



A-level
PHYSICAL EDUCATION
7582/1

PAPER 1 FACTORS AFFECTING PARTICIPATION IN PHYSICAL ACTIVITY
AND SPORT

Mark scheme

June 2021

Version: 1.1 Final Mark Scheme

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 Examiner.

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

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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 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

0 1

Which **one** of the following muscles is a **main agonist** when flexion occurs at the shoulder?

[1 mark]

Marks for this question: AO1 = 1

A – Anterior deltoid

0 2

Which **one** of the following is a direct product of beta oxidation?

[1 mark]

Marks for this question: AO1 = 1

A – Acetyl-CoA

0 3 . 1

Define the term 'tidal volume'.

[1 mark]

Marks for this question: AO1 = 1

- The volume of air breathed in or out per breath (1)

Do not accept *in and out*.

Accept any other appropriate definition of tidal volume.

Maximum 1 mark

0 3 . 2

Explain how **and** why a period of continuous exercise would impact the lung volumes in **Figure 1**.

[3 marks]

Marks for this question: AO2 = 3

- (Tidal volume) would increase as performer needs more oxygen to working muscles (1)
- (Expiratory reserve volume) decreases due to the increase in tidal volume (1)
- (Residual volume) will stay the same as if it decreased the lungs would be at risk of collapse/not affected by continuous exercise (1)

Accept any other appropriate explanation of how **and** why a period of continuous exercise would impact the lung volumes in **Figure 1**.

Maximum 3 marks

0 4

Explain the role of the atrioventricular node in the cardiac conduction system.

[3 marks]

Marks for this question: AO1 = 3

- Receives impulse from sinoatrial node/SAN (1)
- Delays (transmission of) impulse (1)
- To allow ventricular filling/enable the atria to fully contract (1)
- Sends impulse down septum/through bundle of His/to purkinje fibres (1)

Accept any other appropriate explanation of the role of the atrioventricular node in the cardiac conduction system.

Maximum 3 marks

0 5

Training can increase an athlete's maximum A-VO₂ diff.

Analyse how the body systems adapt to allow this.

[3 marks]

Marks for this question: AO3 = 3

- Increased oxygen content in arterial blood due to more red blood cells/haemoglobin/oxygen carrying capacity of the blood (1)
- Increased gas exchange at the muscle due to increased capillarisation/increases blood supply/surface area (1)
- Increased gas exchange at the muscle due to more myoglobin which has a greater affinity for oxygen than haemoglobin so pulls more oxygen into muscle/can store more oxygen in muscle (1)
- Increased gas exchange at the muscle due to larger/more numerous/more efficient mitochondria allowing for more oxygen to be used in a muscle cell so less returned to venous blood (1)

Reference to gas exchange at the muscle only required once for 2nd, 3rd and 4th bullet points.

Accept any other appropriate analysis of how the body systems adapt as a result of training to increase maximum A-VO₂ diff.

Maximum 3 marks

0	6	Evaluate the effectiveness of High Intensity Interval Training (HIIT) for a central midfielder in football.	[8 marks]
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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 High Intensity Interval Training (HIIT).

- Alternating periods of short intense anaerobic exercise with less intense recovery periods.
- The work interval should be anaerobic, and the recovery interval should be aerobic.
- HIIT improves anaerobic power.

AO2 Application of High Intensity Interval Training (HIIT) to a central midfielder in football.

- Sport-specific skills can be included.
- Work:rest ratio adapted to meet demands of football.
- Exercises selected to be sports specific.
- Can be completed individually or as part of a team/squad.
- Develops anaerobic power which is a component of fitness required by a central midfielder to sprint past an opponent.

AO3 Evaluation of the effectiveness of High Intensity Interval Training (HIIT) for a central midfielder in football.

- Central midfielder requires anaerobic power, but it may not be the most important component of fitness/requires several other components of fitness as well.
- As such, HIIT may be beneficial but only as part of varied training programme.
- Aerobic power may be considered the most important component of fitness for a central midfielder so other methods such as Fartlek/continuous/interval training may be more beneficial.
- High intensity nature of the training makes injuries more likely which could lead to the footballer missing games.
- HIIT would develop the performer's ability to perform football skills such as passing when fatigued/negative transfer may occur as skills suffer due to fatigue.
- Longer recovery period from HIIT training so sessions would have to be carefully planned around games/other training sessions to avoid fatigue/over-training.
- Difficult to develop tactics and teamwork during HIIT which is a key factor in the success of a central midfielder.
- Work:rest intervals for a central midfielder could be difficult to accurately work out due to differences in roles/styles of play.

Accept answers which refer to HIIT developing anaerobic and aerobic power as AO1 crediting further AO2 and AO3 answers made regarding aerobic power.

Do **not** credit answers which refer to HIIT developing aerobic power alone.

Accept any other appropriate evaluation of the effectiveness of High Intensity Interval Training (HIIT) for a central midfielder in football.

Maximum 8 marks

07	<p>Usain Bolt and Mo Farah are both multiple Olympic champions, Usain Bolt in the 100 m and Mo Farah in the 10 000 m.</p> <p>Analyse how the structures of their predominant muscle fibre types differ, producing functional characteristics that impact on their performance.</p> <p style="text-align: right;">[15 marks]</p>
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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 structural characteristics of type I (slow twitch) and type IIx (fast glycolytic) muscle fibre types

Type I (slow twitch)	Type IIx (fast glycolytic)
Size of motor neuron: Small Number of mitochondria: High Capillary density: High Myoglobin content: High ATPase levels: Low	Size of motor neuron: Large Number of mitochondria: Low Capillary density: Low Myoglobin content: Low ATPase levels: High

Type IIa fibre types are not relevant to this question.

AO2 Application of the structural characteristics of muscle fibre types to their functional characteristics and sport/athlete

Mo Farah

- Mo Farah's predominant muscle fibre type will be type I/slow twitch as 10 000 m is a long-distance running event which lasts over 3 minutes requiring the aerobic energy system.

The structure of these muscle fibres gives them a high aerobic capacity. This is because:

- The high capillary density of type I muscle fibres means they are supplied with large amounts of oxygenated blood.
- Their high myoglobin content means more of this oxygen is pulled into the muscle cell as myoglobin has a higher affinity to oxygen than haemoglobin.
- This extra oxygen can also be turned into energy more quickly in the extra mitochondria in their muscles.
- The ability of Mo Farah's type I muscle fibres to use oxygen more readily will increase his VO_2 max/aerobic power.

Usain Bolt

- Usain Bolt's predominant muscle fibre type will be type IIx/fast glycolytic.

The structure of these muscle fibres gives them a high anaerobic capacity. This is because:

- Large motor neurone provides great impulse to more muscle fibres resulting in faster, stronger contraction.
- High ATPase levels mean that ATP can be broken down more quickly to produce the energy required for muscle contractions.
- Usain Bolt's type IIx muscles fibres will improve his speed and power which are vital components in a 100 m sprint.

AO3 Analysis of how their muscle fibre type improves their performance in their sport (must be linked to structural and functional characteristics of correct muscle fibres to be creditworthy).

Mo Farah

- Higher VO_2 max/increased lactate threshold will allow Mo Farah to run at a faster speed for a longer period of time without fatiguing.
- This will give him a faster time for the race compared to an athlete with a high percentage of type IIa or type IIx muscle fibres.
- While Farah may be required to sprint at the end of the race, his position before the sprint, determined by his aerobic capacity, is much more important than the speed of his finish in determining success.

Usain Bolt

- The increase in power from type IIx muscle fibres will allow him to drive out of the blocks and accelerate quickly.
- His increased speed will allow him to cover the remaining distance in the race in the fastest time possible.
- As the race is short and quick, aerobic power is not required/fatigability is not a consideration, so muscles do not need these functions.

Accept any other appropriate analysis of how the structure of each athlete's predominant muscle fibres differ, producing functional characteristics that impact on their performance.

Maximum 15 marks

Section B

Skill acquisition

0 8

Which **one** of the following shows the correct relationship between reaction time, response time and movement time?

[1 mark]

Marks for this question: AO1 = 1

B – Reaction time + movement time = response time

0 9

Schmidt's schema theory states that learning occurs through the development of a schema.

Which **one** of the following shows the correct elements of recall schema?

[1 mark]

Marks for this question: AO1 = 1

A – Initial conditions and response specifications

1 0 . 1

Define the term 'learning plateau'.

[1 mark]

Marks for this question: AO1 = 1

- A learning plateau occurs when a learner stops progressing/no improvement in performance is evident (1)

Accept any other appropriate definition of a learning plateau.

1 0 . 2 State **two** potential causes of a learning plateau.

[2 marks]

Marks for this question: AO1 = 2

- Performer not physically ready/task too difficult/goals too high (1)
- Performer lacks ability to develop/modify current skills/reached potential (1)
- Fatigue/lack of fitness (1)
- Still developing mental model of more complex skill (1)
- Boredom/teedium/lack of motivation/extrinsic rewards/goals not challenging enough (1)
- Poor/low quality coaching/teaching/earlier faulty learning (1)

Accept first two answers only.

Accept any other appropriate potential causes of a learning plateau.

Maximum 2 marks

1	1	<p>Explain the advantages and disadvantages of using whole practice when learning a dance routine.</p> <p style="text-align: right;">[4 marks]</p>
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Marks for this question: AO2 = 4

Advantages

- Time efficient so can learn a new routine/several routines quickly for an upcoming competition or show (1)
- Fluency/relationship between subroutines is maintained which is vital for an aesthetic dance (1)
- Mental picture of whole dance can be developed aiding memory/future performances (1)

Disadvantages

- A whole new dance routine may be too much information which is difficult for the performer to remember (1)
- Doesn't allow the development of new/weaker skills as the performer is attempting the whole routine/not focussing on developing specific new skills (1)
- May cause fatigue leading to errors/injury (1)

Answers must be specifically linked to dance routine and not just a list of advantages and disadvantages of whole practice.

Accept any other appropriate explanation of the advantages and disadvantages of using whole practice when learning a dance routine.

Maximum 4 marks

1	2	<p>Analyse how the short-term memory and long-term memory work together to allow an autonomous performer to make effective decisions during performance.</p> <p style="text-align: right;">[3 marks]</p>
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Marks for this question: AO3 = 3

- The autonomous performer will filter/retain the most important/relevant stimuli, and hold it in their short-term memory (1)
- This information in short-term memory will then be compared to a wide range of experiences stored in long-term memory to decide on the best course of action (1)
- An autonomous performer will have many, skilful/well learned/adaptable motor programmes/schema/subroutines stored in their long-term memory to select from, moving the chosen response to the short-term memory to perform it (1)
- The autonomous performer will be able to make quicker decisions due to their ability to recognise key stimuli and compare them to the long-term memory/fast DCR process (1)

Accept any other analysis of how the short-term memory and long-term memory work together to allow an autonomous performer to make effective decisions during a performance.

Maximum 3 marks

1	3	<p>Evaluate the effectiveness of the different methods of guidance that could be used when teaching a swimmer who is in the cognitive stage of learning.</p> <p style="text-align: right;">[8 marks]</p>
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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 methods of guidance and cognitive learner

Methods of guidance

- Visual: Demonstrations.
- Verbal: Instructions.
- Mechanical: The use of aids to support performance.
- Manual: The coach using their own body to support/guide performance.

Characteristics of cognitive learners

- First stage of learning/beginner where they have no clear mental image of the skill and make many mistakes.

AO2 Application of methods of guidance to swimming

- Visual: Demonstration of correct swimming stroke.
- Verbal: Explanation of how and when to breathe.
- Mechanical: Use of a float to allow the performer to focus on kick action.
- Manual: Holding the learner flat in the water so they can feel the correct position they should be in.

AO3 Evaluating effectiveness of methods of guidance for a cognitive swimmer

- All types of guidance would play some role in the development of a swimmer who is in the cognitive stages of learning.
- Mechanical and manual guidance are vitally important in early stages to ensure safety.
- Mechanical and manual guidance also decrease the cognitive load/allow the swimmer to focus on parts of the skill as opposed to the whole eg using a float allows a focus on kicking action.
- Over reliance on mechanical and manual guidance will limit the swimmer's ability to develop a kinaesthetic feel for the whole skill. Can lead to loss of confidence for learners when aid is removed.
- Overreliance on mechanical and manual guidance can lead to loss of motivation when using an aid as learner thinks not being challenged/completing skill independently.
- Visual guidance will be important to provide correct mental image. This is conditional on the demonstration being accurate.
- Swimmers needs to see all parts of the stroke meaning demonstration will be required both in and out of the water.
- Verbal guidance may be the least important in this early stage as the swimmer will have limited knowledge of the skill/may not understand.
- Where verbal guidance is given it must be clear and use language which is accessible to the swimmer in the cognitive stage of learning.

Accept any other appropriate evaluation of the effectiveness of the different methods of guidance that could be used when teaching a swimmer who is in the cognitive stage of learning.

Maximum 8 marks

1	4	<p>Great Britain’s Rebecca Romero won a silver medal in rowing at the Athens Olympics in 2004. She then changed to track cycling, winning individual pursuit gold at the Beijing Olympics in 2008.</p> <p>Analyse why an elite performer would find the switch from rower to cyclist easier than if they were to move from tennis to badminton.</p> <p>Use your knowledge of transfer of learning and the following skill continua:</p> <ul style="list-style-type: none"> • Open-Closed • Discrete-Continuous • Simple-Complex. <p style="text-align: right;">[15 marks]</p>
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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	<p>Knowledge is consistently comprehensive, accurate and well detailed.</p> <p>Application of breadth or depth of knowledge is clearly evident.</p> <p>Analysis and/or evaluation is coherently and consistently made between different relevant factors and their impact.</p> <p>Relevant terminology is almost always used.</p> <p>The answer demonstrates a high level of substantiated reasoning, clarity, structure and focus.</p>
4	10–12	<p>Knowledge is usually comprehensive, accurate and detailed.</p> <p>Application of breadth or depth of knowledge is often evident.</p> <p>Analysis and/or evaluation is often made between different relevant factors and their impact, and is usually coherent.</p> <p>Relevant terminology is usually used.</p> <p>The answer usually demonstrates substantiated reasoning, clarity, structure and focus.</p>
3	7–9	<p>Knowledge is generally accurate and sometimes detailed.</p> <p>Application of breadth or depth of knowledge is sometimes evident.</p> <p>Some analysis and/or evaluation is made between different relevant factors and their impact but may sometimes lack coherence.</p> <p>Relevant terminology is used but may sometimes be missing.</p> <p>The answer sometimes demonstrates substantiated reasoning, clarity, structure and focus.</p>
2	4–6	<p>Knowledge is sometimes accurate but may lack detail.</p> <p>Application of breadth or depth of knowledge is occasionally evident.</p> <p>Some analysis and/or evaluation is attempted between different relevant factors and their impact, but is likely to lack coherence.</p> <p>Relevant terminology is occasionally used.</p> <p>The answer occasionally demonstrates substantiated reasoning, but may lack clarity, structure and/or focus at times.</p>
1	1–3	<p>Knowledge is limited and may lack accuracy and detail.</p> <p>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 skill continua and transfer of learning.

Skill continua

- Open: The environment the skill is performed is unstable/changing.
- Closed: The environment the skill is performed is stable/unchanging.
- Discrete: The skill has a clear beginning or end.
- Continuous: The skill has no clear beginning or end.
- Simple: The skill requires few decisions/little concentration.
- Complex: The skill requires many decisions/high concentration.

Transfer of learning

- Negative: One skill hinders the learning of another.
- Zero: One skill has no effect on the learning of another.

AO2 Application of transfer of learning and skill continua

Rowing to cycling	Badminton and tennis
Closed as both in stable environment Continuous as rowing and cycling have no clear beginning or end Simple due to few decisions/maximum effort/limited concentration required Zero transfer occurs as skill actions are different	Open as both in unstable environment Each shot is discrete as it has a clear beginning and end Complex as each shot requires concentration and many decisions to be made Negative transfer occurs due to the difference in how the shots are played (with and without excessive wrist movement).

AO3 Analysis of why combination of rowing and cycling is possible, but badminton and tennis is more difficult and justification of skill continua

Rowing to Cycling

- The ability to move from rowing to cycling is made possible as there is only one main continuous skill in each event.
- The relatively simple nature of the skills means they are easy to learn.
- The closed nature of the performance means that they are performed in the same way, each with little or no modification or adaptation required.
- Success in these two events is primarily down to fitness and not skill with both sports requiring the same components (aerobic power/muscular endurance/anaerobic power/speed).

Badminton to Tennis

- In badminton and tennis, however, negative transfer occurs which means that even skills with some similarities must be relearned.
- Every shot is a discrete skill with a different technique which needs to be learned.
- As they are complex this is time consuming and more difficult.
- Once the skill is learnt the performer must then learn to apply them in an open game situation effectively.
- Skill execution and decision-making will be the primary factor which determines success.

Accept any other appropriate analysis of why an elite performer would find the switch from rower to cyclist easier than if they were to move from tennis to badminton.

Maximum 15 marks

Section C

Sport and society

1 5

Which **one** of the following was a characteristic of 19th-century gentleman amateurs?

[1 mark]

Marks for this question: AO1 = 1

B – High morals

1 6

Which **one** of the following was a specific aim of the Wenlock Olympian Games?

[1 mark]

Marks for this question: AO1 = 1

B – Form Olympian class

1 7

State **three** physical health benefits of increased participation in sport.

[3 marks]

Marks for this question: AO1 = 3

- Decreased risk of heart disease (1)
- Decreased risk of stroke (1)
- Avoidance of high/low blood pressure (1)
- Decreased risk of type 2 diabetes (1)
- Maintaining a healthy weight/decreased risk of obesity (1)
- Strengthening of bones and muscles/decreased risk of osteoporosis and back pain (1)
- Decreased risk of some cancers (1)

Accept any other appropriate physical health benefits of increased participation in sport.

Maximum 3 marks

1 8 . 1

Describe how secondary socialisation differs from primary socialisation.

[1 mark]

Marks for this question: AO1 = 1

- Family are less involved and other agencies/people/groups have more influence (1)

Accept any other appropriate description of how secondary socialisation differs from primary socialisation.

Maximum 1 mark

1 8 . 2

Explain **three** ways an individual may be encouraged to participate in rock climbing through secondary socialisation.

[3 marks]

Marks for this question: AO2 = 3

- Their friends may enjoy rock climbing and encourage participation (1)
- There may be a rock climbing club nearby which they attend and make new friends (1)
- A teacher may encourage participation in lessons/as an extra-curricular club (1)
- May see climbing on TV/internet which makes it look appealing, so they seek out opportunities to participate (1)

Answers must be specifically linked to rock climbing and not a generic description of secondary socialisation.

Accept any other appropriate explanation of how an individual may be encouraged to participate in rock climbing through secondary socialisation.

Maximum 3 marks

1 9

The launch of the Diamond League athletics events in 2010 introduced large cash prizes into the sport. This was one of many factors which changed the status of track and field athletes post World War II (1950–present).

Evaluate what impact the changing status of track and field athletes has had on the sport of athletics.

[3 marks]

Marks for this question: AO3 = 3

Positive impact (sub max = 2)

- Increased prize money has allowed top athletes to train more, raising the standard of the sport (1)
- Higher standard of athlete performance increases the entertainment value of the sport/raises the profile of the sport (1)
- Increase in prize money available to athletes makes the sport more appealing as a career and increases the talent pool, further raising the standard of the sport (1)

Negative impact (sub max = 2)

- Prize money moved athletes away from amateur ideals to win at all cost mentality, which has changed the values of the sport (1)
- Athletes competing for large prize money has increased the instances of cheating/drug taking which harms the sport's reputation (1)

Accept any other appropriate evaluation of the impact that the changing status of track and field athletes has had on the sport of athletics.

Maximum 3 marks

2	0
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Analyse how the emergence of the middle class in the industrial and post-industrial period (1780–1900) impacted on the sport of association football at this time.

[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 middle class in the industrial and post-industrial period (1780–1900)

- Middle class were self-made men who took advantage of new business opportunities available during the industrial revolution.
- Also emerged from school and universities.
- Less money than upper class but education/entrepreneurialism allowed them to take up prominent roles in society.
- They became factory owners, clergy, officers in the army etc.
- These roles put them in positions where they oversaw/had control over/were trying to help the working class.

AO2 Application of the middle class to association football

- National governing bodies: Middle class set up a national governing body (the FA) which codified sports allowing everyone to play by the same rules.
- They created competition structures for people to enter such as the FA Cup.
- Factory owners: Set up factory teams.
- Providing workers with increased leisure time.
- Clergy: Provided land and facilities for football to take place.
- Philanthropists: Paid for the development of public parks/facilities where football could be played.

AO3 Analysis of how the middle class impacted on the sport of association football

- Broken time payments made by factory owners signalled the start of professional football which increased the standard by making the sport more appealing to the working class.
- Factory owners set aside time for footballers to train and play matches allowing greater focus on improving sport specific skills and fitness.
- The codification of rules by the FA/middle class meant that teams could travel to different areas to play a larger pool of teams of a higher ability, which improved the standard.
- The development of structured competitions such as the FA cup meant that the sport became more competitive/success was widely recognised increasing factory owners' motivation to bring together the best teams possible.
- The provision of more football pitches via the church and philanthropists increased the number of people who were able to play. This increased the playing pool and therefore the standard of the players who reached the top and became professional.

Accept any other appropriate analysis of how the emergence of the middle class in the industrial and post-industrial period (1780–1900) impacted on the sport of association football at the time.

Maximum 8 marks

2	1	<p>Studies suggest that children with disabilities report experiencing low self-efficacy when playing sport.</p> <p>Analyse how discrimination, stereotyping and prejudice can explain the children’s low self-efficacy when applied to Bandura’s model.</p> <p style="text-align: right;">[15 marks]</p>
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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 Bandura’s model of self-efficacy, discrimination, stereotyping and prejudice.

Bandura’s model of self-efficacy.

Self-efficacy is affected by:

- performance accomplishments – how you have performed in a given situation previously
 - vicarious experience – seeing how people of a similar ability to you perform in a given situation
 - verbal persuasion – the verbal comments you receive from significant others regarding your ability to succeed
 - emotional arousal – whether your emotional arousal is at an optimal level or not.
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- discrimination: Unfair treatment of a person based on a stereotype or prejudice
 - stereotyping: A preconceived idea about a group
 - prejudice: A preconceived opinion that is not based on reason or actual experience

AO2 Application of Bandura’s model of self-efficacy to children with a disability or long-term health issues.

- Performance accomplishments: Children with a disability may have had a bad experience of playing sport in the past reducing self-efficacy.
- May have had limited or no opportunities to experience success
- Vicarious experience: Children with a disability may have seen other children with a disability have a bad experience of playing sport reducing self-efficacy/may have never seen another child with a disability having a positive experience of playing sport in the past reducing self-efficacy
- Verbal persuasion: Children with a disability may have heard significant others doubting their ability to succeed or been verbally dissuaded from taking part due to health and safety concerns etc.
- Emotional arousal: Children with a disability may feel more anxious playing sports due increased risk/difficulty which may lead to over arousal, decreasing self-efficacy
- Discrimination: If a performer with a disability is unable to access a club/team/sport without legitimate reason.
- Stereotyping/prejudice: Thinking that people with disabilities are not able to play sport/should only do certain activities.

AO3 Analysis of how discrimination, stereotyping and prejudice would explain these feelings when applied to Bandura’s model of self-efficacy.

- Performance accomplishments: Children with a disability may have encountered discrimination when playing sport meaning they aren’t given the opportunity to be successful and leading to a decrease in self-efficacy.
- This discrimination may be based on the stereotypical view that people with a disability can’t play sport or the prejudice that someone with a certain disability isn’t as good as a performer without a disability.
- Vicarious experience: Discrimination by the media of sports played by people with a disability based on the prejudice that it isn’t as entertaining or exciting may limit coverage.
- Children with disabilities may not get the opportunity to see people with the same disability as them being successful in sport.
- This may mean they begin to believe stereotypes, decreasing self-efficacy.

- Verbal persuasion: People's stereotypical or prejudiced views that sport is dangerous/unsafe for people with disabilities due to the children possibly hearing a large number of negative, possibly discriminatory comments regarding their participation in sport.
- Emotional arousal: If children with disabilities encounter discrimination when participating in sport this may lead to anxiety, increasing arousal, leading to over-arousal which will decrease self-efficacy.

Accept any other appropriate analysis of how discrimination, stereotyping and prejudice can affect the children's low self-efficacy when applied to Bandura's model of self-efficacy.

Maximum 15 marks