



*It's never too early or too late to work towards being the healthiest you.*

**HEALTH IS A JOURNEY, NOT A DESTINATION**



# **A' LEVEL PE**

## **Course Handbook**



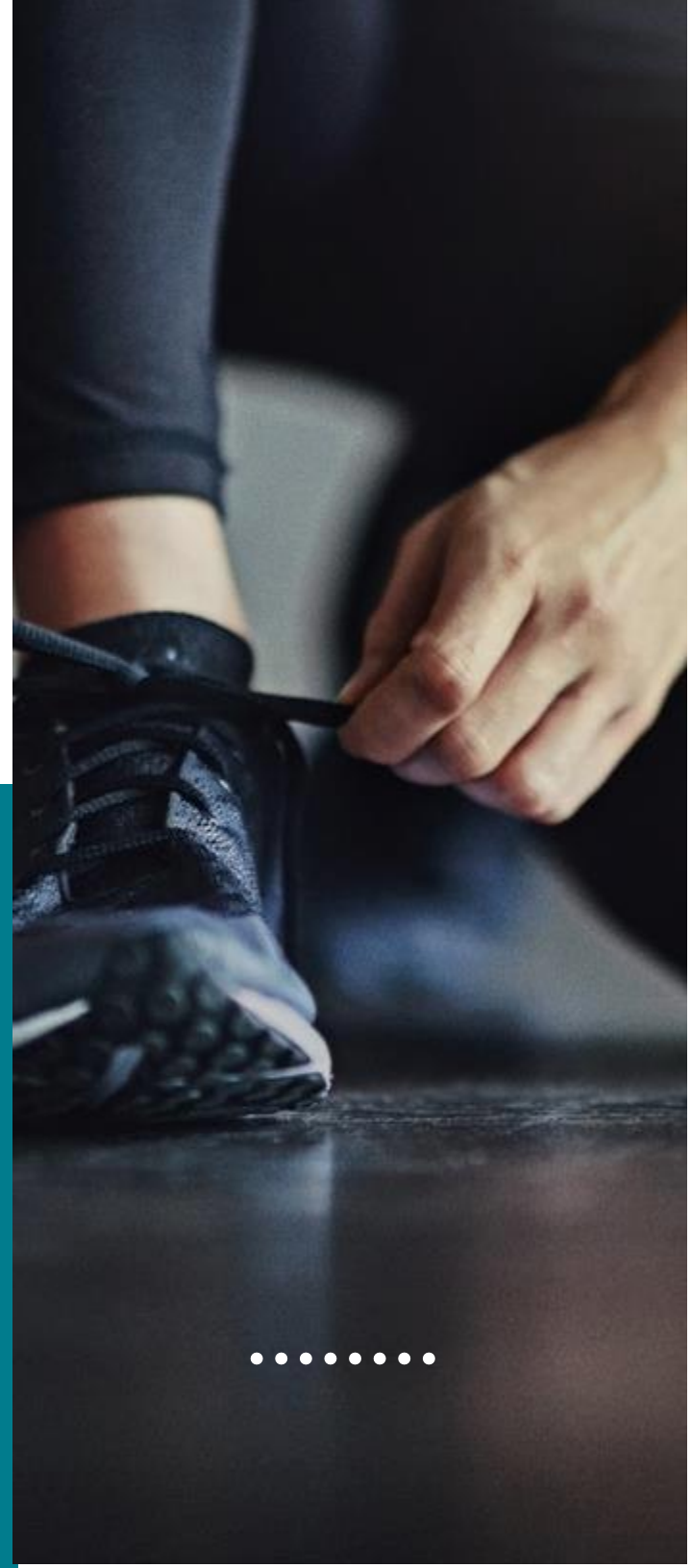
### **Teachers**

Ms Baker

Mr Fox

Mr Clark

Mrs S Johnson





## A' LEVEL PE PRESENTATION

- You will need a folder for each of the three papers in PE
- You will have an exam question book for each of the papers in PE, with a tracker for your progress in the front
- You must bring everything to each lesson
- Topics should be clearly labelled and organised.
- All work should be presented neatly, with date and title
- NO graffiti or doodling on your work or folder.



## EXPECTATIONS - BE THE BEST YOU CAN BE

1. Your attendance at ALL lessons is **COMPULSORY**.
2. If you do miss any lessons, you **MUST** copy the work up before the next lesson. Any points of confusion **YOU** need to follow up!
3. All deadlines should be adhered to. If there are extenuating circumstances, then talk to your teacher **BEFORE** the deadline!
4. A level study is hard and different to GCSE – so you need to use your teacher as a resource and **ASK** for help if you need it. Don't just hope it will all make sense later!
5. Get involved in **ALL** lessons by asking and answering questions.
6. Listen respectfully to the views of others, even if you don't agree with them.
7. Ensure that your folder is kept up-to-date and bring it to **ALL** lessons with the current topic/units' work.



## Content Overview

- Applied anatomy and physiology
- Exercise physiology
- Biomechanics

- Skill acquisition
- Sports psychology

- Sport and society
- Contemporary issues in physical activity and sport

- Performance or Coaching
- Evaluation and Analysis of Performance for Improvement (EAPI)

## Assessment Overview

**Physiological factors affecting performance**  
(01)\*  
90 marks  
2 hour written paper

**Psychological factors affecting performance**  
(02)\*  
60 marks  
1 hour written paper

**Socio-cultural issues in physical activity and sport**  
(03)\*  
60 marks  
1 hour written paper

**Performance in physical education**  
(04)\*  
60 marks\*\*  
Non-exam assessment (NEA)

**30%**  
of total  
A level

**20%**  
Of total  
A level

**20%**  
of total  
A level

**30%**  
of total  
A level

## Course Overview





Activity	Restrictions and allowances	Page
Acrobatic Gymnastics		36
Amateur Boxing		38
Association football	Cannot be five-a-side	39
Athletics		41
Badminton		43
Basketball		44
Blind Cricket		45
BMX	Racing only (not trick)	46
Boccia		47
Camogie		48
Canoeing		49
Cricket		50
Cross Country running		51
Cycling	Track or road cycling only	52
Dance		53
Diving	Platform diving	55
Equestrian		57
Figure Skating		59
Futsal		61
Gaelic football		63
Goal Ball		65
Golf		66
Gymnastics	Floor routines and apparatus only.	68
Handball		70
Hockey	Must be field hockey	71
Hurling		73
Ice Hockey		74
Inline Roller Hockey		76
Kayaking		78

Practical Sports you can be assessed in. You need just one!



Activity	Restrictions and allowances	Page
Lacrosse		79
Netball		81
Polybat		82
Powerchair football		83
Rock Climbing	Can be indoor or outdoor	84
Rowing		85
Rugby League	Cannot be tag rugby	86
Rugby Union	Can be assessed as sevens or fifteen a side. Cannot be tag rugby	87
Sailing	Royal Yachting Association recognised sailing boat classes only. The list can be found online at: <a href="https://www.rya.org.uk/racing/youth-junior/info/Pages/recognised-classes.aspx">https://www.rya.org.uk/racing/youth-junior/info/Pages/recognised-classes.aspx</a> .	89
Sculling		91
Skiing	Must take place on snow, can be indoor or outdoor	92
Snowboarding	Must take place on snow, can be indoor or outdoor	93
Squash		94
Swimming	Not synchronised swimming, personal survival or lifesaving	95
Table Cricket		96
Table Tennis		97
Tennis		98
Trampolining		99
Triathlon	Sprint only	100
Volleyball		102
Water Polo		103
Wheelchair basketball		105
Wheelchair rugby		106
Windsurfing		108

Practical Sports you can be assessed in. You need just one!



<b>Candidate name</b>				<b>Candidate number</b>				
<b>Activity 1</b>	Football							
<b>Date of participation</b>	<b>Level of competition</b>	<b>Role/position/event</b>	<b>Performance outcome</b>					
9 <sup>th</sup> October 2016	School year group competition	Striker Played full game	2-0 win Scored 1 goal					
11/10/2016	Local Saturday league	Striker Came on as sub	1-1 draw					
15/11/2016	County level inter schools fixture	Striker Played 70 minutes	3-2 win Scored 2 goals					

You must keep a log book of your competitive involvement in sport throughout the two years! This is your responsibility to do AND to collect video evidence of these performances





	Autumn Term						Spring Term						Summer Term							
	Autumn 1 (1 weeks)	Autumn 1 (6 weeks)	Practical	Assessment Point	Autumn 2 (7 weeks)	Practical	Assessment Point	Spring 1 (6 weeks)	Practical	Assessment Point	Spring 2 (6 weeks)	Practical	Assessment Point	Summer 1 (5 weeks)	Practical	Assessment Point	Summer 2 (7 weeks)	Practical	Assessment Point	
	Theme	Theme			Theme			Theme			Theme			Theme			Theme			Theme
Year 12	First 300minutes																			
<b>Paper 1 Applied anatomy &amp; Physiology, Exercise Physiology &amp; Biomechanics</b>	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Skeletal and muscular systems	Create a log book for your sport and complete it weekly	Common Deadline	Cardiovascular and respiratory systems	Upload at least one competitive video of you in your sport	Phase tests	Diet, nutrition and ergogenic aids	Upload at least 3 videos of core skills in your sport	Phase tests	Training	Upload at least 3 videos of core skills in your sport	Phase tests	Biomechanics	Upload some videos of any advanced skills you can perform	Mock exam period	Technology/ start energy systems	Upload at least one more competitive video of you in your sport	Phase tests	
<b>Paper 2 Skill Acquisition &amp; Sports Psychology</b>	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Skill Classification Types/Methods of Practice Stages of learning		Common Deadline	Transfer of Learning (Theories, Guidance & Feedback)		Phase tests			Individual differences (Personality, Attitudes, Motivation & Arousal)	Phase tests		Individual differences (Anxiety, Aggression, Social Facilitation)	Phase tests		Group/team and goal setting <b>EAPI introduction and HW Task</b>	Mock exam period & <b>EAPI Mock Exam</b> (strengths and weaknesses section)		<b>EAPI (3 lessons) &amp; Practical</b>	Phase tests
<b>Paper 3 Sport &amp; Society and Contemporary issues in physical activity and sport</b>	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Emergence & evolution of sport; pre industrial Britain		Common Deadline	Emergence & evolution of sport; post 1850 industrial Britain		Phase tests			Emergence & evolution of sport; 20th century Britain	Phase tests		Emergence & evolution of sport; 21st century Britain	Phase tests		Global sporting events	Mock exam period		Routes to sporting excellence in the UK	Phase tests
<b>Skills</b>	Research skills and collaboration	Identify, describe & apply			Compare and contrast			Justifications & Application			Application and answer structures			Verbal communication & Evaluation			Verbal communication & Evaluation			
<b>Reading focus</b>		Transgender athlete			Paralympic cyclist			Codification mania in 19th century			Cardiovascular system			Ultra endurance challenge (training/diet and nutrition)			LIV Golf -personality, motivation & learning			



Year 12 Detailed overview of course content, skills and reading



	Autumn Term							Spring Term					Summer Term				
	Autumn 1 (1 weeks)	Autumn 1 (6 weeks)	Practical	Assessment Point	Autumn 2 (7 weeks)	Practical	Assessment Point	Spring 1 (6 weeks)	Practical	Assessment Point	Spring 2 (6 weeks)	Practical	Assessment Point	Summer 1 (5 weeks)	Assessment Point	Summer 2 (7 weeks)	Assessment Point
	Theme	Theme			Theme			Theme			Theme			Theme		Theme	
Year 13	First 300minutes																
Paper 1 Applied anatomy & Physiology & Biomechanics	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Energy systems	Ensure log book is fully up to date from year 12. Upload another video of you in a competitive situation. Create a powerpoint template and start to add videos to each slide	Common Deadline	Recovery and environment	Upload videos of any remaining core and advanced skills and add to powerpoint	Phase tests	Injuries	Upload videos of any remaining competitive situations and add to powerpoint	Phase tests	Biomechanics	Finalise powerpoint evidence with log book, core skills, advanced skills and competitive videos: DEADLINE 15TH MARCH	Phase tests	Biomechanics and exam preparation	Final Exam	Done	
Paper 2 Skill Acquisition & Sports Psychology	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Confidence and Self Efficacy		Common Deadline	Attribution & Memory EAPI HWK TASKS		Phase tests	Practical (Weeks 1 & 2 prepare for Action plan mock, weeks 3 & 4 complete mock and review, weeks 5 & 6 complete final EAPI - total of 12		Practical moderations and EAPI Mock in Jan (Action plan section) - Final in March before Easter	Leadership		Phase tests	Stress and revision	Phase tests	Revision and Exam period	Final exams
Paper 3 Sport & Society and Contemporary Issues in physical activity and sport	First 300 minutes: Caster Semenya research project (research skills, collaboration, presentation)	Drugs and doping in sport		Common Deadline	Violence and gambling in sport EAPI HWK TASKS		Phase tests				Commercialisation and media		Phase tests	Modern Technology in Sport	Phase tests	Revision and Exam period	Final exams
Skills	Research skills and collaboration	Analyse			Explanations & Evaluations		Verbal communication, Evaluation, analysis & presentation skills			Explanations, Evaluation and Application			Specific exam technique				
Reading focus		Nutrition Article			Allyson Felix: Applied Physiology & Biomechanics in Athletes		Heat and Performance			The psychology of climbing			How sport developed in the 1960's		N/A		

# Year 13 Detailed overview of course content, skills and reading



# Revision in A' level PE

You will be supported with revision for PE in a number of ways.

For each topic you will get a PE Pros document which has top tips from your teacher about that topic, feedback from previous exams, example questions and a revision checklist to use throughout the course

You will also be given knowledge organisers. Both completed and blank for you to decide which works best for you in aiding revision.

We will assess your knowledge throughout the course and revisit previous topics regularly to support your retention of this information.

# Sample PE Pros resource

## PE Pro Revision: **Movement Analysis**

### Sample Questions:

- \* Using Figure 1, complete Table 1 to identify the articulating bones, the joint action and the main agonist at the right shoulder from position A to position B.
- \* Identify the plane about which the movement at the right shoulder is taking place from position A to position B.
- \* Using **Figure 1**, identify the 'joint action', 'main agonist' and the 'type of muscle contraction' occurring at the hip **and** ankle joints as the weightlifter moves from Position **A** to Position **B**.

(a) Fig. 1.1 shows an acrobatic movement in gymnastics.



Fig. 1.1

(b) Complete the table below to identify the movement and agonist muscle at the left and right hip during this skill.

	Movement	Agonist
Left hip		
Right hip		

(4)

### Top Tips and revision strategies:

- 1) Be able to **define** all key terms AND **NAME MUSCLES (especially quadriceps group and hamstring group)** AND **BONES AT EACH JOINT SITE** (Flash cards).
- 2) You may get an image of a performer in sport, **use this, draw on this** to help you get the marks. Use our past papers to practice doing this.
- 3) Remember in the **DOWNWARD** phase of the **SQUAT, BICEP CURL** and **PRESS UP**, the type of muscle contraction is always **ECCENTRIC!**
- 4) **KNOW** the joint actions that are possible for the shoulder, elbow, hip, knee and ankle.
- 5) Ball and socket joints can do flexion, extension, hyperextend and horizontal motion (shoulder is only joint where circumduction occurs). Hinge joints can **ONLY** perform FLEXION & EXTENSION.

# Revision Checklist:

Topic areas	Revised 1 <sup>st</sup> time	Revised 2 <sup>nd</sup> time	Revised 3 <sup>rd</sup> time	Revised 4 <sup>th</sup> time
<b>Analysis of Movement;</b> Names of muscles and bones at shoulder, elbow, wrist, hip, knee, ankle.				
Planes of movement (frontal, transverse, sagittal)				
Practical analysis of movement with reference to joint type, movement produced, agonist and antagonist muscles involved and type of muscle contraction taking place.				
Movement patterns to describe movement at a joint (flexion, extension, abduction, adduction, horizontal flexion, medial and lateral rotation, circumduction, dorsi-flexion, plantar flexion.				
Types of muscle contractions (Isotonic: Concentric and eccentric) (Isometric)				

# Knowledge organiser samples

**Possible question type  
or length...**

**Key words/definitions for the  
topic**

**Diagrams relevant for this topic**

**PE Flipped Learning**

**Topic:**

**Tips from presenter**

**Things I don't understand or  
questions**

**General notes and scribbles**



# Biomechanical Principles, Levers and the Use of Technology

**1.1** Research: How can the biomechanical principles on this page provide elite performers with an advantage in their sport?

**A** Describe Newton's three laws of motion.

## Newton's Laws of Motion

First Law:

Second Law:

Third Law:

**B** Complete the equations below and provide units for all parts of the equation.

## Biomechanical calculations

Force	=		x	
Momentum	=		x	
Acceleration	=		/	
Weight	=		x	

**C** Draw and label the three lever systems in the space below and explain how the second class lever system has a mechanical advantage.

## Levers

First class lever:

Second class lever:

Mechanical advantage:

Third class lever:

**Load:** the weight that needs to be moved (the weight of the moving body part)

**Effort:** the force needed to move the load (the muscle)

**Fulcrum:** the location of the movement (the joint)

**Effort arm:** the distance from the fulcrum to the effort

**Load arm:** the distance from the fulcrum to the load

**D** Describe 3 factors affecting air resistance and 2 factors affecting friction.

Affected by:

- 
- 
- 

**Weight:**  
The effect of gravity on an object.  $\text{Weight} = \text{mass} \times 9.81\text{m/s}^2$

**Net force:**  
The total force exerted on an object

**Balanced force:**  
Opposing forces in opposing directions are equal  
**Unbalanced forces:**  
Opposing forces in opposing directions are unequal

**Friction:**  
Occurs when two surfaces interact, opposing movement

Affected by:

- 
- 

**Air resistance:**  
A form of friction acting between an object and the air

**Reaction:**  
Provide an opposite force to the force being exerted

**Forces changing an object's centre of mass will lessen its stability**

**Centre of mass:**  
The point at which the total body mass is concentrated

**Stability:**  
The object's resistance to changing position

**Free body diagrams**  
These show the vertical and horizontal forces being exerted on a body, and how these affect the motion of the body



**E** Draw and label arrows on the free body diagram of a cyclist to show the forces acting upon them as they perform.

## Analysing movement through the use of technology



Force plates



Limb kinematics



Wind tunnels

**F** Describe the three ways technology can be used to analyse movement in sport.

# Biomechanical Principles, Levers and the Use of Technology

## Newton's Laws of Motion

### First Law: Inertia

An object's state of motion will not change unless acted upon by an external force

### Second Law: Acceleration

An object will accelerate in the same direction as the force exerted on it, and the amount of acceleration is directly proportional to this force

### Third Law: Reaction

For every action there is an equal and opposite reaction

## Biomechanical calculations

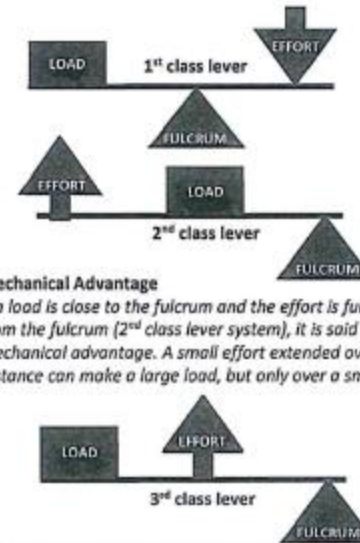
Force (N) = Mass (kg) × Acceleration (m/s<sup>2</sup>)

Momentum (kgm/s) = Mass (kg) × Velocity (m/s)

Acceleration (m/s<sup>2</sup>) = Change in velocity (m/s) / Time (s)

Weight (kg/ms<sup>2</sup>) = Mass (kg) × Gravitational acceleration (m/s<sup>2</sup>)

## Levers



**Load:** the weight that needs to be moved (the weight of the moving body part)

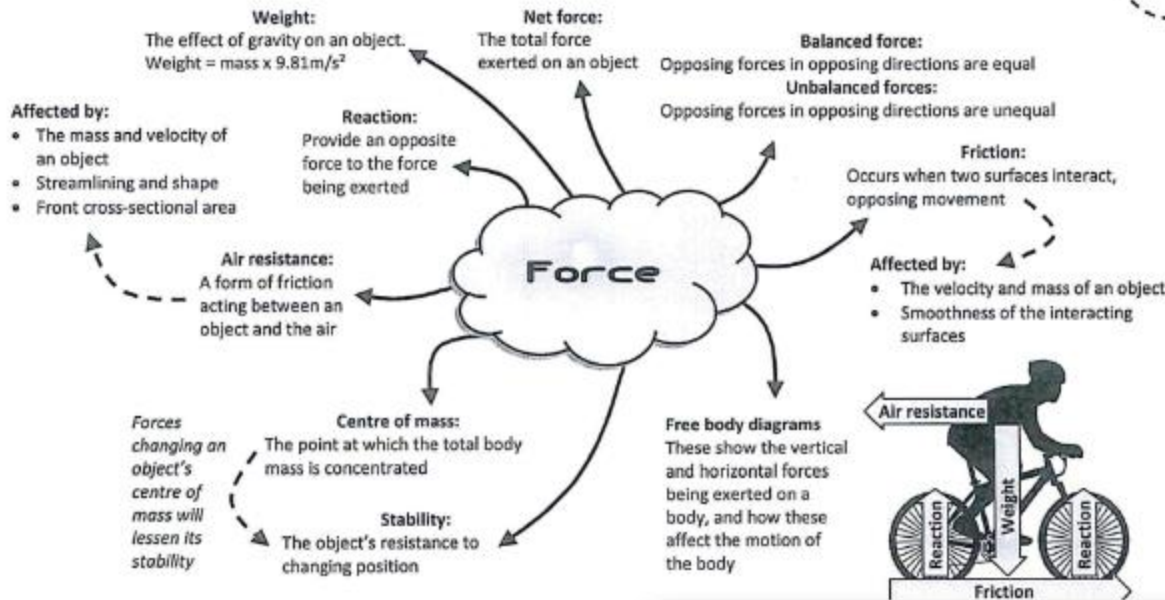
**Effort:** the force needed to move the load (the muscle)

**Fulcrum:** the location of the movement (the joint)

**Effort arm:** the distance from the fulcrum to the effort

**Load arm:** the distance from the fulcrum to the load

**Mechanical Advantage**  
If a load is close to the fulcrum and the effort is further away from the fulcrum (2<sup>nd</sup> class lever system), it is said to have a mechanical advantage. A small effort extended over a large distance can make a large load, but only over a small distance.



## Analysing movement through the use of technology



**Force plates**  
Used to calculate the reaction force produced when moving. This is particularly useful during jumping movements.

**Limb kinematics**  
Studying motion through use of cameras, wearable motion capture material and computer software. This allows analysis of the angles and movements of specific body parts.

**Wind tunnels**  
Used to analyse the impact of air resistance on sports performance and where improvements regarding streamlining could be made.



## Types of text

- Autobiographies
- News articles
- Textbooks
- Journals
- Magazines

Through reading for PE you have the chance develop your understanding of different roles in PE and Sport and improve your personal well-being through gaining knowledge.

### Key features of PE texts

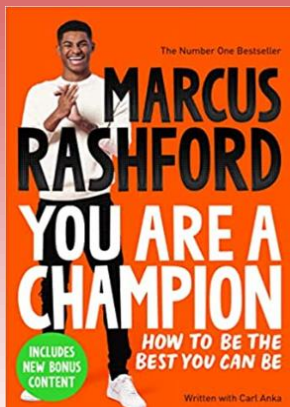
- Texts contain historical events, scientific information and current issues in sport and physical activity.
- The author of the text is important and influences what is written.
- Contextual factors are key (who, what, where and when) along with the author's purpose and perspective.
- Specialised terms are used throughout.
- Information related to fitness readings and diagrams/charts.

### Strategies for reading in PE

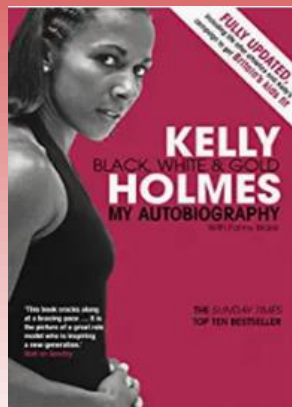
- Explore sources critically, looking to evaluate any potential bias in the source.
- Read texts closely, consider the author's perspective and circumstances.
- Analyse specialised words for meaning.
- Analysis of documents (who, what, where, and when) is the key method for for studying PE texts.
- You must try to make inferences from the texts, videos, images, charts, fitness readings and numerical data.
- You need to determine between interesting information and that which is relevant to developing your understanding for assessments.

## Recommended Reads

### KS3



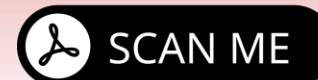
### KS4



### KS5



For **more suggestions** scan here:



**Types of text**

- Autobiographies
- News articles
- Textbooks
- Journals
- Magazines

**Through reading for PE** you have the chance develop your understanding of different roles in PE and Sport and improve your personal well-being through gaining knowledge.

Look for **key PE vocabulary**



Make sure that you know what the terms mean.

**Understand** which role in sport the source is aimed at



Make sure you know who the text is written for. Is it for a coach, performer, official, fan, sport scientist, sports journalist?

**Identify** the author's purpose/intention



Is the content of the text factual, instructional or opinion?

**Link the text** to what you already know



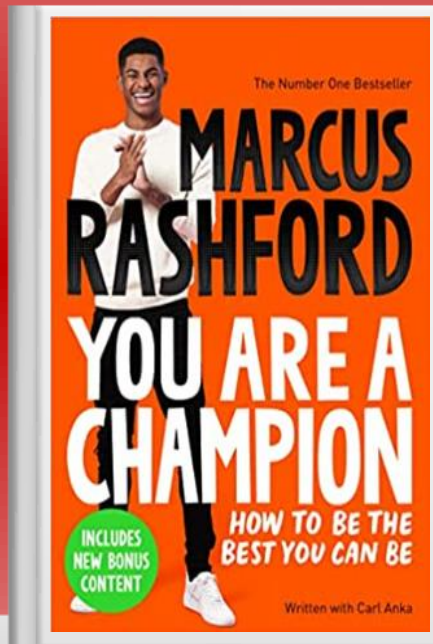
Compare the text to what you already know about the topic. What matches? What is new information? What differs from your own knowledge?



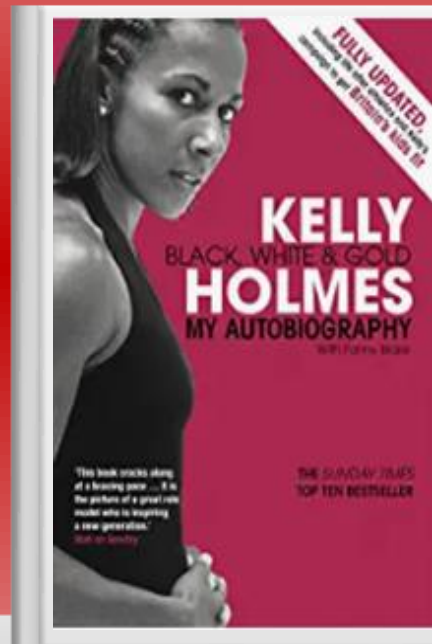
For **more suggestions** scan here:



**KS3**



**KS4**



**KS5**



# Top tips for success...

- Use your free time in school wisely – 5 hours of free time should be dedicated to PE per week!
- Plan your free time at home to have exercise, rest/relaxation AND time to study (you should be doing some work most nights)
- Keep notes organised in the correct folder, behind labelled dividers.
- Use coloured pens and highlighters in lessons.
- Revise anything you don't understand that very same night!
- Use your copy of the scheme of work to make notes or RAG rate your confidence in topics.
- Keep on top of topic summary sheets.
- Consider getting your own text book.