular fitness – Cooper 12 minute tests (run, swim) <ol style="list-style-type: none"> 1. Harvard Step Test, agility – Illinois agility run test, Strength – grip dynamometer 2. Muscular endurance – one minute sit-up, one-minute press-up, speed – 30m sprint, 3. Power – vertical jump, 4. Flexibility – sit and reach. 	Lesson 11 PowerPoint – Year 9 GCSE 11 Worksheet 11 Task 11 Homework 11



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	5.2 Planning training using the principles of training: <ol style="list-style-type: none"> 1. Individual needs 2. Specificity 3. Progressive overload, 4. FITT (frequency, intensity, time, and type) 5. Overtraining 6. Reversibility 	Lesson 12 PowerPoint – Year 9 GCSE 12 Worksheet 12 Task 12 Homework 12
	5.3 The use of different training methods for specific components of fitness, physical activity and sport: <ol style="list-style-type: none"> 1. Continuous 2. Fartlek 3. Circuit 4. Interval 5. Weight/resistance 	Lesson 13 PowerPoint – Year 9 GCSE 13 Worksheet 13 Task 13 Homework 13
Topic 6 An introduction on performance enhancing drugs in sport	6.1 Performance-enhancing drugs and the effects on sporting performance: <ol style="list-style-type: none"> 1. Anabolic steroids 2. Beta blockers 3. Diuretics 4. Narcotic analgesics 	Lesson 14 PowerPoint – Year 9 GCSE 14 Worksheet 14 Task 14 Homework 14
	6.2 Performance-enhancing drugs and the effects on sporting performance: <ol style="list-style-type: none"> 1. Peptide hormones (erythropoietin (EPO)) 2. Growth hormones (GH)) 3. Stimulants 4. Blood doping 	Lesson 15 PowerPoint – Year 9 GCSE 15 Worksheet 15 Task 15 Homework 15
Topic 7 An introduction to energy use and diet	7.1 The nutritional requirements of a balanced diet to maintain a healthy lifestyle and optimise specific performances in physical activity and sport: The role and importance of macronutrients (carbohydrates, proteins and fats) for performers/players in physical activity and sport.	Lesson 16 PowerPoint – Year 9 GCSE 16 Worksheet 16 Task 16 Homework 16
	7.2 The role and importance of micronutrients (vitamins and minerals), water and fibre for performers/players in physical activities and sports.	Lesson 17 PowerPoint – Year 9 GCSE 17 Worksheet 17 Task 17 Homework 17



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