



*Rewarding Learning*

**General Certificate of Secondary Education  
2023**

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## **Physical Education**

Paper 2

Developing Performance

**[G9772]**

**FRIDAY 26 MAY, MORNING**

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# **MARK SCHEME**

## General Marking Instructions

### **Introduction**

Mark schemes are intended to ensure that the GCSE examinations are marked consistently and fairly. The mark schemes provide markers with an indication of the nature and range of candidates' responses likely to be worthy of credit. They also set out the criteria which they should apply in allocating marks to candidates' responses.

### **Assessment objectives**

Below are the assessment objectives for Physical Education which are assessed in examination paper 1 and paper 2.

Candidates must:

- AO1** be able to recall knowledge and demonstrate understanding of the concepts, facts, terminology, principles and methods relating to the subject content;
- AO2** be able to apply effectively the concepts, facts, terminology, principles and methods relating to the subject content ;
- AO3** be able to analyse, interpret and evaluate information and data relating to the subject content.

### **Quality of candidates' responses**

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 16-year-old which is the age at which the majority of candidates sit their GCSE examinations.

### **Flexibility in marking**

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

### **Positive marking**

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 16-year-old GCSE candidate.

### **Awarding zero marks**

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

### **Marking Calculations**

In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error.

### **Types of mark schemes**

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

### **Levels of response**

Tasks and questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

**Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.

**Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.

**High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

### **Quality of written communication**

Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is basic.

Level 2: Quality of written communication is good.

Level 3: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

**Level 1 (Basic):** The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 (Good):** The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

**Level 3 (Excellent):** The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

		AVAILABLE MARKS
<p><b>1</b> The person is developing physical fitness for <b>performance</b>. Award <b>[0]</b> for an answer not worthy of credit. Award <b>[1]</b> for an understanding the demands of physical fitness for performance.</p>	[1]	1
<p><b>2</b> Example answers:</p> <ul style="list-style-type: none"> <li>• Enhanced/better performance</li> <li>• More aesthetically pleasing performance</li> <li>• Consistent, efficient and fluent execution of skills</li> <li>• Better decision making</li> <li>• Increased self esteem</li> <li>• Decreased risk of injury</li> </ul> <p>Award <b>[0]</b> for an answer not worthy of credit. Award <b>[1]</b> for a competent understanding of how a high level of physical fitness for performance will beneficially improve a sportsperson’s performance. (2 × [1])</p>	[2]	2
<p><b>3</b> A person’s flexibility is determined by the ability of the <b>muscles</b> and <b>ligaments</b> surrounding joints to stretch to allow the full range of movement at the joints.</p> <p>Award <b>[0]</b> for an answer not worthy of credit. Award <b>[1]</b> for a moderate understanding of what determines a person’s flexibility potential, e.g. A person’s flexibility is determined by the ability of the muscles surrounding joints to stretch. Award <b>[2]</b> for a clear and competent understanding of what determines a person’s flexibility potential, e.g. A person’s flexibility is determined by the ability of the muscles and ligaments surrounding joints to stretch to allow the full range of movement at the joints. [2]</p>	[2]	2

4 (a) **Dynamic** flexibility training is most suitable for the warm-up.

Example answers:

Including dynamic stretching exercises in the warm-up will:

- actively prepare the muscles.
- warm up the body/increases muscle temperature.
- take the muscles through their full range of motion by including sport specific movements.
- loosen up the joints so that they move more freely.
- enhance explosive performance/increase the ability of a muscle to produce force, such as jumping, running or sprinting as well as balance and agility.
- reduce the risk of injury.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for correctly identifying dynamic flexibility training as the most suitable to include in an athlete's warm-up.

Award **[1]** for a competent understanding of the importance of including dynamic flexibility training in an athlete's warm-up.

(2 × [1])

[2]

(b) **Static** flexibility training is most suitable for the cool-down.

Example answers:

Including static stretching exercises in the cool-down will:

- help to develop flexibility/increase the range of motion as the muscles are warm and pliable, therefore more easily stretched.
- ease tension in muscles caused by workout.
- increase blood flow to the muscles to reduce muscle soreness.
- reduce the risk of injury.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for correctly identifying static flexibility training as the most suitable to include in an athlete's cool-down.

Award **[1]** for a competent understanding of the importance of including static flexibility training in an athlete's cool-down.

(2 × [1])

[2]

4

5 Muscular strength enables a person's muscles to be able to **apply maximum or near maximum force to overcome a resistance**.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a competent understanding of the fitness component of muscular strength,

e.g. Muscular strength enables a person's muscles to be able to apply maximum or near maximum force.

Award **[2]** for a highly competent understanding of the fitness component of muscular strength,

e.g. Muscular strength enables a person's muscles to be able to apply maximum or near maximum force to overcome a resistance.

[2]

2

		AVAILABLE MARKS
<p><b>6</b> Example answers:</p> <ul style="list-style-type: none"> <li>Weightlifting: an ability to lift heavier weights; improved balance and coordination; reduced risk of injury.</li> <li>Rugby: stronger in the scrum as a greater ability to withstand force from opponents; improved balance and coordination; reduced risk of injury.</li> </ul> <p>Any other acceptable answer.</p> <p><b>NB</b> Do not credit any repeated situation/technique. Answers must be specific to the sport stated.</p> <p>Award <b>[0]</b> for an answer not worthy of credit. Award <b>[1]</b> for a clear example of the physical requirements of muscular strength in a specific sport. (2 × [1])</p>	[2]	2
<p><b>7</b> Example answers:</p> <ul style="list-style-type: none"> <li>The sportsperson ran continuously; for 25 minutes.</li> <li>The running session included the sportsperson working the body at high intensities for varying periods of time; for example, short bursts at 9/10 RPE, longer bursts at 8/10 RPE.</li> <li>Periods of high intensity work were followed by periods of recovery; for example, a sprint 9/10 RPE was followed by a jog of 4/10.</li> </ul> <p>Award [0] for an answer not worthy of credit. Award [1] for a basic understanding of how to apply the fartlek method of training to develop physical fitness. Award [2] for a moderate understanding of how to apply the fartlek method of training to develop physical fitness with limited planning of the time or intensity. Award [3] for a competent understanding of how to apply the fartlek method of training to develop physical fitness with some planning of the time or intensity. Award [4] for a highly competent understanding how to apply the fartlek method of training to develop physical fitness with good planning of the time and intensity.</p>	[4]	4
<p><b>8</b> Example answers:</p> <ul style="list-style-type: none"> <li>Circuit or weight training exercises must be performed explosively to develop muscular power.</li> <li>Plyometric circuit training exercises which require explosiveness will develop muscular power.</li> </ul> <p>Award <b>[0]</b> for an answer not worthy of credit. Award <b>[1]</b> for a clear understanding that exercises must be performed explosively to develop muscular power.</p>	[1]	1

## 9 Example answers:

**Advantage:**

- The planned circuit focuses on leg exercises only. This will help the athlete to develop a stronger lower body/develop hypertrophy of the lower body muscles to adapt and improve.
- A strong lower body will help prevent injury, for example avoid lower back pain/prevent knee injuries as lower body is strengthened.
- The planned circuit will help strengthen the sportsperson's core as they will have to engage the major abdominal muscles to perform the exercises correctly.
- Stronger lower body will give the sportsperson greater stability which will help, e.g. running form.

**Disadvantage:**

- The planned circuit focuses only on the major muscles of the lower body which could cause the athlete fatigue, as no recovery time is given/muscles are being overworked.
- The planned circuit focuses only on developing the major muscles of the lower body therefore the athlete will not develop their upper and core physical fitness.
- The planned circuit could lead to the athlete becoming injured as too much stress could be put on the major muscles of the lower body as little time is given to recover.

**Level 1 ([1]–[2])**

Overall impression – basic

Basic to moderate understanding of the advantages or disadvantages of organising circuit training.

The quality of written communication is basic. The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 ([3]–[4])**

Overall impression – good

Moderate to competent understanding of the advantages and/or disadvantages of organising circuit training.

The quality of written communication is good. The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear .

**Level 3 ([5]–[6])**

Overall impression – excellent

A highly competent understanding of both the advantages and disadvantages of organising circuit training.

The quality of written communication is excellent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is some use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently of a high standard to make meaning clear.

[6]

6

10 (a)

Exercise	Run
Training Method	Continuous Steady Pace (CSP)

AVAILABLE MARKS

Award [0] for an answer not worthy of credit.

Award [1] for correctly applying the principle of specificity to plan the type of exercise to match the demands of the sport.

Award [1] for correctly applying the principle of specificity to plan the training method to match the demands of the sport.

(2 × [1]) [2]

(b) Example answers:

- The purpose of the first stage of the warm-up is to gradually raise the athlete's pulse. This will involve working the major muscles of the body involved in the training session.
- The purpose of the first stage of the warm-up is to gradually raise the body temperature and the heart rate, which will help to warm the muscles.
- The athlete will start to jog at a low intensity and gradually raise the intensity towards the level to be used in the workout.
- For example, the athlete will increase the intensity from a jog to a half pace run, to a three-quarter pace run, and end with short sprints over 5-10 metres.
- The time set for the pulse raiser will be around three to five minutes. This is approximately 10% of the overall workout.

Award [0] for an answer not worthy of credit.

- *Pulse-raising purpose:*

Award [1] for a clear and competent understanding of the purpose of including a pulse-raiser in a warm-up.

- *Pulse-raising activity:*

Award [1] for planning a safe, appropriate and effective pulse raising activity.

- *Pulse-raising intensity:*

Award [1] for planning a safe, appropriate and effective intensity for the pulse-raising activity.

- *Pulse-raising time:*

Award [1] for planning a safe, appropriate and effective time for pulse raising activity. [4]

(c)

Example answer:

	Mon	Tue	Wed	Thur	Fri	Sat	Sun
<b>Week 1–2</b>	CSP Run 25 mins 6 RPE		CSP Run 30 mins 6 RPE		CSP Run 30 mins 6 RPE		
<b>Week 3–4</b>	CSP Run 30 mins 7 RPE		CSP Run 35 mins 7 RPE		CSP Run 30 mins 7 RPE		CSP Run 40 mins 6 RPE
<b>Week 5–6</b>	CSP Run 35 mins 7 RPE		CSP Run 35 mins 8 RPE		CSP Run 35 mins 7 RPE	CSP Run 30 mins 8 RPE	CSP Run 45 mins 7 RPE

Award [0] for an answer not worthy of credit.

Award [1] for a correct but moderate application of the principle of training to effectively plan a safe and appropriate training programme.

Award [2] for a correct, practical and competent application of the principle of training to effectively plan a safe and appropriate training programme.

(3 × [2])

[6]

12

11 (a) (i) The long-distance runner is **Student C**.

Award [0] for an answer not worthy of credit.

Award [1] for identifying student C as the long-distance runner.

[1]

(ii) Example answers:

- Student C has high levels of aerobic fitness.
- Student C ran the furthest in the 12-minute Cooper run, 3420m.
- Aerobic energy production is needed by Student C to be able to run long distance races for long periods of time without tiring.
- Student C scored 17.75 secs in the speed and agility test.
- Speed and agility are important skill-related fitness components for the long-distance runner for example, at the beginning of the race/ end of the race/overtaking an opponent.

Award [0] for an answer not worthy of credit.

Award [1] for a basic understanding of the relative importance of the physical fitness requirements for an athletic event.

Award [2] for a moderate understanding of the relative importance of physical fitness requirements for an athletic event.

Award [3] for a competent understanding of the relative importance of physical fitness requirements for an athletic event.

Award [4] for a highly competent understanding of the relative importance of physical fitness requirements for an athletic event, with reference to more than one fitness test result.

[4]

(b) (i) The gymnast is **Student A**.

Award [0] for an answer not worthy of credit.

Award [1] for identifying student A as the gymnast.

[1]

(ii) Example answers:

- Student A has excellent flexibility.
- Student A scored the highest in the sit and reach test, 32 cm.
- Flexibility is needed by the gymnast to be able to bend, stretch, twist and turn easily which is needed for most gymnastic movements.
- Student A has very good leg muscular power of the legs, scored 68 cm in the vertical jump test.
- Muscular power is important for Student A to be able to run faster/ with speed in an explosive effort for vault or floor routines/to get better height and distance.
- Student A has good speed and agility, scored 17.55 secs. Speed and agility are important skill-related fitness components for gymnastics to be able to change several positions quickly and efficiently. For example, floor routines/on the balance beam/somersaults.

Award [0] for an answer not worthy of credit.

Award [1] for a basic understanding of the relative importance of the physical fitness requirements for a sport.

Award [2] for a moderate understanding of the relative importance of physical fitness requirements for a sport.

Award [3] for a competent understanding of the relative importance of physical fitness requirements for a sport.

Award [4] for a highly competent understanding of the relative importance of physical fitness requirements for an athletic event, with reference to more than one fitness test result. [4]

(c) (i) The basketball player is **Student B**.

Award [0] for an answer not worthy of credit.

Award [1] for identifying student B as the basketball player. [1]

(ii) Example answers:

- Student B has excellent muscular power of the legs.
- Student B scored the highest in the vertical jump test, 72cm.
- Muscular power is needed by the basketball player to be able to exert a maximal contraction in one explosive effort for example, to jump to catch or score/to accelerate into an explosive sprint.
- Student B has excellent speed and agility; Student B achieved the fastest time of 16.65 secs in the speed and agility test.
- Speed and agility are very important skill-related fitness components for basketball. Basketball is not played in straight lines, but instead requires constant changes in direction at speed. For example, speed and agility are needed to explode towards the basket/get into position to take a charge/to catch up to an opponent after a turnover in a fast break situation.
- Student B has a high level of aerobic fitness, they scored 2900m in the 12-minute Cooper run.
- Aerobic energy production is an important component of fitness for basketball for the student to be able to move up and down the court at the speed and consistent effort needed to last the duration of the game without tiring.
- If Student B is male, they scored highly in the sit and reach test i.e., 21cm. Student B therefore has good levels of flexibility.
- For basketball players flexibility helps with a wide range of activities from jumping to being able to perform a low and wide defensive stance. Flexibility also will help with injury prevention.

Award [0] for an answer not worthy of credit.

Award [1] for a basic understanding of the relative importance of the physical fitness requirements for a sport.

Award [2] for a moderate understanding of the relative importance of physical fitness requirements for a sport.

Award [3] for a competent understanding of the relative importance of physical fitness requirements for an athletic event.

Award [4] for a highly competent understanding of the relative importance of physical fitness requirements for an athletic event, with reference to more than one fitness test result. [4]

**12 Example answers:****Athlete A:**

- Athlete A has not effectively applied the principle of overload.
- Athlete A started the programme using a 7 RM weight. Starting with a 7 RM weight is not possible to enable the athlete to complete 10 repetitions. This would put the athlete's body under too much stress and could lead to injury. Athlete A would have been better setting an overload of 12 RM to complete 10 repetitions safely at the beginning of the training programme.
- Athlete A has not effectively applied the principle of progressive overload.
- Athlete A demonstrates the principle of reversibility rather than progressive overload as the weeks progressed.
- The biological adaptations gained from training will be lost as Athlete A decreased the intensity of their training by decreasing the weight used. For example, in week 3 Athlete A was completing 10 repetitions with an 8 RM weight which is suitable but in the next phase of training they increased the RM to 9, which means the athlete was lifting a lighter weight.

**Athlete B:**

- Athlete B has effectively applied the principle of overload.
- Athlete B in week 1 was using a 12 RM weight to complete 10 repetitions. This is a very suitable overload at the beginning of the training programme. This will put the athlete's body under just the right amount of stress to be able to build Muscular Strength and avoid injury.
- Athlete B has effectively applied the principle of progressive overload.
- Each fortnight Athlete B decreased the RM by 1, making the weight they were using heavier. This means Athlete B gradually and safely increased the load placed on their body to allow continual improvement in fitness to occur. As Athlete B's body adapted to cope more efficiently with the increased weight (decreased RM) they overloaded again, and the body systems once again adapted to cope and become fitter. For example, increasing in week 4 the weight from 11 RM to week 6 using a 10 RM weight.

Award **[0]** for an answer not worthy of credit.

**Level 1 ([1]–[3])**

Overall impression – basic

Basic to moderate evaluation of the effective application of the principles of training, specifically overload and progressive overload.

The quality of written communication is basic. The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 ([4]–[6])**

Overall impression – good

Moderate to competent evaluation of the effective application of the principles of training, specifically overload and progressive overload.

The quality of written communication is good. The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

**Level 3 ([7]–[9])**

Overall impression – excellent

A highly competent and detailed evaluation of the effective application of the principles of training, specifically overload and progressive overload. Both athletes' effective application of overload and progressive overload is evaluated. The quality of written communication is excellent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently of a high standard to make meaning clear.

[9]

**AVAILABLE  
MARKS**

9

13 (a)

Training programme phase: Week 1–3	Student A (Muscular Strength)	Student B (Muscular Endurance)
Repetition Maximum (RM)	4RM	25RM
Repetitions	2 (2–4)	23 (23–25)
Rest	5 minutes (5–6 minutes)	2 minutes (2–3 minutes)

NB the planned repetitions and rest must be specific. Do not accept a range, e.g. 16–25 RM.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a specific and appropriate application of weight training to develop the specific type of muscular fitness.

(4 × [1])

[4]

(b) Example answers:

**Muscular Strength**

- To develop Muscular Strength the recommended Repetition Maximum for Student A's programme to be effective was between 1–4 RM.
- As this is the first phase of the training programme, 4 RM was planned as it is a lighter weight to start the programme rather than 1 RM.
- It is better to start the weight training programme with a lighter weight but still be focused on developing Muscular Strength and then apply progressive overload in the second phase of the training to lower RMs as the student gets fitter.
- Starting the training programme at 1 RM would put too much stress on Student A and could lead to injury.

**Muscular Endurance**

- To develop Muscular Endurance the recommended Repetition Maximum for Student B's programme to be effective was between 16–25 RM.
- As this is the first phase of the training programme, 25 RM was planned as it is a lighter weight to start the programme rather than 16 RM.
- It is better to start the weight training programme with a lighter weight but still be focused on developing Muscular Endurance and then apply progressive overload in the second phase of the training to lower RMs as the student gets fitter.
- Starting the training programme at 16 RM would put too much stress on Student B and could lead to injury.

**Comparison**

- The planned RM for Muscular Strength must be lower than the planned RM for Muscular Endurance; to develop Muscular Strength will require lifting a heavier weight.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a limited but acceptable evaluation of how the planned RM will safely develop the specific type of muscular fitness in the first phase of training of the programme.

Award **[2]** for a moderate evaluation of how the planned RM will safely develop the specific type of muscular fitness in the first phase of training of the programme.

AVAILABLE  
MARKS

Award [3] for a clear and competent evaluation of how the planned RM will safely develop the specific type of muscular fitness in the first phase of training of the programme.

Award [4] for a clear and highly competent evaluation of how the planned RM will safely develop the specific type of muscular fitness in the first phase of the training of the programme. [4]

(c) Example answers:

#### **Muscular Strength**

- To develop Muscular Strength with the recommended RM of 1–4, the repetitions must be between 1–4.
- As this is the first phase of training and with a planned weight of 4 RM, 2 repetitions are appropriate as Student A is not having to complete the maximum number of repetitions for the chosen weight.
- This will allow Student A to apply progressive overload in the second phase of training to completing 4 repetitions with a 4 RM weight as they get fitter.
- Starting with lower repetitions than the RM of the planned weight would reduce the risk of Student A becoming injured.
- If the planned weight is 4 RM it is not possible to perform more than 4 repetitions.

#### **Muscular Endurance**

- To develop Muscular Endurance with a recommended RM of 16–25, the repetitions must be between 16–25.
- As this is the first phase of training and with a planned weight of 25 RM, 23 repetitions are appropriate as Student B is not having to complete the maximum number of repetitions for the chosen weight.
- This will allow Student B to apply progressive overload in the second phase of training to completing 25 repetitions with a 25 RM weight as they get fitter.
- Starting with lower repetitions than the RM of the planned weight would reduce the risk of Student B becoming injured.
- If the planned weight is 25 RM it is not possible to perform more than 25 repetitions.

#### **Comparison**

- The planned repetitions for Student A are much lower as they are working with a lower RM weight/heavier weight.
- The planned repetitions for Student B are higher than the repetitions planned for Student A. This is because Student B is working with a higher RM weight/lighter weight.

Award [0] for an answer not worthy of credit.

Award [1] for a limited but acceptable explanation as to how the repetitions chosen will safely develop the specific type of muscular fitness at the beginning of a weights programme.

Award [2] for a moderate explanation as to how the repetitions chosen will safely develop the specific type of muscular fitness at the beginning of a weights programme.

Award [3] for a clear and competent explanation as to how the repetitions chosen will develop the specific type of muscular fitness at the beginning of a weights programme.

Award [4] for a clear and highly competent explanation as to how the repetitions chosen will develop the specific type of muscular fitness at the beginning of a weights programme. [4]

(d) Example answers:

- Longer periods of rest between sets were planned for Student A's programme compared to Student B's programme. Students A will be working at a higher intensity/lower RM. This applies the principle of rest as the harder you work the more rest time should be allowed.
- The planned rest for Muscular Strength is recommended to be between 5 to 6 minutes.
- The planned rest for Muscular Endurance is recommended to be between 2 to 3 minutes.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a moderate understanding of the safe application of the principle of rest to develop a specific type of muscular fitness at the beginning of a weights programme.

Award **[2]** for a clear and competent understanding of the safe application of the principle of rest to develop a specific type of muscular fitness at the beginning of a weights programme. [2]

14

- 14 (a) Balance is the ability to remain in a state of equilibrium (stable, not falling), whether static or moving.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a clear and correct definition of balance. [1]

(b) Example answers:

- Gymnast – would need good balance to hold a position e.g. handstand; to stop them falling off the gymnastic apparatus during a routine, e.g. beam; to remain on their feet, e.g. after landing from a vault.
- Footballer – would need good balance to stay on their feet, e.g. when being tackled or tackling.
- Rugby – would need good balance to hold their position, e.g. in the scrum; to be able to make quick reactions to avoid a tackle.
- Netball – would need good balance to keep a stable posture to ensure they do not foot fault; to perform single leg reaching activities, e.g. when passing the ball or when shooting.
- Boxing – would need good balance to help them keep upright after taking a hit.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a competent understanding of how balance underpins skilled performance in a specific sport. [2]

(2 x [1])

3

- 15** Example answers:
- Whole practice is when the skill is **practiced in its entirety/total**. It is not broken down into parts.
  - For example, when teaching a golf swing it is difficult to split this skill up into parts because you would lose the flow and ‘feel’ of the swing.
  - For example, when practicing the full sequence of movements for the long jump in athletics – the run-up, take-off, flight and landing.
  - Other examples may include: somersault in gymnastics; dart throw; snooker shot; tennis serve; soccer penalty kick.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a clear and competent understanding of whole practice to help learning.

Award **[1]** for a clear example of whole practice being used to develop skilled performance in a specific sports activity.

(2 × [1]) [2]

2

- 16 (a) (i)** Swimmer A is in the **autonomous/advanced** stage of learning.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for identifying Swimmer A being in the autonomous stage of learning. [1]

**(ii)** Example answers:

- Swimmer A has learnt the required swimming skills and can perform these almost automatically without much thought or attention.
- Swimmer A’s swimming movements are efficient, effective and coordinated.
- Swimmer A makes fewer errors and the coaches’ role is in fine tuning the performance, tactics and mental performance.
- Swimmer A will focus more attention on the decision making about strategies and tactics for the swim race. For example, to start the race fast.
- In a competitive situation Swimmer A can take account of relevant factors, such as opponents and environmental conditions.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a moderate understanding of the features of a performance in the autonomous stage of learning.

Award **[2]** for a competent understanding of the features of a performance in the autonomous stage of learning.

Award **[3]** for a highly competent understanding of the features of a performance in the autonomous stage of learning. [3]

- (b) (i)** Swimmer B is in the **cognitive/beginner** stage of learning.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for identifying Swimmer B being in the cognitive stage of learning [1]

**(ii)** Example answers:

- Swimmer B will have to carefully think about the technique in order to perform the skill being taught.
- Swimmer B will require a clear mental picture of the swim technique required.

- Swimmer B will make major errors; Swimmer B's swimming movements are unlikely to be efficient, effective or coordinated.
- Swimmer B will find it difficult to correct his own mistakes.
- Swimmer B will rely on the teacher/coach to give clear demonstrations, simple instructions, short periods for practice and praise for correct actions.
- Swimmer B may feel anxious, lack confidence and worry that there is too much to take in to perform the skill correctly.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a moderate understanding of the features of a performance in the cognitive stage of learning.

Award **[2]** for a competent understanding of the features of a performance in the cognitive stage of learning.

Award **[3]** for a highly competent understanding of the features of a performance in the cognitive stage of learning. [3]

(c) (i) Swimmer C is in the **associative/intermediate** stage of learning.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for identifying Swimmer C being in the associative stage of learning. [1]

(ii) Example answers:

- Swimmer C's performance of the swim skills improves considerably, they are more efficient, effective and coordinated; there are fewer mistakes made.
- Swimmer C focuses on refining the skills they have previously learnt through practice.
- Swimmer C will think less about her technique and more about timing and coordination.
- Swimmer C has some ability to understand and correct her own technique mistakes.
- Swimmer C will concentrate on practicing the skill previously learned and stores to use internal feedback from her senses and external feedback from her coaches.
- Swimmer C will feel more in control and more confident in her skill ability.
- In a straight forward competitive situation and without too much pressure, she can use the skills successfully.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for a moderate understanding of the features of a performance in the associative stage of learning.

Award **[2]** for a competent understanding of the features of a performance in the associative stage of learning.

Award **[3]** for a highly competent understanding of the features of a performance in the associative stage of learning. [3]

17 (a)

	Week 1	Week 2	Week 3	Week 4 Target score
<b>Successful shots</b>	16	23	28	<b>32</b> <b>(30–37)</b>

AVAILABLE  
MARKS

**NB** target must be specific. Do not accept a target range, e.g. 29–35.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for an appropriate and sound application of setting a SMART target. [1]

(b) Example answers:

- **Specific** target: the target is specific to assessing the netballer’s scoring accuracy; the target will give the netballer a clear focus to work towards improving her scoring accuracy.
- **Measurable** target: the netballer will be able to monitor her progress against a set goal and prior achievement.
- **Achievable** or **realistic** target: the target set is realistic (not too easy) yet challenging to motivate the netballer to improve further scoring performance.
- **Recorded** target: by setting/writing the target down/agreeing it with the netball coach will give the target more purpose.
- **Timed** target: the target can be reviewed against performance at the end of week 4. There is a clear set a time limit for the netballer to complete the shooting drill to assess scoring accuracy.

Award **[0]** for an answer not worthy of credit.

**Level 1 ([1]–[2])**

Overall impression – basic

Basic to moderate understanding of the principles of SMART target setting to help improve sport performance.

The quality of written communication is basic. The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 ([3]–[4])**

Overall impression – good

Moderate to competent understanding of the principles of SMART target setting to help improve sport performance.

The quality of written communication is good. The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

**Level 3 ([5]–[6])**

Overall impression – excellent

A highly competent understanding of the principles of SMART target setting to help improve sport performance. All three SMART principles are effectively explained.

The quality of written communication is excellent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently of a high standard to make meaning clear. [6]

(c) Example answers:

- Mental practice will allow the netballer to **visualise** a successful shot to score over and over again in her mind.
- Mental practice will **increase** the netballer's **concentration** on performing the skill correctly. This will make the netballer less likely to make an error on her shooting timing/technique.
- Mental practice could increase the netballer's confidence with the shooting technique.
- Mental practice could make the netballer more focussed on the scoring skill.
- Mental practice could reduce anxiety associated with the netballer successfully scoring. This could make the netballer more relaxed when performing the skill so less muscular tension.
- Mental practice could help the netballer control emotions; will make them think more positively; higher levels of motivation.

Award **[0]** for an answer not worthy of credit.

Award **[1]** for correctly identifying a benefit of using mental practice to improve performance.

(2 × [1])

[2]

**Total**

**AVAILABLE  
MARKS**

9

**100**