Sponne School PE Faculty	
Key Stage 4 to 5 Transition Booklet	

July 2019

Welcome to A-Level PE and congratulations of choosing a course based around something that is quite prominent in your life-sport. Over the next 2 years, you will develop your knowledge of key concepts and ideas that underpin sports performance.

To gain the most out of this course it is important that:

1) You attend every lesson. There is a clear link between attendance and performance at A-Level.
2) You collect video evidence of your sports performance. This should be done throughout the year in multiple competitions and training session. You also need to collect/record any result sheets, match reports or coach feedback given to you.
3) Make an effort weekly to read articles surrounding sport; even if it is not your own one. This will enhance your knowledge of sport and you will be able to link the theory to it. Most Sunday newspapers tend to have research articles in them based around a current sporting event.
4) Start arranging your class notes into revision slides/cards as soon as possible and start using them. The students that have performed well at A-Level PE start revising material as soon as they have them.
5) That 1% extra effort throughout the course is ultimately rewarded on results day!

In preparation for the transition tasks, you need to complete the research tasks in this booklet. The research you complete will give you the knowledge to complete the transition questions. Bring the transition questions and completed booklet to your first lesson in September.

To help you with this task we recommend the following resources:

- Brianmac.co.uk
- Youtube –type in the topic to find various slideshows/presentations made by PE teachers
- AQA approved text books- you may find extracts of these books on google scholar/ amazon books

Answering the questions

You need to construct your answer to follow the marking structure. It follows the same style as the GCSE PE questions with AQA. The example below answers the question 'Evaluate the benefits of Altitude Training'

Assessment Objective 1

Demonstrate knowledge and understanding-2 marks

What is it, how does it work

Altitude training is training that takes place over 2500 meters. Due to the lower partial pressure of oxygen at that altitude, it is harder to exercise there. Over a period of time, the body produces more haemoglobin (caused by the increased presence of EPO), which carries oxygen around the body to compensate for the lower pressure at altitude.

Assessment Objective 2

Apply knowledge and understanding-3 marks

Relationship to performance.

When an athlete returns to sea level they will have an advantage as they will have an increased oxygen carrying ability as the body has more haemoglobin, resulting in an increased V02 max.

An endurance athlete would benefit from training at altitude. They would use the aerobic energy system, which mixes oxygen with glucose in the mitochondria to produce energy. The increased V02 max would enable the athlete to perform at higher intensities by providing more oxygen to the mitochondria, therefore producing more energy. If an athlete works above their V02 max, lactic acid will be produced. Lactic acid would then move into the blood, due to the high pressure gradient of it in the muscle. Once it is in the blood, lactic acid becomes blood lactate. Blood lactate has a negative effect on performance, as it inhibits the haemoglobin' ability to pick up oxygen resulting in performance having to recede to a level below the V02 max.

Assessment Objective 3

Analyse and Evaluate factors-3 marks

Impact/limiting factors/better suggestions

Quite clearly if done properly, altitude can be extremely effective for endurance athletes. Altitude training can have disadvantages. When the athlete first experiences altitude they will find it hard to, it is hard to train at the same intensity due to the low partial pressure of oxygen which could result in loss of fitness. Altitude sickness could also occur which would be detrimental to training. The benefits of altitude training would soon be lost on returning to sea level, meaning that timing in relation to competition would need to be perfected. The cost of altitude training and psychological effect could be factors preventing somebody from doing altitude training. Taking the banned drugs could also mimic the effect of altitude training by producing more of the EPO hormone and thus more red blood cells and haemoglobin.

PE Transition task questions

Read and complete the research tasks in the PE KS4 to KS5 booklet before completing the questions below.

Applied anatomy and physiology

Theory Element	**Explanation**
Krebs Cycle	
Beta Oxidation	
Mitochondria	
Type 1 muscle fibre	
Long term adaptations to type 1 muscle fibres through aerobic exercise	

1) It has been widely reported that Mo Farah has around 10% body fat. Analyse the immediate and long term effects of exercise that enable him to achieve such a low percentage of body fat. (8 marks)

Skill acquisition

Theory Element	**Explanation**
Schema Theory	
Schmidt motor control and learning 1982	
Parameters of schema- how can these be applied to different sporting environments	
Implications for coaching- analysis of strategies that a coach can use to insure successful use of a schema	

2) The images below show two golfers trying to hit successful shots.

Analyse how Schmidt's schema theory can be applied to a single shot and the implications of this theory for the golfer's coach when trying to maximise performance. (8 marks)

Exercise Physiology

Theory Element	**Explanation**	**Its role in performance**
Aerobic Energy System		
Glucose		
Glycogen		
VO2 Max		

3) Evaluate Glycogen Loading prior to performing in an endurance event (8 marks)

Biomechanical Movement

Theory Element	Explanation	Sporting Example
Newton' First law of motion		
Newton' Second law of motion		
Newton' third law of motion		

4) Evaluate the role of Newton' 3 laws of motion during a rugby scrum (8 marks)

Sport Psychology

Theory Element	Explanation
1. Attitudes	
Components of an attitude, Formations of attitudes	
Cognitive Dissonance	
Persuasive Communication	
2. Personality	
Trait and Social Learning (Nature v Nurture) to develop personality	
Interactionist Approach (research Hollander and Lewin) –how does an understanding of the interactionist approach improve performance?	

5) Evaluate how well the interactionist perspective explains the behaviour of a team member in varying competitive situations. (8 marks)

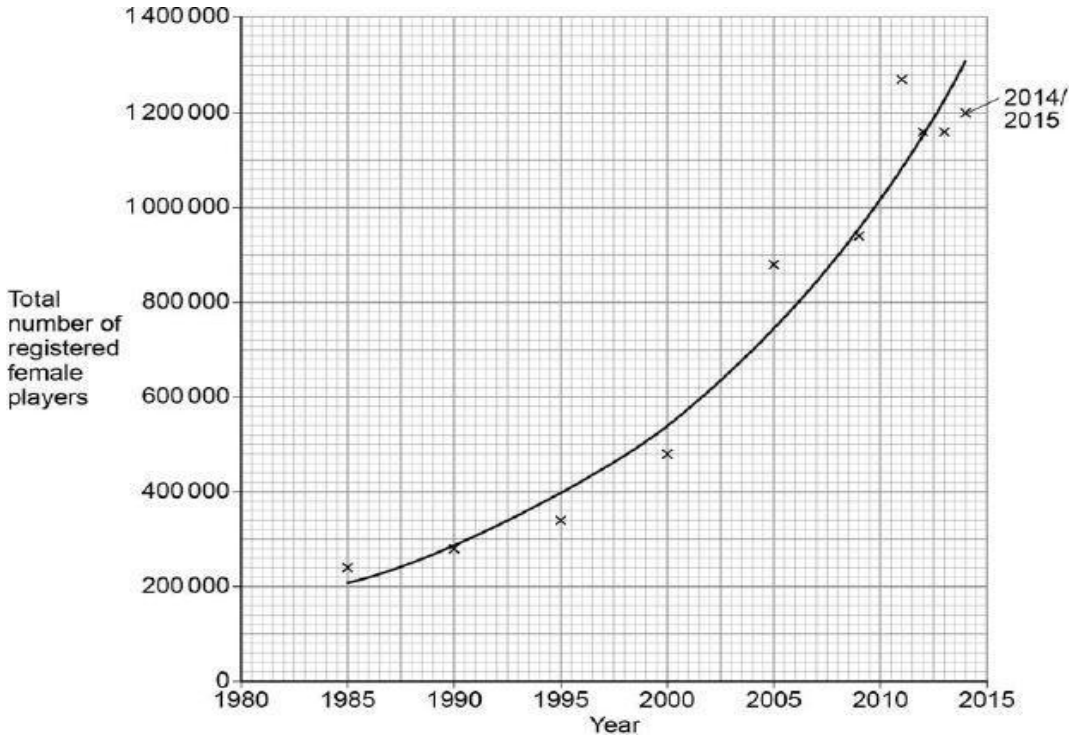
5) Elite performers need high levels of health and fitness to display a positive attitude to training and competition to be successful.

Explain the term attitude and using named psychological theories, outline how the negative attitude of a performer towards training could be changed. Use examples to support your answer. (8 marks)

Sport and Society

Theory Element	Explanation
Sociological Theory	
Society, Socialisation, social processes, social issues	
Social Action Theory	
Underrepresented groups in sport – disability, ethnic group, gender, disadvantaged	
Barriers to participation and possible solutions for under represented groups	

7) The graph below shows the number of worldwide registered female footballers between 1980 and 2015.



Using your knowledge of the factors affecting the emergence of elite female performers, analyse the graph and suggest reasons for the results shown. (8 marks)

Sport and Society-Technology

2. Ethics in Sport	
Understand the key terms- Amateurism, The Olympic oath, Sportsmanship, Gamesmanship, Win ethic and Deviance	
Amateurism (research on the Corinthian casuals are a good example) –is this 'ideal' still evident in sport today?	
Application of the key terms- How do they apply to the modern Olympics (research sporting examples of suggestions for and against the above key terms being present in modern day e.g. Justin Gatlin)	

8) In 2012, eight badminton players were charged with not using their best efforts to win a match at the Olympic Games.

   Discuss the extent to which the Olympic Oath is irrelevant at the modern Olympic Games (8 marks)