
A-level
PHYSICAL EDUCATION
7582/1

PAPER 1 – FACTORS AFFECTING PARTICIPATION IN PHYSICAL ACTIVITY
AND SPORT

Mark scheme

Additional Specimen

Version 1.0

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level, you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as in the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Section A

Applied anatomy and physiology

01 'Tidal volume × respiratory frequency' is an equation.

Which **one** of these physiological measures does the equation allow you to calculate?
[1 mark]

Marks for this question: AO1 = 1

C

Maximum 1 mark

02 Which of these are characteristics of a type I muscle fibre?

[1 mark]

Marks for this question: AO1 = 1

A

Maximum 1 mark

03.1 **Figure 1** shows a person performing a bench press.

Identify the joint action and main agonist occurring at the **shoulder** as the performer in **Figure 1** moves from position **A** to position **B**.

[2 marks]

Marks for this question: AO2 = 2

Award **one** mark for each of the following points.

Joint action: Horizontal flexion / adduction (1).

Main agonist: Pectoralis major / anterior deltoid (1).

Maximum 2 marks

03.2 **Figure 1** shows a person performing a bench press.

Identify the joint action and main agonist occurring at the **elbow** as the performer in **Figure 1** moves from position **A** to position **B**.

[2 marks]

Marks for this question: AO2 = 2

Award **one** mark for each of the following points.

Joint action: Extension (1).

Main agonist: Triceps (1).

Maximum 2 marks

04 Outline **three** factors that affect the rate at which a performer accumulates lactate. **[3 marks]**

Marks for this question: AO1 = 3

Award **one** mark for each of the following points.

- Intensity of exercise – higher intensity the faster lactate accumulation occurs (1).
- Fitness of the performer – physiological adaptive responses due to training, eg more mitochondria, greater capillary density, improved gaseous exchange (1).
- VO_2 max of a performer / buffering capacity – higher the level, delayed rate of lactate accumulation (1).
- Respiratory exchange ratio/RER – closer the value to 1.00 quicker lactate accumulation occurs (1).
- Muscle fibre type used – if slow twitch fibres used, delays lactate accumulation (1).

Accept any other suitable factors that affect the rate at which a performer accumulates lactate.

Maximum 3 marks

05.1 Define arteriovenous oxygen difference (A- VO_2 diff). **[1 mark]**

Marks for this question: AO1 = 1

Award **one** mark for the following point.

- The difference in the volume of oxygen between the arteries and the veins (1).

Accept any other suitable definition of arteriovenous oxygen difference (A- VO_2 diff).

Maximum 1 mark

05.2 Explain what happens to arteriovenous oxygen difference (A- VO_2 diff) following the onset of exercise. **[2 marks]**

Marks for this question: AO2 = 2

Award **one** mark for each of the following points.

- Increase in the difference (1).
- More oxygen is extracted by the working muscles / stored in myoglobin (1).
- Venous blood therefore has less oxygen to return to the heart (1).

Accept any other suitable explanation of what happens to arteriovenous oxygen difference (A- VO_2 diff) following the onset of exercise.

Maximum 2 marks

06 Evaluate the appropriateness of plyometric training and interval training to games players who are trying to improve their level of performance.

[8 marks]

Marks for this question: AO1 = 2, AO2 = 3, AO3 = 3

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

Level	Marks	Description
4	7–8	Knowledge is consistently accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is consistently used. The answer almost always demonstrates substantiated reasoning, clarity, structure and focus.
3	5–6	Knowledge is usually accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is often used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
2	3–4	Knowledge is sometimes accurate with some detail. Application of breadth or depth of knowledge is sometimes evident. Analysis and/or evaluation is sometimes made between different relevant factors and their impact, but may lack coherence. Relevant terminology is sometimes used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and focus.
1	1–2	Knowledge may be limited. Application of breadth or depth of knowledge may be limited or not evident. There may be little or no analysis and/or evaluation between different relevant factors and their impact. Relevant terminology is occasionally used. The answer may lack substantiated reasoning, clarity, structure and focus.
	0	No relevant content.

Possible content may include:

AO1 – Knowledge of plyometric training and interval training

Eg Plyometric training involves hopping / bounding / depth jumping / medicine ball work. Its aim is to develop power / speed / explosive strength and it involves fast twitch fibres / type II. There are three phases (pre-stretch, amortisation and muscle contraction).

Interval training is a method that incorporates periods of high intensity exercise followed by periods of rest or low intensity exercise. It is often referred to as high intensity interval training (HIIT). The intensity can be altered to suit the needs of the performer. HIIT involves short high intensity periods that improve the anaerobic system. Research has shown that it also has benefits for the aerobic system.

AO2 – Application to a games player, eg netball

Eg Plyometric training can be helpful for netball players because they require power in both the legs and arms. Power required in legs to jump for rebounds / attacking rebounds / defensive rebounds. Power may be required in legs to jump for the ball in any of the three thirds. Leg power may be used to dodge quickly away from an opponent. Power required in arms to throw longer passes, eg shoulder passes. No specific equipment required so can easily be incorporated into netball training sessions.

Eg interval training can be helpful for netball players. Short intensity work good for netballers as it will help them handle sprints to move to the ball or to the opposition player with the ball. You could incorporate vertical jumps into the training which will increase power in legs to be better equipped to jump for the ball on rebounds or when receiving a high pass. No specific equipment required so can easily be incorporated into netball training sessions and can be completed quickly so not time intensive.

AO3 – Analysis/evaluation of the appropriateness of plyometric training and interval training to a games player, eg netball

Eg The development of leg power could make the difference between retrieving rebounds or not as Netball is a sport whereby goals can only be scored in the D, the power to retrieve rebounds is extremely important (to score / prevent the opposition from scoring). Many netball players are tall and the ball is often in the air, therefore the use of plyometrics to develop leg power may enable players to intercept and/or catch the ball.

In a 48 minute game, it can be argued that other components of fitness are more important than power, ie agility, aerobic power etc – therefore it can be argued that plyometrics is not as important for a games player. Interval training might be more appropriate as it benefits both the anaerobic and aerobic energy systems. Periods of high intensity exercise can help players compete with the game when fast paced, eg many sprints during the game to close down opponents, make fast breaks, etc.

Using leg power to dodge may be particularly important when marked closely, eg at centre pass, and plyometrics could make the difference between gaining the space to receive the ball or having a pass intercepted. Improving in this area could also be factored into interval training by incorporating vertical jumps into training sessions.

Credit other relevant evaluative points about the appropriateness of plyometric training and interval training to a games player. Answers must be in relation to improving performance for a games player.

Maximum 8 marks

07 Lactate sampling and the VO₂ max test are measurements of energy expenditure.

Evaluate how useful these measurements of energy expenditure would be for a 100m sprinter **and** a marathon runner.

[15 marks]

Marks for this question: AO1 = 4, AO2 = 5, AO3 = 6

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

Level	Marks	Description
5	13–15	Knowledge is consistently comprehensive, accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is almost always used. The answer demonstrates a high level of substantiated reasoning, clarity, structure and focus.
4	10–12	Knowledge is usually comprehensive, accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is usually used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
3	7–9	Knowledge is generally accurate and sometimes detailed. Application of breadth or depth of knowledge is sometimes evident. Some analysis and/or evaluation is made between different relevant factors and their impact but may sometimes lack coherence. Relevant terminology is used but may sometimes be missing. The answer sometimes demonstrates substantiated reasoning, clarity, structure and focus.
2	4–6	Knowledge is sometimes accurate but may lack detail. Application of breadth or depth of knowledge is occasionally evident. Some analysis and/or evaluation is attempted between different relevant factors and their impact, but is likely to lack coherence. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and/or focus at times.
1	1–3	Knowledge is limited and may lack accuracy and detail. Application of breadth or depth of knowledge is likely to be limited or not evident. There may be very little or no analysis and/or evaluation made between different relevant factors and their impact. Relevant terminology used only very occasionally. The answer often lacks substantiated reasoning, clarity, structure and/or focus.
	0	No relevant content.

Possible content may include:**AO1 – Knowledge of lactate sampling and the VO₂ max test**

Eg Lactate sampling involves measuring the level of lactate in the blood stream. It involves venous extraction of blood using a needle. Lactate levels usually measured in mmol/L. It is taken to calculate OBLA level (4mmol/L) and the resulting OBLA score compared to percentage of VO₂ max.

VO₂ max testing is a progressive test carried out on a treadmill or similar cardiovascular machine. It is used to calculate the maximal volume of oxygen that can be consumed per unit of time and is usually measured in litres per minute/ml.kg.min⁻¹. It involves use of gas analysis.

AO2 – Application to a 100m sprinter and a marathon runner

Eg both athlete types capable of doing the tests as part of a training programme / testing arrangement.

Sprinter unlikely to do either test but most unlikely to do the VO₂ max test. Sprinter may use lactate sampling in training, ie test lactate at the end of a sprint race.

Marathon runner most likely to use both tests. Marathon runner may rely on VO₂ max testing as a physiological measure to inform training. Marathon runner may integrate VO₂ max testing and lactate sampling regularly within their training schedule.

AO3 – Evaluation of the usefulness of these measurements of energy expenditure to a 100m sprinter and marathon runner

Eg Sprinter unlikely to use either test as they tend to focus purely on speed and neither test is directly related to speed. The VO₂ max test is a test of aerobic endurance which is irrelevant for a sprinter. Sprinter may decide to evaluate lactate levels at the end of a race to analyse the efficiency of their ATP/PC system, which could be linked to speed in metres per second per 10 m to establish any threshold point. However, the use of either test would have very little impact / potential impact on the performance speeds of a sprinter.

Marathon runners more likely to make use of a VO₂ max test because of the aerobic evaluation it allows. They can then plan a training programme to increase their VO₂ max which would be monitored regularly. A marathon runner more likely to use lactate sampling because if they can establish their OBLA point, as a physiological measure this would dictate the speed they could run (optimal speed). Training would therefore be designed just below their OBLA. A marathon runner could compare their OBLA point as a percentage of VO₂ max to try to increase this percentage through training.

Credit other relevant evaluative points in relation to the usefulness of these measurements of energy expenditure for a 100m sprinter and/or a marathon runner.

Maximum 15 marks

Section B

Skill Acquisition

08 Which **one** of these is a characteristic of a performer in the cognitive stage of learning?
[1 mark]

Marks for this question: AO1 = 1

D

Maximum 1 mark

09 Armbands are used as a buoyancy aid when people are learning to swim.
This is an example of which type of guidance?
[1 mark]

Marks for this question: AO1 = 1

B

Maximum 1 mark

10 There will be a delayed response by a badminton player when their opponent's shot clips the top of the net, changing the flight path of the shuttlecock.
Use the single channel hypothesis to explain this.
[3 marks]

Marks for this question: AO2 = 3

Award **one** mark for each of the following points.

- The initial stimulus is the shuttlecock being hit, the second stimulus is the shuttle hitting the net (1).
- As the second stimulus arrives before first response can be completed, the player cannot deal with second stimulus / response until finished with first stimulus / response / psychological refractory period (1).
- The badminton player therefore has a slower / longer response / reaction time (1).
- Badminton player reacts too late / rushed shot / unforced error / cannot return (1).

Accept any other suitable explanations of the single channel hypothesis. Answers must be related to the badminton player and the delayed response caused by the shuttlecock hitting the net and changing direction.

Maximum 3 marks

- 11 Baddeley and Hitch's working memory model consists of a central executive, which controls and coordinates three subsystems.

Outline the role of the three subsystems named below.

[3 marks]

Marks for this question: AO1 = 3

Award **one** mark for each of the following points.

Visuospatial sketchpad (inner eye) (sub-max 1 mark)

- Deals with visual and spatial information (1).
- Stores and processes information in a visual or spatial form (1).
- The Visio-Spatial Sketchpad is used for navigation (1).
- Displays and manipulates visual and spatial information held in long-term memory (1).

Phonological loop (sub-max 1 mark)

- Deals with spoken and written material. It can be used to remember a phone number. It consists of two parts (1).
- **Phonological Store** (inner ear) – Linked to speech perception. Holds information in speech-based form (ie spoken words) for 1–2 seconds (1).
- **Articulatory control process** (inner voice) – Linked to speech production. Used to rehearse and store verbal information from the phonological store (1).

Episodic buffer (sub-max 1 mark)

- Acts as a 'backup' store which communicates with both long term memory and the components of working memory (1).
- Links to other two subsystems and perception (1).
- Allows visual and audio information to be 'chunked together' (1).
- Holds information temporarily and is key to conscious awareness (1).

Accept any other suitable outline of the role of the three subsystems of the working memory model.

Maximum 3 marks

12 State **two** factors that determine whether a skill is classified as open or closed. **[2 marks]**

Marks for this question: AO1 = 2

Award **one** mark for each of the following points.

- If the environment constantly changes it is an open skill (1).
- The degree to which a skill is perceptual and externally paced – more perceptual and externally paced usually means it is more open (1).
- If the environment is stable and predictable it is a closed skill (1).
- Skills tend to be self-paced when closed (1).

Accept any other suitable factors that determine whether a skill is classified as open or closed.

Maximum 2 marks

13 Using your knowledge of Schmidt's schema theory, explain the importance of sensory consequences when executing a netball pass. **[2 marks]**

Marks for this question: AO2 = 2

Award **one** mark for each of the following points.

- Important so that the performer receives intrinsic / kinaesthetic feedback about the pass (1).
- The information concerning knowledge of performance is important to decipher the level of performance / success of the pass (1).
- May be able to decipher the response outcome without the use of intrinsic feedback, ie from extrinsic sources (1).

Accept any other suitable explanation of the importance of sensory consequences when executing a netball pass.

Maximum 2 marks

14 **Figure 2** shows an athlete leaving the blocks at the start of a 100m race.

Analyse the stages of information processing that contribute to the success of an athlete's start to a race.

[8 marks]

Marks for this question: AO1 = 2, AO2 = 3, AO3 = 3

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

Level	Marks	Description
4	7–8	Knowledge is consistently accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is consistently used. The answer almost always demonstrates substantiated reasoning, clarity, structure and focus.
3	5–6	Knowledge is usually accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is often used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
2	3–4	Knowledge is sometimes accurate with some detail. Application of breadth or depth of knowledge is sometimes evident. Analysis and/or evaluation is sometimes made between different relevant factors and their impact, but may lack coherence. Relevant terminology is sometimes used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and focus.
1	1–2	Knowledge may be limited. Application of breadth or depth of knowledge may be limited or not evident. There may be little or no analysis and/or evaluation between different relevant factors and their impact. Relevant terminology is occasionally used. The answer may lack substantiated reasoning, clarity, structure and focus.
	0	No relevant content.

Possible content may include:

AO1 – knowledge of the stages of information processing

Eg Taking in information from the environment / display, information received by the senses of the body/stimulus identification stage. The sprinter perceives this information – acquires the information, interprets, selects and organises it. Process of selective attention. Perception involves DCR (detect, compare, recognise). The sprinter translates this information and programmes a response (response programming). The use of STM / LTM sends a decision to the effector mechanism and the muscular system outputs the decision.

AO2 – application to the start of a race

Eg A sprinter takes in the extent of their environment / display, eg blocks, other sprinters, sound of the crowd / sound of the gun, etc. Stimulus identification stage – sees blocks / opponents (eyes), hears crowd and gun (ears), feels position in blocks (kinaesthesia), etc. The sprinter perceives this information – acquires the information, interprets, selects and organises, eg interprets the position of the blocks. DCR application – detects the position of the feet in the blocks, compares it to past experience, recognises if adjustments should be made, perceives that gun sound is time to move. Use of STM/LTM – has not started in last 30 seconds so has to recall how to start from the long term memory. Sends a decision to the effector mechanism – to move/use anaerobic power / explosive start and the muscular system outputs the decision to start and muscles provide the force to move.

AO3 – Analysis of the stages of information processing that contribute to the success of an athlete’s start to a race

Eg Interpretation of the display is key to success of the start / must hear gun clearly / leave on the ‘b’ of the bang. Selective attention must be directed to the sense of hearing to hear the gun to get out of the blocks quickly. DCR is important to detect the body’s position, compare it to previous successful starts, recognise slight changes to enable the power to generate through the feet correctly. The start is key in such a short race, therefore the decision must be sent quickly through the effector mechanism to the appropriate muscles. The decision made must include a large impulse being sent to the muscles to generate the appropriate power. Links can be made to how appropriate arousal can maintain focus/concentration and selective attention can block out any distractions cues which could delay reaction time (psychological refractory period), full focus and selective attention can reduce the number of stimuli to process (relationship to Hicks Law) etc.

Credit other relevant analytical points about the stages of information processing that contribute to the success of an athlete’s start to a race.

Maximum 8 marks

- 15** The coach of an elite basketball team has noticed a recent decline in the number of successful shots during matches. This has led to a reduction in the players' confidence.

Evaluate how effective the use of variable practice and Bandura's model of self-efficacy would be when improving the shooting success and confidence of the team.

[15 marks]

Marks for this question: AO1 = 4, AO2 = 5, AO3 = 6

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

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5	13–15	Knowledge is consistently comprehensive, accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is almost always used. The answer demonstrates a high level of substantiated reasoning, clarity, structure and focus.
4	10–12	Knowledge is usually comprehensive, accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is usually used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
3	7–9	Knowledge is generally accurate and sometimes detailed. Application of breadth or depth of knowledge is sometimes evident. Some analysis and/or evaluation is made between different relevant factors and their impact but may sometimes lack coherence. Relevant terminology is used but may sometimes be missing. The answer sometimes demonstrates substantiated reasoning, clarity, structure and focus.
2	4–6	Knowledge is sometimes accurate but may lack detail. Application of breadth or depth of knowledge is occasionally evident. Some analysis and/or evaluation is attempted between different relevant factors and their impact, but is likely to lack coherence. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and/or focus at times.
1	1–3	Knowledge is limited and may lack accuracy and detail. Application of breadth or depth of knowledge is likely to be limited or not evident. There may be very little or no analysis and/or evaluation made between different relevant factors and their impact. Relevant terminology used only very occasionally. The answer often lacks substantiated reasoning, clarity, structure and/or focus.
	0	No relevant content.

Possible content may include:

AO1 – knowledge of variable practice and Bandura’s model of self-efficacy

Eg Variable practice, eg variation of practice / varying how the skill is practiced different situations. Variable practice should be used when the skill is open and the environment unpredictable. Practice sessions should match real life scenarios.

Self-efficacy, eg improved confidence can lead to improved performance. There are four factors affecting self-efficacy:

- performance accomplishments (influenced by what done in the past / past experiences)
- vicarious experience (watching others do the same thing and being successful)
- verbal persuasion (power of reinforcement and encouragement)
- emotional arousal (keeping emotions / arousal intact during pressure situations).

AO2 – Application to the coach of the basketball team

Eg Variable practice, eg would involve varied shooting drills. Mix of different types of shooting – practices may involve shooting from close, distance, lay-up, set shots, three point, etc. Could change the conditions, eg introduce opposition so have varied amount of pressure to replicate unpredictable conditions of a game situation.

Self-efficacy, eg coach could show players footage of times when made shots to show them that they can do it (performance accomplishments), the coach could give accurate demonstrations of different shots to the players (vicarious experience), the coach could praise players when they are successful / players could congratulate one another when they are successful when they have made shots in practice / in a game (power of reinforcement and encouragement), use stress management techniques like visualization when taking free throws to control anxiety (emotional arousal).

AO3 – Evaluation of the effectiveness of variable practice and Bandura’s model of self-efficacy in improving the shooting success and confidence of the team

Eg Variable practice can also be used to mimic situations from games in which shooting has been poor. The variety may add a fun element, which could increase motivation. Additionally, coach could facilitate confidence by allowing success in practices, eg if the practices start at a lower level of demand and then increase in difficulty, confidence of being accurate in an easier drill may transfer to the next drill. This could build up confidence in the players, especially if coupled with positive feedback from coach.

However, as elite performers, massed practice could be the most beneficial. The team are physically fit, so could practice without breaks, are motivated (eg paid), could interpret kinesthetic feedback without need for extrinsic advice / feedback. Also, might be better to use massed practice for improving accuracy of free throws, which are a closed skill, whereas variable practice is better for open skills.

Variable practice is also time consuming and could place unnecessary demands on the players if given too many things to focus on, which could exacerbate their confidence issues. This could mean that stress levels increase as a result.

Credit other relevant evaluative points about the effectiveness of the use of variable practice and Bandura’s model of self-efficacy in improving the shooting success and confidence of the team.

Maximum 15 marks

Section C

Sport and society

16 The 'Golden Triangle' describes the relationship between which three bodies? **[1 mark]**

Marks for this question: AO1 = 1

C

Maximum 1 mark

17 'An inequality where society is divided into different levels on the basis of a characteristic, such as wealth or status.'
Which **one** of these is the above statement describing? **[1 mark]**

Marks for this question: AO1 = 1

D

Maximum 1 mark

18 Evaluate the importance of improved transport and urbanisation on the development of association football from the mid-19th century onwards.

[4 marks]

Marks for this question: AO3 = 4

Award **one** mark for each of the following points.

- Both equally as important as they allowed football to be played more regularly (1).
- Urbanisation can be seen to be important as the large numbers of people in one place provided a captive audience (1).
- The lack of space meant that purpose built facilities had to be built to manage crowds / provide a focus (1).
- Perhaps more important than transport as the majority of crowds were 'home' supporters anyway (1).
- Transport did however allow teams to travel so important as more and wider fixtures could be organised (1).
- Football was able to develop as fans could also now travel to watch games (1).
- Can be argued that transport was the most important as without it, new competitions could not have existed, eg FA Cup from 1871–2 season (1).

Accept any other relevant evaluative point around the importance of improved transport and urbanisation on the development of association football from the mid-19th century onwards.

Maximum 4 marks

19 State **two** characteristics of a modern amateur performer.

[2 marks]

Marks for this question: AO1 = 2

Award **one** mark for each of the following points.

- Plays for the love of the sport (1).
- Places large emphasis on taking part (1).
- Lower status than professional (1).
- Receive little / no funding (1).
- Some high level performers in certain sports are not professional so could technically be classed as amateur (1).

Accept any other relevant characteristics of a modern amateur performer.

Maximum 2 marks

20 Evaluate the extent to which British rule over an ‘empire’ played in the spreading of sporting ideas throughout the world in the 19th century.

[4 marks]

Marks for this question: AO1 = 1 AO2 = 1 AO3 = 2

Award **one** mark for each of the following points.

AO1 (sub-max 1 mark)

- British public school boys and university old boys spread sporting values throughout the empire (1).

AO2 (sub-max 1 mark)

Sporting ideas were spread throughout the empire by:

- teachers – development of teams / values (1)
- clergy – developed church teams / became missionaries (1)
- British army – armed services played sport in the empire (1)
- diplomats – travelled the world and took ideas with them (1).

AO3 (sub-max 2 marks)

- British Empire provided ‘worldwide opportunities’ / countries for British ideas to be taken to (1)
- The varying stakeholders – teachers / clergy, etc spread concepts / games to each part of the empire (1).
- The empire was literally worldwide and meant that sports like association football could be picked up by countries in all corners of the globe (1).
- Continuing need to protect and secure the empire meant that the British army had to be present in all parts of the empire – thus sporting ideas spread as the army played stereotypical British sports (1).

Accept any other relevant evaluative point around the extent to which British rule over an empire played in the spreading of sporting ideas throughout the world in the 19th century.

Maximum 4 marks

21 **Figure 3** 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 **Figure 3** and suggest reasons for the results shown.

[8 marks]

Marks for this question: AO1 = 2 AO2 = 3 AO3 = 3

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

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4	7–8	Knowledge is consistently accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is consistently used. The answer almost always demonstrates substantiated reasoning, clarity, structure and focus.
3	5–6	Knowledge is usually accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is often used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
2	3–4	Knowledge is sometimes accurate with some detail. Application of breadth or depth of knowledge is sometimes evident. Analysis and/or evaluation is sometimes made between different relevant factors and their impact, but may lack coherence. Relevant terminology is sometimes used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and focus.
1	1–2	Knowledge may be limited. Application of breadth or depth of knowledge may be limited or not evident. There may be little or no analysis and/or evaluation between different relevant factors and their impact. Relevant terminology is occasionally used. The answer may lack substantiated reasoning, clarity, structure and focus.
	0	No relevant content.

Possible content may include:

AO1 – Knowledge of factors affecting the emergence of elite female performers

Eg There has been an emergence of elite female performers in the late 20th century and early 21st century. Although they don't have the same amount of media coverage as male sports performers, the amount of media coverage has increased. This has led to more female role models. There has been more opportunities for women to join sports clubs. These opportunities have been made more attractive, eg by introducing female only classes or teams. Women's sport has been boosted by initiatives, eg Sport England, which again has raised awareness. Work has been done to deconstruct traditional gender stereotypes, eg women stay at home to look after children.

AO2 – Application to Figure 3

Eg The number of females registered has risen significantly, with an increase from just over 200000 in 1985 to 1300000 in 2015, which could have come from an increase in equal opportunities. There has been a steady rise year on year with no drops in the rate of the rise, which could be facilitated by greater media coverage of the women's game, which in turn has led to more female roles models. The rise has increased since 2005 which indicates the momentum has increased, eg due to more female provision / clubs.

AO3 – Analysis of the reasons for the results shown in Figure 3

Eg Football is more available and socially acceptable so more women are likely to start playing. Media coverage of women's football has increased, eg women's world cup / Champions League so more women are aware and likely to play and improve. There are more female footballers and therefore more people have heard of the big names, eg Kelly Smith. This can inspire younger players to play. Women who were encouraged to take up sport in the 20th century might encourage their children to do the same, which could lead to an increase.

There are presumably more clubs to cater for the increase in registered players, therefore more opportunities for the growing numbers to play competitively. FIFA / UEFA / governing bodies are more likely to fund women's football and the increase in the number of coaches and clubs allows and inspires more to play.

As domestic stereotypes and women's rights have improved, more cultures / religions / countries have allowed women to play.

Accept any other relevant analytical point about Figure 3 and suggestions for the results shown in the data.

Maximum 8 marks

- 22** **Table 1** contains data from the Sport England Active People Survey. It shows the percentage of people in England taking part in physical activity at least once a week according to work status, over a five year period.

Table 1

Work status	2011/12	2012/13	2013/14	2014/15	2015/16
Full time	43.8%	44.2%	43.5%	43.6%	43.4%
Unemployed	29.8%	38.2%	27.9%	26.7%	27.1%

Identify the barriers to participation for the disadvantaged **and** suggest possible solutions to overcome them. Refer to **Table 1** in your answer.

[15 marks]

Marks for this question: AO1 = 4 AO2 = 5 AO3 = 6

Students are expected to answer in continuous prose, use good English, organise information clearly and use specialist vocabulary where appropriate.

Level	Marks	Description
5	13–15	Knowledge is consistently comprehensive, accurate and well detailed. Application of breadth or depth of knowledge is clearly evident. Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact. Relevant terminology is almost always used. The answer demonstrates a high level of substantiated reasoning, clarity, structure and focus.
4	10–12	Knowledge is usually comprehensive, accurate and detailed. Application of breadth or depth of knowledge is often evident. Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent. Relevant terminology is usually used. The answer usually demonstrates substantiated reasoning, clarity, structure and focus.
3	7–9	Knowledge is generally accurate and sometimes detailed. Application of breadth or depth of knowledge is sometimes evident. Some analysis and/or evaluation is made between different relevant factors and their impact but may sometimes lack coherence. Relevant terminology is used but may sometimes be missing. The answer sometimes demonstrates substantiated reasoning, clarity, structure and focus.
2	4–6	Knowledge is sometimes accurate but may lack detail. Application of breadth or depth of knowledge is occasionally evident. Some analysis and/or evaluation is attempted between different relevant factors and their impact, but is likely to lack coherence. Relevant terminology is occasionally used. The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and/or focus at times.

1	1–3	<p>Knowledge is limited and may lack accuracy and detail. Application of breadth or depth of knowledge is likely to be limited or not evident.</p> <p>There may be very little or no analysis and/or evaluation made between different relevant factors and their impact.</p> <p>Relevant terminology used only very occasionally.</p> <p>The answer often lacks substantiated reasoning, clarity, structure and/or focus.</p>
	0	No relevant content.

Possible content may include:

AO1 – Knowledge of barriers to participation

Eg Barriers to participation include a lack of disposable income, lack of facilities, a lack of specialist equipment, location, emotional well-being, etc.

AO2 – Application to the disadvantaged and reference to Table 1

Eg Table 1 shows that unemployed people participate in less physical activity than people in full time employment in England, suggesting that socio-economic disadvantages are a barrier to participation. For example, being unemployed means that people won't have the money to spend on gym membership or on sports equipment. Sports equipment is expensive, even to buy trainers to go running.

Some people who are unemployed may live in a poorer neighbourhood that doesn't have many/any sports facilities. As a result, people cannot afford to travel to an area with facilities. People who are unemployed may have a low self-esteem and might not want to participate in sport/socialise with people as a result of it.

AO3 – Possible solutions to overcome barriers to participation for the disadvantaged

Eg Leisure centres could offer discounted rates during the daytime for people who are unemployed or disadvantaged to get them doing more sport/physical activity. They could also offer family discount rates to make participation more appealing and affordable.

There could be an initiative to find volunteers to run free classes / coaching sessions for people who can't afford to go to ones you have to pay for in order to get people participating more. This could even be youth clubs offering opportunities for participation in deprived areas.

Clubs could offer sponsorship deals for talented performers from disadvantaged backgrounds so that they have the opportunity to progress to an elite level.

Local businesses could sponsor local clubs / schools in disadvantaged areas by providing kit / equipment. It means that people can play sport and that there is exposure for local businesses so it is mutually beneficial. Communities could embrace the power of sport. There was a boost in participation amongst the unemployed in 2012.13, which could have been on the back of the London 2012 Olympic and Paralympic Games. Unemployed people at home in the day may have watched more sport and been inspired by it. Government / sports organisations / local communities could introduce initiatives to promote the power of sport as a way to boost emotional well-being and to get people feeling more positive in themselves.

Accept any other relevant barrier to participation and solutions to overcome them. Answers must link specifically to the disadvantaged and Table 1 to go beyond AO1.

Maximum 15 marks