



Subject: Physical Education



# A-Level PE Transition Booklet

Aim High 

Be Determined 

Be Brave 

Be Supportive 

Be Proud 

Achieving Excellence through a Values Driven Education



## Introduction

Welcome to A-level physical education. This course is designed to develop knowledge, understanding and skills relevant to sporting performance. The course will delve into the science behind sport and look at how this underpins and enhances performance. The socio-cultural factors that influence sport will also be investigated, looking at the impact they continue to have and how these have developed over time.

The way you will study during your A-level course may vary from what you have previously experienced. You will be expected to conduct independent study developing your knowledge on a range of topic areas that have been covered during your lessons. Beyond this, you will also be required to apply this knowledge to examples within the sporting world, demonstrating your understanding of the theoretical concepts and how they impact sporting performance.

A-level physical education is an excellent foundation for a university degree in sports science, sports management, sports development or pathways linking to exercise and health. Physical education can also complement further study in human biology, physics, biomechanics, psychology, nutrition, sociology and many more.

Your course will be delivered by a series of teachers who are specialist within their areas of delivery. The three main components are anatomy and physiology (Mr Richards/ Miss Eales), sports psychology/skill acquisition (Mr Green/ Mr Gibbins) and sport and society (Mr Dowle/ Mrs Bostwick). The knowledge that you gain will be continuously applied and assessed in all areas through the use of questioning, milestones and practice exams. This will allow staff to identify areas that you may require extra support enabling you to secure the best possible outcome. All areas are of equal weighting and will contribute to your final and overall grade.

The purpose of this booklet is to give you an insight into the course that you will be undertaking. By completing the tasks you will gain fundamental knowledge to support you in different theoretical elements that you will explore in your first year of study, putting you on the road to success.

### **Contents:**

- ❖ Course overview and practical activity list.
- ❖ Anatomy and physiology tasks.
- ❖ Skill acquisition tasks.
- ❖ Sport and society tasks.
- ❖ Recommended resources.



## Course overview

<p><u>Paper 1:</u> Section A: Applied Anatomy and Physiology Section B: Skill Acquisition Section C: Sport and Society</p>	35%	<p>2 hour written paper. 105 marks. Multiple choice, short answer and extended writing questions.</p>
<p><u>Paper 2:</u> Section A: Exercise Physiology and Biomechanics Section B: Sport Psychology Section C: Sport and Society and Technology in Sport</p>	35%	<p>2 hour written paper. 105 marks. Multiple choice, short answer and extended writing questions.</p>
<p><u>NEA:</u> Practical performance in physical activity and sport (15%) Written analysis and evaluation of performance (15%)</p>	35%	<p>90 marks. Performance in one activity (45 marks). Analysis and evaluation of performance (45 marks) Internal assessment, external moderation.</p>

## Practical activity list

<p><b>Activity</b> Amateur boxing Association football Athletics Badminton Basketball Camogie Canoeing Cricket Cycling Dance Diving Equestrian Gaelic football Golf Gymnastics</p>	<p>Handball Hockey Hurling Kayaking Lacrosse Netball Rock climbing Rowing Rugby league Rugby union Sculling Skiing Snowboarding Squash Swimming Table tennis</p>	<p>Tennis Trampolining Volleyball  <b>Specialised activities</b> Blind cricket Boccia Goal ball Powerchair football Polybat Table cricket Wheelchair basketball Wheelchair rugby</p>
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## Specification

The full specification for the course can be found at:

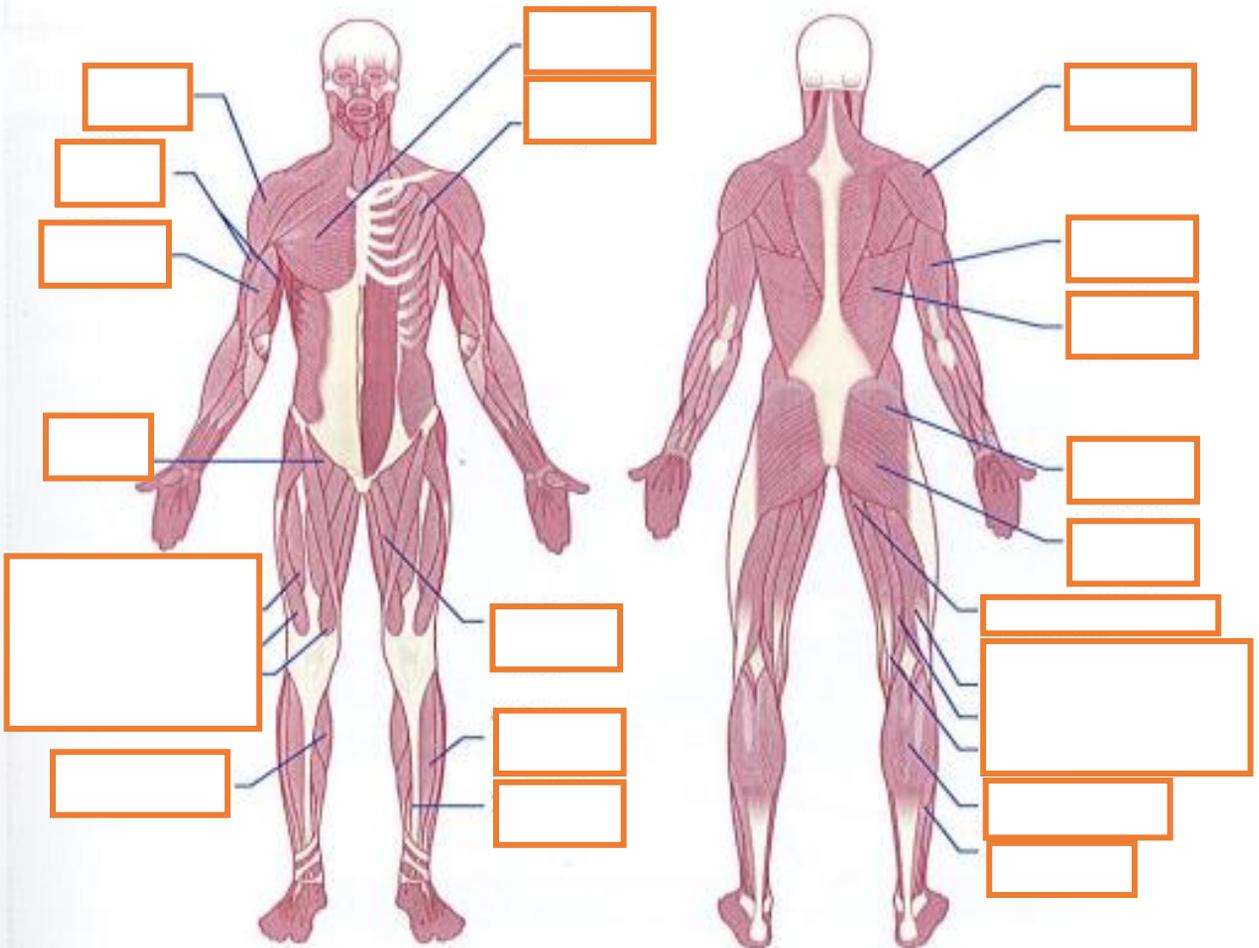
<https://www.aqa.org.uk/subjects/physical-education/as-and-a-level/physical-education-7582>



## Applied anatomy and physiology

### Task 1:

Identify and label the muscles on the diagram below.



Deltoid  
Triceps brachii  
Pectoralis major  
Latissimus dorsi  
Soleus  
Gastrocnemius  
Gluteus medius

Gluteus maximus  
Tibialis anterior  
Adductor longus  
Iliopsoas  
Biceps brachii  
Rectus femoris  
Vastus lateralis

Vastus medialis  
Vastus intermedius  
Pectoralis minor  
Adductor magnus  
Biceps femoris  
Semitendinosus  
Semimembranosus

Explain what:

A) An agonist muscle is

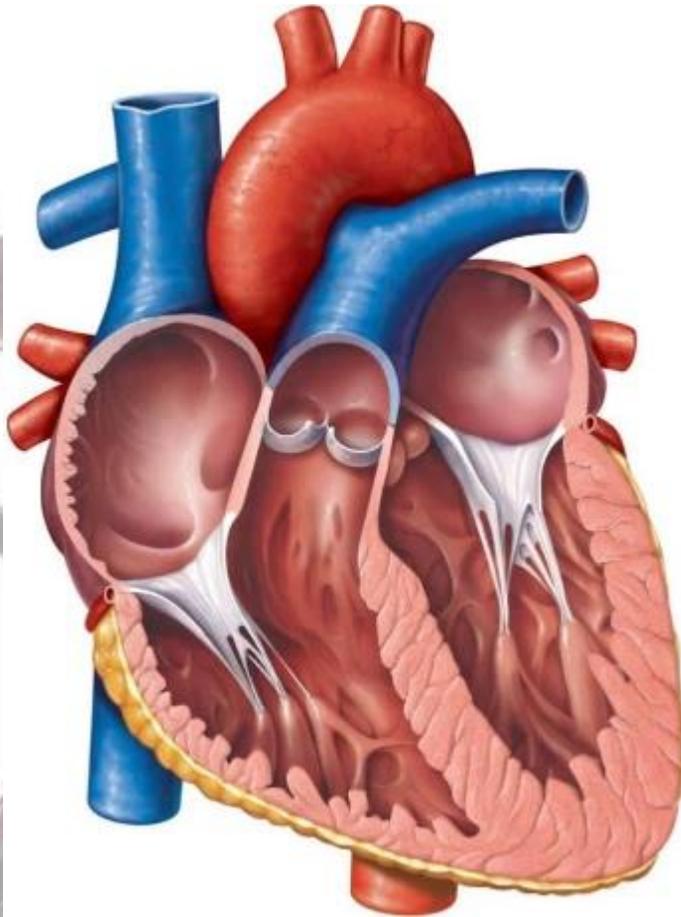
B) An antagonist muscle is



## Applied anatomy and physiology

### Task 2:

Label the different parts of the heart on the diagram below



Superior vena cava  
Pulmonary semilunar valve  
Right ventricle  
Left pulmonary artery  
Left atrium  
Left ventricle

Interventricular septum  
Right pulmonary artery  
Right atrium  
Inferior vena cava  
Left pulmonary veins  
Aortic semilunar valve

Chordae tendineae  
Right pulmonary veins  
Tricuspid valves  
Aorta  
Bicuspid valves

Starting at the Vena Cava, place the following structures in the correct order that a red blood cell would pass on its journey through the heart:

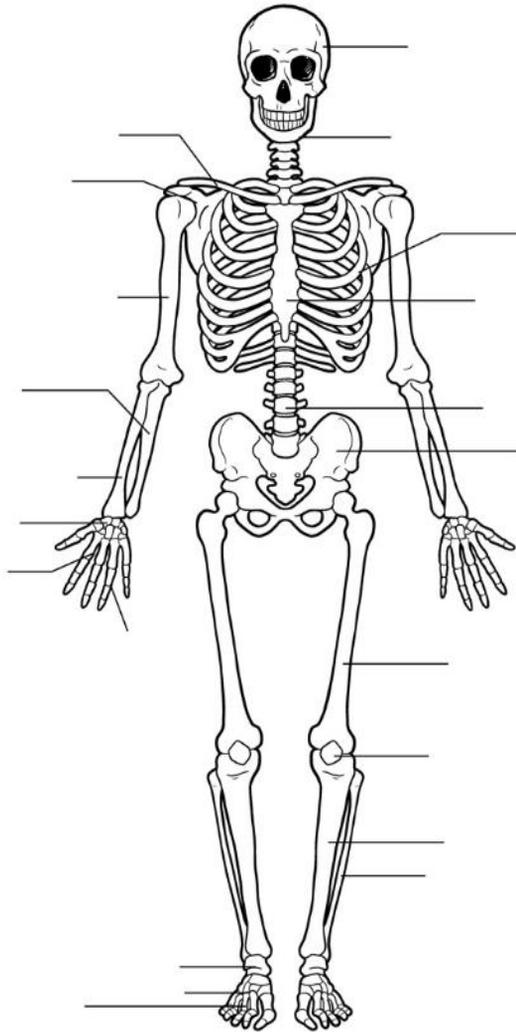
- Aorta 1.
- Bicuspid valve 2.
- Pulmonary Vein 3.
- Left Ventricle 4.
- Right Ventricle 5.
- Right Atrium 6.
- Left Atrium 7.
- Lungs 8.
- Pulmonary artery 9.
- Tricuspid valve 10.



## Applied anatomy and physiology

### Task 3:

Label the bones on the diagram below.



Cranium  
Mandible  
Clavicle  
Sternum  
Ribs  
Vertebrae  
Scapula  
Humerus

Radius  
Ulna  
Carpals  
Metacarpals  
Phalanges  
Pelvis  
Femur  
Patella

Tibia  
Fibula  
Talus  
Metatarsals  
Phalanges  
Tarsals

Joint	Joint type	Articulating bones
Ankle	Hinge	
Knee	Hinge	
Hip	Ball and socket	
Shoulder	Ball and socket	
Elbow	Hinge	



## Skill Acquisition

### Task 1:

Define the term skill.

All skills are placed on continua. Describe the characteristics of each of the extremes of the continua and place 3 examples of sports skills on them.

Open

Closed

Gross

Fine

Self-paced

Externally-paced

Simple

Complex

Low organised

High organised

Discrete

Serial

Continuous



## Skill Acquisition

### Task 2:

#### **Transfer of learning**

A skill is something that is learned. Skills that are learnt can be transferred from one sport to another in some cases. The theory of transfer is defined as the effect of the learning and performance of one skill on the learning and performance of another.

Research and outline the different types of transfer.

#### **Positive transfer**



#### **Negative transfer**



#### **Zero transfer**



#### **Bilateral transfer**





## Skill Acquisition

### Task 3:

#### **Methods of guidance**

Methods of guidance are a set of four techniques that may be used to enhance learning and offer assistance to the performer.

Outline the 4 methods of guidance and provide an example of when it would be used.



#### **Verbal**



#### **Manual**



#### **Visual**



#### **Mechanical**



## **Sport and society**

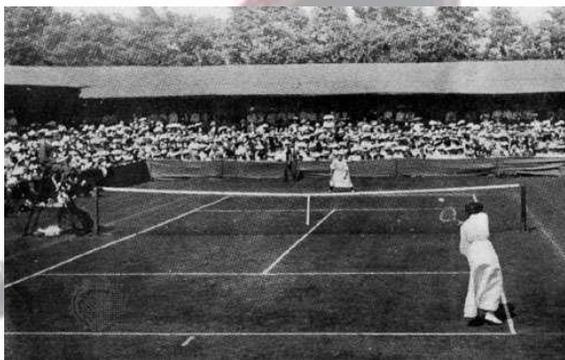
### **Task 1:**



Watch the video linked below and conduct some research on mob football. Highlight the key characteristics of the game below.

<https://www.youtube.com/watch?v=uYSA4oHrJvs>

### **Mob football**



Watch the video linked below and conduct some research on real tennis. Highlight the key characteristics of the game below.

<https://www.youtube.com/watch?v=Od9s1u3LJl4>

<https://www.youtube.com/watch?v=GhqD-HVJwN4>

### **Real tennis**





## Sport and society

### Task 2:

<http://www.wenlock-olympian-society.org.uk/history/>

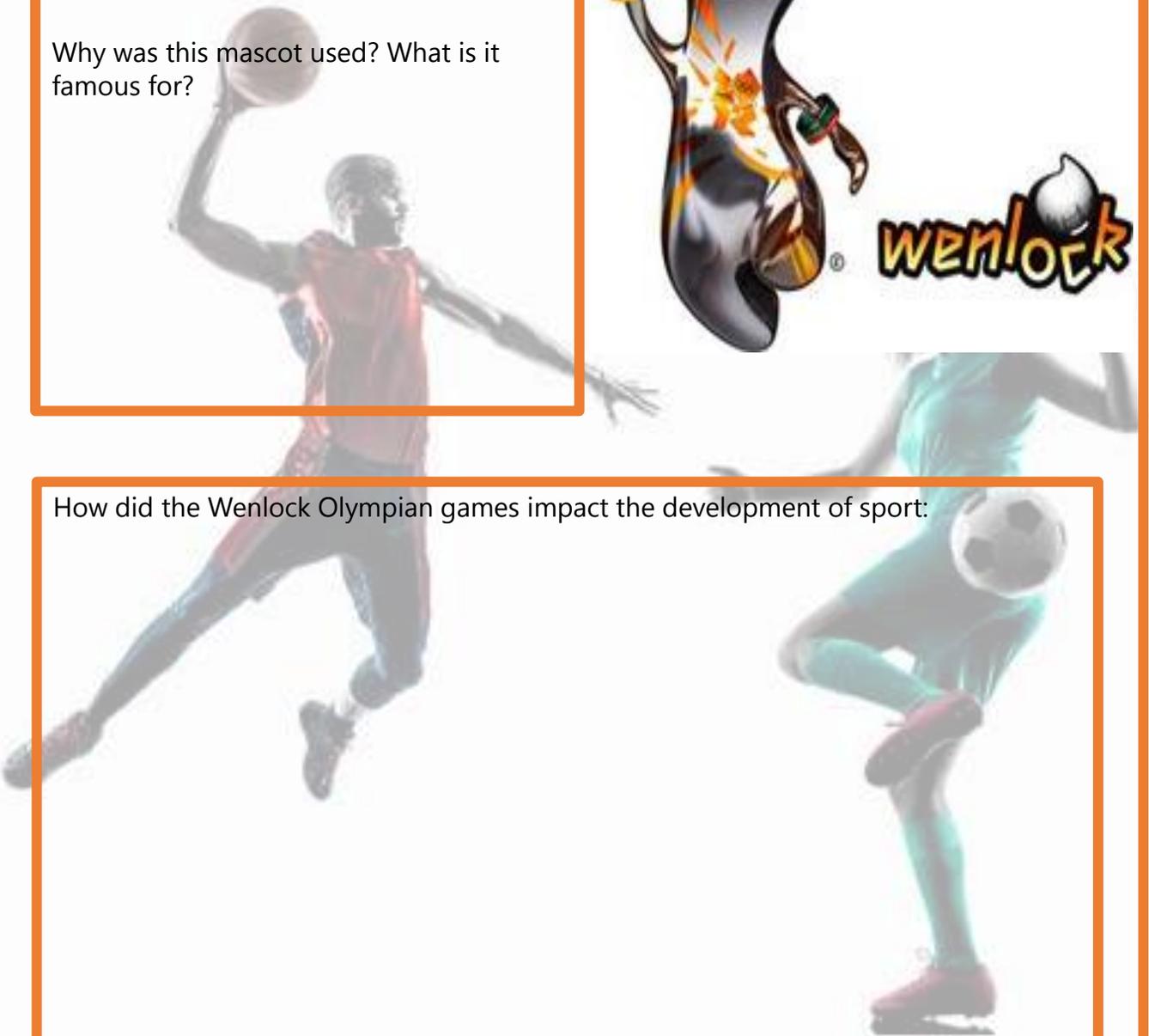
Who is this mascot?

Where did you see them?

Why was this mascot used? What is it famous for?



How did the Wenlock Olympic games impact the development of sport:





## Sport and society

### Task 3:

Below is a list of football clubs that have been renamed since their church/factory days. What are they currently known as?

Past:

Dial Square

Thames Ironworks

Ferranti Thistle

Newton Heath L&YR F.C

Ardwick Association Football Club

Hotspur Football Club

St Luke's

Small Heath Alliance

St Domingo

The Wednesday Cricket Club

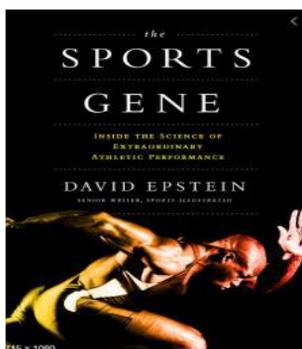
Present:

Why did most, if not all, football teams begin as factories/churches? What developments have occurred to allow football to become the game is today? (Think about media, sponsorship, transport, education and economy to help aid your answer).



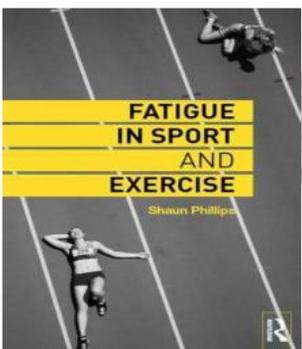
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## Recommended reading



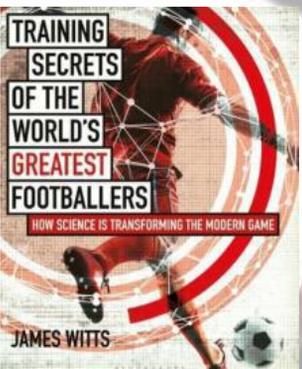
### **The Sports Gene: Inside the Science of Extraordinary Athletic Performance (By David Epstein)**

This book explores the question of nature versus nurture as it pertains to training for athletes in sports using anecdotes which favour both sides of the argument. These anecdotes are combined with the results of statistical studies to give the reader an understanding of the magnitude that biology plays in athletics. Topics such as the effects of gender, race, genetics, culture, and physical environment are discussed as contributors to success in specific sports.



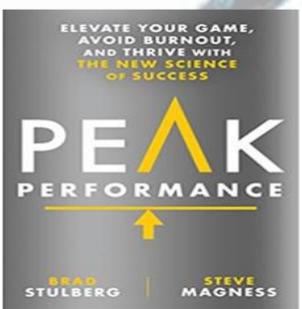
### **Fatigue in Sport and Exercise (By Shaun Phillips)**

The book examines the different 'types' of fatigue and the difficulties of identifying which types are prevalent during different types of exercise, including a discussion of the most important methods for measuring fatigue. It introduces the fundamental science of fatigue, focusing predominantly on covering physiological aspects, and explores key topics in detail, such as energy depletion, lactic acid, dehydration, electrolytes and minerals, and the perception of fatigue.



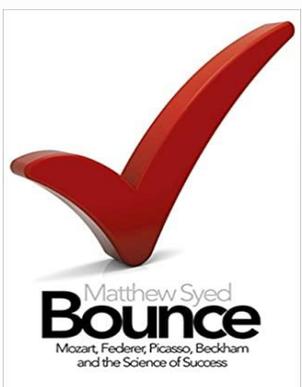
### **Training Secrets of the World's Greatest Footballers How Science is Transforming the Modern Game (By James Witts)**

Why does Paul Pogba wear custom-made compression socks? Why does Sergio Agüero altitude-train when returning from injury? From virtual-reality units to the omnipresence of GPS vests, taking in brain-training, innovative gear and performance nutrition along the way, you'll discover what it takes to reach the top of the game - and how to apply this knowledge to your own training.



### **Peak Performance: (By Brad Stulberg)**

Peak Performance combines the inspiring stories of top performers across a range of capabilities from athletic to intellectual to artistic with the latest scientific insights into the cognitive and neurochemical factors that drive performance in all domains. Peak Performance presents the newly-discovered links that hold promise as performance boosters, but that have been traditionally overlooked.



### **Bounce: The Myth of Talent and the Power of Practice (By Matthew Syed)**

What are the real secrets of sporting success, and what lessons do they offer about life? Why doesn't Tiger Woods "choke"? Why are the best figure skaters those that have fallen over the most and why has one small street in Reading produced more top table tennis players than the rest of the country put together.

The book draws on the latest in neuroscience and psychology to uncover the secrets of our top athletes. Bounce is crammed with fascinating stories and statistics.

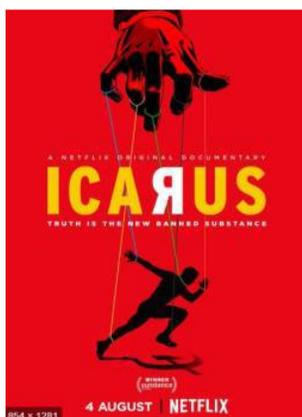
Looking at controversial questions such as whether talent is more important than practice, drugs in sport (and life) and whether black people really are faster runners, the mind-bending Bounce is a must-read for the hardened sports nut or brand new convert. This book's links to all of the three main areas on the course.



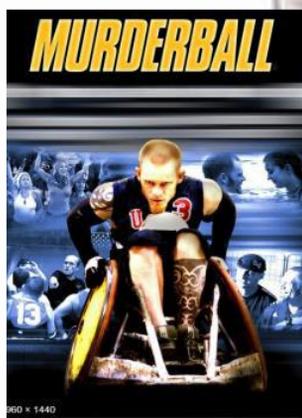


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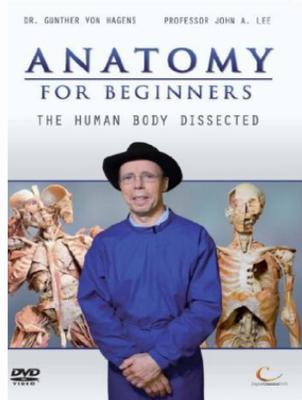
## Relevant media and documentaries



**Icarus** - When filmmaker Bryan Fogel sets out to uncover the truth about doping in sports, a chance meeting with a Russian scientist transforms his story from a personal experiment into a geopolitical thriller. Dirty urine, unexplained death and Olympic gold are all part of the exposure of the biggest scandal in sports history.



**Murderball** - This documentary introduces the U.S. quad rugby team -- a team composed entirely of young paraplegic men. Using special wheelchairs and very little protection, the players play full-contact competitive rugby, using rules only slightly altered to accommodate their limitations. The film follows the team as they discuss the sport, their lives, and how they ended up in their chairs to begin with, while they play their way to the 2004 Paralympic Games in Athens, Greece. This has great links to disability sport and factors effecting participation. A DVD copy can be borrowed from the P.E. office. .



**Anatomy for Beginners – The Human Body Dissected.** In this series you can see highlights of the dissections and learn more about the human body. Your anatomical guides are controversial anatomist Dr Gunther von Hagens, who dissects the bodies, and pathologist Prof. John Lee who explains how they work in health and in disease. At the heart of each episode is a human dissection, carried out by von Hagens, each episode focusing on a different set of anatomical systems: movement, circulation, digestion and reproduction.



**The Truth about Fitness** - Medical journalist Michael Mosley teams up with scientists whose latest research is turning common knowledge about fitness on its head. They reveal why 10,000 steps is just a marketing ploy and that two minutes of exercise is all a person needs each week. They discover how to get people to stick to their fitness plans and what exercise can actually make everyone more intelligent. Whether it is for couch potatoes who hate the thought of exercise, someone too busy to consider the gym, or even for fitness fanatics who are desperate to do more - science can help everyone exercise better.

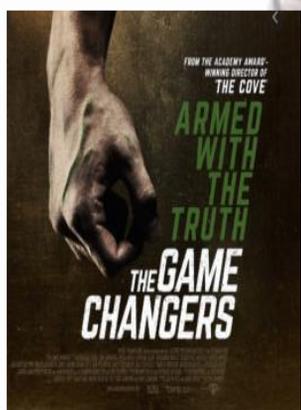




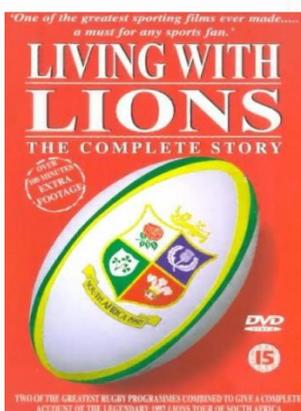
## Relevant media and documentaries



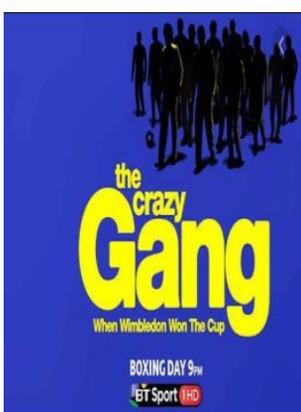
**The English Game** – Netflix drama that is highly relevant to the Sport and Society section of the course. This series looks at the invention of football and how it rose to become the world's game by crossing class divides.



**The Game Changers** - James Wilks travels the world on a quest for the truth about meat, protein, and strength. Showcasing elite athletes, special ops soldiers, and visionary scientists to change the way people eat and live.



**Living with Lions** - Ground breaking documentary focusing the British and Irish Lions tour to South Africa in the summer of 1997. The unprecedented behind-the-scenes access to the team shows the preparations, the training, the fun, the team selection, the 'earthy' language, the bonding, the awesome task of playing and some shocking footage of injuries. Despite securing the series with wins in the first two tests, the Lions remained motivated by the prospect of a 3-0 whitewash, a feat never achieved against the Springboks throughout the century. Great links to motivation, arousal and group dynamics.



**The Crazy Gang – When Wimbledon Won the Cup** – This documentary spills the beans on the notorious Wimbledon football team who climbed from non-league status to the pinnacle of the British game in less than a decade. In this revealing documentary, Crazy Gang members disclose for the first time the extent of the brutality between the players themselves and how being part of that process was the making of them all. Links to deviance in sport and group dynamics.





## **Podcasts**

<https://www.bbc.co.uk/programmes/b01bwfyd> - A story of lies, expulsions, bigotry and witch-hunts, as a civil war in sport erupted when rugby split in two.

<https://www.bbc.co.uk/programmes/b01cwszw> - Podcast that explores the way global television has changed our relationship with sport forever.

<https://www.bbc.co.uk/programmes/b01cw7kv> - Why rugby union tried to stand firm against the encroaching tide of professionalism and, in August 1995, lost.

<https://www.bbc.co.uk/programmes/b01cvk8l> - Why and when the British government got involved in sport, when the country had always prided itself on keeping them apart.

<https://www.bbc.co.uk/programmes/b01ckmgn> - The demise of the amateur gentleman and the rise of the professional player, as the 1960s saw the beginning of a new, more egalitarian era in British sport.

<https://www.bbc.co.uk/programmes/b01bwmwd> - The rise of the middle class in Victorian Britain heralded the birth of suburban tennis and golf clubs.

<https://www.bbc.co.uk/programmes/b01b9h7c> - A look at Rugby School, which can claim to be the birthplace of the modern Olympic games.

<https://www.bbc.co.uk/programmes/b01bb7jp> - The importance of boxing for the 19th-century alpha male. With no gloves or armour, pugilism was pure, painful and deeply patriotic.

<https://www.bbc.co.uk/programmes/b01bbcqn> - Podcast on the role Rugby school played in turning its pupils into men fit to run the empire

<https://www.bbc.co.uk/programmes/b01bllxk> - The Football Association, founded in 1863, was set up to ensure that players should be gentlemen both on and off the pitch.

<https://www.bbc.co.uk/programmes/b01bm0pf> - If trade was the driving force behind the expansion of the British Empire, sport was the glue that helped keep it together.

<https://www.bbc.co.uk/programmes/b01bmltg> - The story of how football went from an amateur pastime to big business, and it all started in the Lancashire mill town of Preston.



## Twitter and websites

<https://twitter.com/tythyalevelpe?lang=en-gb> – Good archive source of relevant articles related to AQA Physical Education.

[https://twitter.com/cleans\\_letsrun?lang=en](https://twitter.com/cleans_letsrun?lang=en) – Account that posts articles and news related to drugs and deviance in sport.

<https://twitter.com/sportingintel?> – Account that looks at the links between commercialisation and sport.

<https://twitter.com/modoorbell?lang=en> – Account that posts articles and news related to drugs in sport.

<https://twitter.com/danroan> – Leading BBC sports journalist.

<https://sportsscientists.com/> - Science of Sport website that brings you the second, third, and fourth level of analysis you will not find anywhere else.

<https://sites.google.com/view/mrwnukpe/home> - Blog based A-LEVEL P.E. site great for revision.

<http://alevelphysicaleducation.co.uk/> - Great source of notes and articles.

<http://www.alevelpe.com/> - Another blog-based site. Good for revision.

<https://www.youtube.com/channel/UCPu81I88W5d38hZplqzsLXQ/videos> – General P.E. YouTube account with some good clips relating to A-Level P.E.

