

**APPLIED ANATOMY AND PHYSIOLOGY (YEAR 10)**

**PAPER 1: THE HUMAN BODY AND MOVEMENT IN PHYSICAL ACTIVITY AND SPORT**

1. Bones and the functions of the skeleton
2. Structure of the skeletal system/functions of the skeleton
3. Muscles of the body
4. Structure of a synovial joint
5. Types of freely moveable joints that allow different movements
6. How joints differ in design to allow certain types of movement
7. How the major muscles and muscle groups of the body work antagonistically on the major joints of the skeleton to affect movement in physical activity at the major movable joints
8. First, second and third class levers
9. Mechanical advantage
10. Analysis of basic movements in sporting examples
11. Planes and Axes
12. The pathway of air and gaseous exchange
13. Blood vessels
14. Structure of the heart and the cardiac cycle (pathway of blood)
15. Cardiac output and stroke volume (including the effects of exercise)
16. Mechanics of breathing and interpretation of a spirometer trace
17. Aerobic and anaerobic exercise. Recovery/EPOC
18. The short and long term effects of exercise
19. Relationship between health and fitness
20. The components of fitness. Linking sports and activities to the required components of fitness
21. Reasons for and limitations of fitness testing
22. Measuring the components of fitness and demonstrating how data is collected
23. The principles of training and overload
24. Applications of the principles of training
25. Types of training including an introduction to the analysis and evaluation task
26. Type of training (continued) with reference to the advantages and disadvantages of using these types for different sports
27. Calculating intensity
28. Considerations to prevent injury
29. High altitude training and seasonal aspects
30. Warming up and cooling down
31. Application of the principles to the analysis and evaluation task

**SPORTS PSYCHOLOGY (YEAR 11)**

**PAPER 2: SOCIO-CULTURAL INFLUENCES AND WELL-BEING IN PHYSICAL ACTIVITY AND SPORT**

1. Coursework
2. Skill and ability, including classification of skill
3. Definitions and types of goals. The use and evaluation of setting performance and outcome goals, including the use of SMART targets to improve/optimize performance
4. Basic information processing
5. Examples of and evaluation of the types of feedback and guidance
6. Arousal and the Inverted U theory. Application of how optimal arousal has to vary in relation to the skill/stress management techniques
7. Aggression and personality
8. Intrinsic and extrinsic motivation, including evaluation of their merits
9. Finish Coursework
10. Engagement patterns and the factors affecting them

11. Commercialisation, sponsorship and the media
12. Positive and negative impacts of technology
13. Conduct of performers and introduction to drugs. Sporting examples of drug taking
14. Advantages/disadvantages to the performer/the sport of taking PEDs
15. Spectator behaviour and hooliganism, including strategies to combat hooliganism
16. The meaning of health and fitness: physical, mental/emotional and social health-linking participation in physical activity to exercise, sport to health and well-being
17. The consequences of a sedentary lifestyle. Obesity and how it may affect performance in physical activity and sport
18. Somatotypes
19. Energy use. Reasons for having a balanced diet and the role of nutrients
20. The role of carbohydrates, fat, protein, vitamins and minerals. Reasons for maintaining water balance (hydration) and further applications of the topic area