The EverLearner

National Mock Exams 2025

POWERED BY ExamSimulator

Mark Scheme
AQA GCSE PE – Paper 1

Please read before distributing to students.

Purpose of this document

This document and the associated question paper are based on the data analysis performed by The EverLearner Ltd and published within the 2025 infographics. Please, note the following:

- We believe this mark scheme has a very strong association with previous AQA GCSE PE Paper 1 exams in relation to command terms, skills, AO distribution, extended writing requirements and topics.
- However, this is categorically NOT a mark scheme for a predicted paper. No one can accurately predict an exam paper and we make no claim to this end.
- It is vital that you only use this document internally in your school/college. Publishing the document online or sharing it in any other way is strictly prohibited, as this will undermine the potential educational experiences of students in other schools/colleges.
- Finally, please make sure you attend the associated revision session in May.

This mark scheme contains:

- Copy of each question for reference
- Marking guidance where appropriate
- Marking points containing alternative acceptable responses plus relevant assessment objective

How should schools use this mark scheme?

The mark scheme has been constructed specifically for the exam paper used in The EverLearner's National Mock Exams from 2025. Many of these questions will be discussed in the live revision show provided by James Simms on **Thursday 1st of May 2025 at 15:30** (available to all subscribing schools live and on demand; a shorter version for non-subscribers will be available on YouTube after the live session).

The paper is available to be set, answered and marked online via ExamSimulator. ExamSimulator is a premium resource available via TheEverLearner.com and provides immediate diagnostics of student writing performance after every exam answer. Get in touch with us to start a free trial.

I hope this helps both students and teachers in their exam preparations.

James Simms

The EverLearner

Subject	Physical Education
Course	**AQA GCSE** PE 9-1
Time allowed	1 hour 15 minutes

Title	**AQA GCSE** PE Paper 1 NME 2025

Guidance	• The total mark for this paper is 78 marks. • You have 1 hour 15 minutes (plus additional time for those who have exam access arrangements). • The marks for each question are shown in brackets (use this as a guide for how much time should be spent on each question). • You may use a calculator. • Read each question carefully and answer **all** questions. • If the timer reaches zero prior to you submitting your paper, the software will automatically submit your responses. • Good luck!

Total marks	78

1. Which of the following is **not** considered an anaerobic activity?

Marking points **(maximum 1)**

(1) [AO 1] A - Triathlon/Triathlon/A

2. Which component of fitness is measured using a handgrip dynamometer?

Marking points **(maximum 1)**

(1) [AO 1] C - Strength/Strength/C

3. Which of the following blood vessels transports oxygenated blood to the body?

Marking points **(maximum 1)**

(1) [AO 1] A - Aorta/Aorta/A

4. Look at the image. Which axis of rotation is the performer moving around?

Marking points **(maximum 1)**

(1) [AO 2] B - Transverse/Transverse/B

5. Which one is the correct definition of EPOC?

Marking points **(maximum 1)**

(1) [AO 1] C - Volume of oxygen consumed in recovery above resting rate/Volume of oxygen consumed in recovery above resting rate/C

6. Look at the image of a biceps curl. Which muscle is the main antagonist at the elbow during phase 2?

Marking points **(maximum 1)**

(1) [AO 2] D - Triceps/Triceps/D

7. Name **two** bones that articulate at the elbow.

Marking points **(maximum 2)**

(1) [AO 1] Humerus

(2) [AO 1] Radius

(3) [AO 1] Ulna

8. State two types of movement possible at a ball-and-socket joint.

Marking points **(maximum 2)**

(1) [AO 1] Flexion

(2) [AO 1] Extension

(3) [AO 1] Abduction

(4) [AO 1] Adduction

(5) [AO 1] Rotation

(6) [AO 1] Circumduction

9. Look at the image. Identify the joint action taking place at the **knee** as the performer moves from A to B.

Marking points **(maximum 1)**

(1) [AO 2] Flexion

10. Look at the image. Identify **both** the agonist **and** antagonist at the **knee** as the performer moves from A to B.

Marking points **(maximum 2)**

(1) [AO 2] Agonist is the quadriceps/Quadriceps are the agonist

(2) [AO 2] Antagonist is the hamstrings/Hamstrings are the antagonist

11. Look at the image. State the type of muscle contraction that is taking place in the agonist muscle at the **knee** as the performer moves from A to B.

Marking guidance

Do not accept isotonic on its own, as this is too vague.

Marking points (maximum 1)

(1) [AO 2] Isotonic eccentric/Eccentric

12. Define extension at a hinge joint. Use a sporting example in your answer.

Marking guidance

Accept any other suitable sporting examples.

Marking points (maximum 2)

(1) [AO 1] Increased angle at a joint/Joint angle increases

(2) [AO 2] Knee during the execution phase of kicking a football/Elbow during execution phase of shot-put/High jump in the take-off leg at the knee

13. Describe **two** features of a synovial joint and how they help to prevent injury.

Marking points (maximum 2)

(1) [AO 1] Ligaments increase joint stability/Ligaments help to prevent dislocation

(2) [AO 1] Synovial membrane secretes synovial fluid

(3) [AO 1] Synovial fluid lubricates the joint

(4) [AO 1] Bursae reduce friction between surfaces of the bone

(5) [AO 1] Cartilage covers the ends of bones and prevents friction/Cartilage acts as a shock absorber

14. The image shows a spirometer trace. Identify the missing volumes labelled A, B and C.

Marking points **(maximum 3)**

(1) [AO 2] A is tidal volume

(2) [AO 2] B is inspiratory reserve volume

(3) [AO 2] C is expiratory reserve volume

15. What is cardiac output?

Marking points **(maximum 1)**

(1) [AO 1] Volume of blood leaving the left ventricle per minute/Stroke volume x Heart rate

16. Performers and coaches may use different types of data to plan a training programme.
Describe **quantitative** data.

Marking points **(maximum 1)**

(1) [AO 1] Represented as numbers/Can be counted/Can be measured

17. Sonaya is a 22-year-old swimmer who competes in the 50m freestyle.
State **one** component of fitness that is important for Sonaya. Justify your choice.

Marking guidance

One mark for naming a relevant component of fitness and up to two marks for justifying the fitness component. Accept any other relevant components of fitness with a suitable justification.

Marking points **(maximum 3)**

(1) [AO 1] Speed

(2) [AO 3] Move through the water as quickly as possible and give her a better chance of winning the race

(3) [AO 3] To give her a better chance of winning the race

(4) [AO 1] Explosive strength/Anaerobic power/Power

(5) [AO 3] Push off the start blocks more forcefully

(6) [AO 3] Which gives her a headstart in the race over her opponents/Which gives her a quicker start

(7) [AO 1] Muscular endurance

(8) [AO 3] Perform repeated muscular contractions for the entirety of the race/Maintain force production of muscle contractions throughout the race

(9) [AO 3] To delay onset of fatigue/Prevent the performer from slowing down in the race

(10) [AO 1] Coordination

(11) [AO 3] Respond quickly to the start pistol

(12) [AO 3] Enabling her to move through the water efficiently at speed

(13) [AO 1] Reaction time

(14) [AO 3] To get a faster start in the race ahead of her competitors

(15) [AO 3] So that her arm and leg actions are smooth and fluent

18. Sonaya is a 22-year-old swimmer who competes in the 50m freestyle. Name and describe a fitness test that Sonaya may complete before planning her training programme.

Marking guidance

Award one mark for a suitable fitness test and up to two marks for a description of the fitness test.

Marking points **(maximum 3)**

(1) [AO 1] 30m sprint test

(2) [AO 1] 30m sprint: Rolling start

(3) [AO 1] 30m sprint: Run as fast as you can

(4) [AO 1] 30m sprint: Record time in seconds using a stopwatch

(5) [AO 1] Vertical jump test

(6) [AO 1] Vertical jump: Performer stands sideways onto the wall and measures standing reach height

(7) [AO 1] Vertical jump: Jump as high as possible and mark jump height/Use a vertical jump board to measure peak jump height

(8) [AO 1] Vertical jump: Measure difference between standing reach height and jump height in centimetres/Score is difference between standing and jump height in centimetres

(9) [AO 1] Ruler-drop test

(10) [AO 1] Ruler drop: Ruler held at 0cm between thumb and index finger

(11) [AO 1] Ruler drop: Performer catches ruler between thumb and index finger as it is dropped

(12) [AO 1] Ruler drop: Distance dropped is measured in centimetres

(13) [AO 1] Wall-toss test

(14) [AO 1] Wall toss: Performer stands 2m from wall

(15) [AO 1] Wall toss: Throw ball at the wall with an underarm action

(16) [AO 1] Wall toss: Throw ball with one hand and catch with the opposite hand

(17) [AO 1] Wall toss: Record number of successful catches in 30 seconds

19. Gaseous exchange takes place at the alveoli.
Describe the process of gaseous exchange.

Marking guidance

Do not accept features of the alveoli on their own.

Marking points **(maximum 4)**

(1) [AO 1] Takes place through diffusion/Diffusion of gases/Movement of gases from high to low concentration

(2) [AO 1] Oxygen concentration in the alveoli is higher than in the capillaries/Oxygen concentration is higher in the alveoli/Oxygen concentration is high in the alveoli

(3) [AO 1] Oxygen moves into the capillaries down the concentration gradient/Oxygen diffuses into the capillaries down the concentration gradient/Gases move down the concentration gradient

(4) [AO 1] Carbon dioxide concentration in the capillaries is higher than in the alveoli/Carbon dioxide concentration is higher in the capillaries/Carbon dioxide concentration is high in the capillaries

(5) [AO 1] Carbon dioxide moves into the alveoli down the concentration gradient/Carbon dioxide diffuses into the alveoli down the concentration gradient/Down the concentration gradient

20. Identify **three** immediate effects of exercise.

Marking points **(maximum 3)**

(1) [AO 1] Increase in temperature/Sweating/Red skin

(2) [AO 1] Increase in depth of breathing/Increase in tidal volume/Increase in depth of breathing

(3) [AO 1] Increase in frequency of breathing/Increase in breathing frequency/Increase in rate of breathing

(4) [AO 1] Increase in heart rate/Heart rate goes up

21. Building muscular strength and improving muscular endurance are both long-term effects of exercise.
Explain how **two other** long-term effects of exercise affect sports performance.

Marking guidance

Do not accept improved muscular strength or improved muscular endurance as they are included in the question.

Award up to two marks for stating alternative long-term effects of exercise. Award up to two marks for explaining how **each** long-term effect affects sports performance.

Marking points (maximum 4)

(1) [AO 1] Changes in body shape

(2) [AO 2] Long-distance runner carrying less weight will expend less energy

(3) [AO 1] Improved speed

(4) [AO 2] 100m sprinter can reach higher speeds and finish in a faster time/Forward in hockey can sprint for the ball faster and shoot before being tackled

(5) [AO 1] Improved suppleness/Greater flexibility/Increased flexibility

(6) [AO 2] Gymnast can perform moves with a greater range of movement/Perform more aesthetically pleasing movements/Perform more advanced routines

(7) [AO 1] Improved cardiovascular endurance/Increased stamina/Greater oxygen-carrying capacity

(8) [AO 2] Long-distance cyclist can work at a higher intensity for longer/Delay fatigue for longer

(9) [AO 1] Increase in size of the heart/Hypertrophy of the heart/Heart hypertrophy

(10) [AO 2] Marathon runner can run for a longer period of time with less effort/Improved efficiency of the heart so more oxygen delivered to working muscles

(11) [AO 1] Resting heart rate is lower/Lower resting heart rate/Bradycardia

(12) [AO 2] Takes longer for an athlete to reach their maximum heart rate/Heart works more efficiently

22. The image shows a long jumper at the point of take-off.
Identify the class of lever at the ankle.

Marking points **(maximum 1)**

(1) [AO 2] Second-class lever/2nd class lever/Second class

23. Look at the image.
Describe the position of A, B and C for the class of lever at the ankle during a long jump take-off.

Marking guidance

For written exams, accept a correctly drawn diagram of a second-class lever system as an alternative answer.

Marking points **(maximum 3)**

(1) [AO 2] A: Load would be between the effort arrow and fulcrum

(2) [AO 2] B: Effort arrow would be at one end of the lever arm and pointing upwards

(3) [AO 2] C: Fulcrum is at the other end below the line/Fulcrum is below the line at the other end

24. Define a training threshold.

Marking points **(maximum 1)**

(1) [AO 1] Upper and lower boundaries of a heart rate zone/Boundaries of the target zone

25. John is a 16-year-old triathlete (swimming, cycling and running) who wants to improve his fitness levels.
Calculate his aerobic **and** anaerobic training zones.

Marking guidance

Award one mark for calculating each training zone. Answers **must** include both lower and upper target heart rates, and **must** include the correct units of measurement.

Marking points (maximum 2)

(1) [AO 2] Aerobic is between 122 and 163 bpm/122 to 163 bpm

(2) [AO 2] Anaerobic is between 163 and 184 bpm/163 to 184 bpm

26. John is a 16-year-old triathlete (swimming, cycling and running) who wants to improve his fitness levels.
Identify the **three** phases of the training season that he will need to consider when planning his training.

Marking points (maximum 3)

(1) [AO 1] Pre-season/Preparation

(2) [AO 1] Competition/Playing/Peak

(3) [AO 1] Post-season/Off-season/Transition

27. Explain how a 200m sprinter could apply the principle of specificity to their training programme.

Marking points (maximum 2)

(1) [AO 2] Training methods relevant to the 200m such as interval training/Plyometrics/HIIT

(2) [AO 2] Working in the anaerobic training zone/Working above anaerobic training threshold/Training at 80-90% of maximum heart rate

(3) [AO 2] Focusing on components of fitness specific to 200m, such as speed/Improving power, as this is relevant to 200m/Improving reaction time to get a faster start to the race

(4) [AO 2] Focusing on a certain part of the race such as the start/Focusing on improving running around the bend

28. Discuss the suitability of the multi-stage fitness test for a netball player.

Marking guidance

Award up to three marks for reasons why it is suitable and award up to three marks for reasons why it is not suitable for a netball player.

Marking points **(maximum 5)**

(1) [AO 3] Suitable because it is running-based/Running-based like netball/Involves running

(2) [AO 3] Suitable because it involves changes of direction/Change of direction, which is similar to netball

(3) [AO 3] Suitable because it measures cardiovascular endurance, which is crucial in a netball match/Netball relies on cardiovascular endurance/Netball matches are long duration and require cardiovascular endurance

(4) [AO 3] Suitable because the maximal nature of the test is similar to a competitive match

(5) [AO 3] Suitable because the dimensions are similar to a netball court/Test can be done on a netball court/Similar length to a netball court

(6) [AO 3] Not suitable because it does not include sideways movement/Test does not involve sideways movements which are important in netball/Netball players rarely run forward and backward in straight lines

(7) [AO 3] Not suitable because there are no breaks in the test/Netball is a stop-start sport/Netball matches include periods of recovery

(8) [AO 3] Not suitable because the test does not include any netball-specific skills/Test does not include any motor skills relevant to netball

29. Look at the image. Identify the plane of movement and the axis of rotation during the goalkeeper's dive.

Marking points **(maximum 2)**

(1) [AO 2] Frontal plane

(2) [AO 2] Sagittal axis

30. Evaluate the importance of flexibility for a football goalkeeper.

Marking guidance

Award a maximum of three marks for positives or negatives. To award full marks, responses must include **at least** one positive (with three negatives) or one negative (with three positives).

Marking points (maximum 4)

(1) [AO 3] Flexibility is important to allow greater reach when diving to make a save/Allow greater range of movement when attempting a save/Greater shoulder flexibility will enable a goalkeeper to reach further and save a shot

(2) [AO 3] Greater ankle flexibility to push upwards and reach a ball when making a save at height

(3) [AO 3] Greater hip flexibility is beneficial when distributing the ball from a goal kick

(4) [AO 3] A flexible goalkeeper is less likely to get injured/Less likely to overstretch/More flexible means fewer injuries

(5) [AO 3] Increased flexibility can help a football goalkeeper to deflect a shot away from other attackers for a possible rebound/Increased flexibility in the wrists can help a goalkeeper to tip the ball round the post

(6) [AO 3] However, other components of fitness are also important such as reaction time to successfully save a shot/Flexibility is not as important as reaction time

(7) [AO 3] Flexibility may be less important than power for a goalkeeper when pushing off the floor to attempt a save

31. For a training programme to be effective, coaches and performers should apply the principle of progressive overload.
Justify the importance of progressive overload within a training programme.

Marking guidance

AO1 awarded for knowledge of progressive overload. AO2 awarded for application of progressive overload within a training programme. AO3 awarded for justification of the importance of progressive overload. Accept any other appropriate justification of progressive overload within a training programme. Please read the response in combination with the level descriptors to award an appropriate mark.

AQA GCSE PE 9-1 (6 Marks)

Marking points (maximum 6)

(1) [AO 1] Gradual increase of the amount of overload to improve fitness/Gradual increase of stress placed on body during training/More stress placed on the body than normal during training

(2) [AO 2] Which will reduce the potential for injury/Limit risk of injury

(3) [AO 3] Gradually applying overload in training leads to progressive improvements that are more likely to be sustained

(4) [AO 3] Lower risk of injury by applying overload gradually leads to more consistent training

(5) [AO 1] Gradually increase frequency of training/How often you train

(6) [AO 2] Training three times a week instead of twice a week/Training twice in week 3 and then training three times in week 4

(7) [AO 3] Training more often per week allows for greater fitness improvements/Training more often can allow a greater variety of training to take place, supporting overall fitness improvements

(8) [AO 1] Gradually increase intensity/How hard you train

(9) [AO 2] By working at a higher percentage of max heart rate/By working at a higher percentage of one-rep max

(10) [AO 3] Lead to greater fitness gains in a shorter period of time

(11) [AO 1] Gradually increase the time you train/How long you train/Number of reps

(12) [AO 2] Increasing duration of training runs by 1 minute each week/Adding 5 extra reps of an exercise per week/Adding an extra set of exercises per week

(13) [AO 3] Which would gradually improve fitness components such as cardiovascular endurance/Muscular strength/Muscular endurance

(14) [AO 3] Important to limit the increases to avoid injury, for example increasing duration OR number of reps

(15) [AO 1] Vary type of training to be more demanding/Vary activities done within a training session

(16) [AO 2] Changing stations within a circuit to target different muscle groups/Changing stations to include skill-based exercises/Adding extra challenge to exercises within a circuit

(17) [AO 3] Allows for a greater range of muscle groups to be targeted and improved, as well as improving skills leading to better fitness and overall performance

(18) [AO 3] Important to consider the fitness goals of a performer and make sure that progressive overload is relevant to the requirements of their sport

32. Nilam has been playing hockey for five years and wants to improve her fitness using Fartlek training.
Discuss the effectiveness of Fartlek training for a hockey player.

Marking guidance

AO1 awarded for knowledge of Fartlek training. AO2 awarded for application of Fartlek to hockey. AO3 awarded for discussion of positives and negatives related to Fartlek and a hockey player. Accept any other appropriate discussion of Fartlek training for a hockey player. Please read the response in combination with the level descriptors to award an appropriate mark.

AQA GCSE PE 9-1 (9 Marks)

Marking points (maximum 9)

(1) [AO 1] Training at different intensities/Different terrains/Varying work-recovery ratio

(2) [AO 1] Develops cardiovascular endurance/Cardiovascular fitness

(3) [AO 1] Develops speed

(4) [AO 1] Improves aerobic and anaerobic fitness

(5) [AO 2] Useful for individual or squad training

(6) [AO 2] Matches the changing pace of a game/Matches the changing intensities of a game/Training can match elements of the game, such as sprinting to close down a defender

(7) [AO 2] Easily included into a training session with periods of sprinting and jogging during drills

(8) [AO 2] Can be done indoors or outdoors, such as on a water-based pitch so it is more specific to hockey

(9) [AO 2] Training at 60-80% of max heart rate improves a player's aerobic fitness/Training at 80-90% of max heart rate improves anaerobic fitness

(10) [AO 3] Improving speed using Fartlek training benefits an attacker by being first to the ball/Increasing goalscoring opportunities/Being able to eliminate defenders

(11) [AO 3] Improving aerobic and anaerobic fitness using Fartlek training is more time-efficient/More efficient than also including continuous training

(12) [AO 3] Not sports-specific if done in isolation/Running on its own without incorporating skills

(13) [AO 3] However, difficult to measure intensity a player is working at

(14) [AO 3] Working at higher intensities may lead to a greater risk of injury/Requires high levels of motivation to maintain intensity levels and improve fitness

(15) [AO 3] Training on different terrains would not be beneficial to a hockey player, as they play on an artificial pitch

(16) [AO 3] Other methods such as weights or flexibility should also be included as part of strength and conditioning/To strengthen and lower injury risk

AQA GCSE Physical Education **6 Mark Level Descriptors**

Level	Marks	Description
3	5-6	Knowledge of the topic area is accurate and generally well detailed. Application to a to the performer/sport/context is mostly clear and effective. Analysis or Evaluation is thorough, reaching valid and well-reasoned links to the context. The answer is generally clear, coherent and focused, with appropriate use of terminology throughout.
2	3-4	Knowledge of topic area is evident but is more detailed for some than others. There is some appropriate and effective application to a performer/sport/context although not always presented with clarity. Any evaluation or analysis is clear but reaches valid and well-reasoned links to one area. The answer lacks coherence in places, although terminology is used appropriately on occasions.
1	1-2	Knowledge of the topic is limited. Application to a performer/sport/context is either absent or inappropriate. Evaluation or analysis is poorly focused or absent, with few or no reasoned links to context. The answer as a whole lacks clarity and has inaccuracies. Terminology is either absent or inappropriately used.
	0	No relevant content.

AQA GCSE Physical Education **9 Mark Level Descriptors**

Level	Marks	Description
3	7-9	Knowledge of the topics is accurate and generally well detailed. Application to a performer/sport/context is mostly appropriate, clear and effective. Analysis/ Evaluation or Discussion is thorough, reaching valid and well-reasoned links to context of the question. The answer is generally clear, coherent and focused, with appropriate use of terminology throughout.
2	4-6	Knowledge of the topics is evident but is more detailed for some than others. There is some appropriate and effective application to a performer/sport/context although not always presented with clarity. Any analysis/evaluation or discussion is clear but reaches valid and well-reasoned conclusions for some points more than others. The answer lacks coherence in places, although terminology is used appropriately on occasions.
1	1-3	Knowledge of the topics is limited. Application to a performer/sport/context is either absent or inappropriate. Analysis/Evaluation or Discussion is poorly focused or absent, with few or no reasoned conclusions. The answer as a whole lacks clarity and has inaccuracies. Terminology is either absent or inappropriately used.
	0	No relevant content.