



The EverLearner

# National Mock Exams 2025

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## Mark Scheme Edexcel 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 Edexcel 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 13:00** (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*



Subject	Physical Education
Course	Edexcel GCSE PE 9-1
Time allowed	1 hour 30 minutes

Title	Edexcel GCSE PE Paper 1 NME 2025
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Guidance	<ul style="list-style-type: none"><li>• The total mark for this paper is 80 marks.</li><li>• You have 1 hour 30 minutes (plus additional time for those who have exam access arrangements).</li><li>• The marks for each question are shown in brackets (use this as a guide for how much time should be spent on each question).</li><li>• You may use a calculator.</li><li>• Read each question carefully and answer <b>all</b> questions.</li><li>• If the timer reaches zero prior to you submitting your paper, the software will automatically submit your responses.</li><li>• Good luck!</li></ul>
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Total marks	80
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1. Exercise causes short-term effects on the body. Which one of the following is a short-term effect on the cardiovascular system?

Marking points (maximum 1)

(1) [AO 1] C - Increased stroke volume/Increased stroke volume/C

2. Which one of the following shows the correct net movement of gases from the capillary to the muscle tissue during gaseous exchange?

Marking points (maximum 1)

(1) [AO 1] Option B/B

3. Which one of the following images shows a flat bone?

Marking guidance

Accept pubis, ilium and iscium.

Marking points (maximum 1)

(1) [AO 1] B - Pelvis/Pelvis/B

4. Which one of the following is the correct **primary** function of plasma?

Marking points (maximum 1)

(1) [AO 1] B - Carrying nutrients/Carrying nutrients/B

**5. Muscle attachment and storage of calcium and phosphorus are two functions of the skeleton.**

**Explain how **one other** function of the skeleton allows a boxer to perform successfully.**

### Marking guidance

Do not accept explanations linked to muscle attachment or the storage of calcium and phosphorus.

Sub max one mark for AO1 and one mark for AO2. AO1 and AO2 mst be linked.

### Marking points (maximum 2)

- (1) [AO 1] Protection of vital organs
- (2) [AO 2] Cranium protects the brain and prevents concussion, which would negatively affect both performance and training
- (3) [AO 1] Joints for movement
- (4) [AO 2] Joints have different ranges of movement, allowing the boxer to use a variety of techniques
- (5) [AO 1] Red and white blood-cell production
- (6) [AO 2] Red blood cells carry oxygen to the working muscles, helping to prevent fatigue in the boxer and slower reactions
- (7) [AO 2] White blood cells required for immunity, allowing the boxer to fight infection, which could lead to illness stopping training or leading to early onset fatigue
- (8) [AO 1] Platelets are produced
- (9) [AO 2] Platelets help with clotting to ensure a boxer does not suffer excessive blood loss from any punches they might take



**6. Complete the table by:**

- (i) Stating the range of movement possible at the type of joint.
- (ii) Stating an example of the type of joint in the body.

**Marking guidance**

Range of movement must be flexion to extension. Do not credit flexion or extension alone.

Credit correct answers even if an incorrect answer is given for the same joint (i.e. mark each answer independently).

Accept radioulnar for D.

**Marking points (maximum 4)**

- (1) [AO 2] A is flexion to extension
- (2) [AO 2] B is ankle joint/B is ankle
- (3) [AO 2] C is rotation
- (4) [AO 2] D is atlas and axis

**7. Describe the range of movement possible at a ball-and-socket joint.**

**Marking points (maximum 3)**

- (1) [AO 1] Allows circumduction
- (2) [AO 1] Circumduction is a circular-shaped movement/Allows a circular-shaped movement
- (3) [AO 1] Combines flexion and extension
- (4) [AO 1] Combines abduction and adduction
- (5) [AO 1] Allows rotation

**8. The image below shows the muscular system while running.  
Identify the two muscles labelled A and B in the image.**

**Marking points (maximum 2)**

- (1) [AO 1] A is hamstrings
- (2) [AO 1] B is tibialis anterior

**9.** Shanice is a badminton player who requires quick movements and lunging actions to cover the court and reach the shuttle.

Examine the antagonistic muscle action taking place at the hip to allow her to move **into** a lunging position.

Marking points (**maximum 3**)

(1) [AO 3] Due to the contracting hip flexor/The hip flexor contracts and shortens

(2) [AO 3] Flexion occurs at the hip

(3) [AO 3] Due to the gluteals relaxing/The gluteus maximus relaxes and lengthens

**10.** A triathlon is a long-distance race that consists of swimming, cycling and running.

Explain how the characteristics of **two different** muscle-fibre types aid a triathlete in their performance.

Marking guidance

Accept other appropriate responses. Sub max two marks for only referring to one muscle-fibre type.

One mark for correct link between the muscle fibre type and its characteristic needed in the race (AO2). One mark for appropriate example linked to the characteristic.

Marking points (**maximum 4**)

(1) [AO 2] Fast twitch/Type IIx contract powerfully/contract forcibly

(2) [AO 2] Required for force and power for quick sprinting movements to overtake on the finishing straight/To get an explosive start in the swim/To power up a hill to avoid being overtaken

(3) [AO 2] Type IIa have both aerobic and anaerobic properties

(4) [AO 2] Type IIa contract at moderate-to-high intensity

(5) [AO 2] Used during a triathlon when moving through the pack at the beginning of the swim

(6) [AO 2] Slow twitch/Type I have a slow contraction speed

(7) [AO 2] Type 1 have high resistance to fatigue

(7) [AO 2] Type 1 have high resistance to fatigue

(8) [AO 2] Type 1 fibres have a high aerobic capacity

(9) [AO 2] Required for sustained periods of exercise allowing the triathlete to complete the event without the muscles fatiguing and needing to slow down

**11. State one feature of arteries which allows them to transport blood at high pressure.**

### Marking guidance

Accept any appropriate characteristic that links to high pressure.

### Marking points (maximum 1)

(1) [AO 1] Thick smooth muscular layer

(2) [AO 1] Elastic walls

(3) [AO 1] Small lumen

**12. Explain why it is essential for veins to contain valves.**

### Marking points (maximum 2)

(1) [AO 3] To prevent backflow/One direction only

(2) [AO 3] Due to blood flowing under low pressure

(3) [AO 3] Veins are the vessels furthest away from the heart pump

**13. Describe the term capillarisation.**

### Marking points (maximum 1)

(1) [AO 1] Process where new capillaries are formed around the alveoli and skeletal muscle/Process where new capillaries are formed around the alveoli/New capillaries formed around skeletal muscle

formed around skeletal muscle

**14.** Describe the changes in the chest cavity which allow inhalation to take place.

Marking points (maximum 2)

- (1) [AO 1] Diaphragm contracts and flattens/Diaphragm pulls downwards
- (2) [AO 1] Intercostal muscles contract and move the ribs up and outwards
- (3) [AO 1] Chest cavity increases in size drawing air in/Chest cavity gets larger to take in more air
- (4) [AO 1] Air pressure in chest decreases

**15.** Jonas uses different energy systems when playing competitive rugby.  
Define aerobic respiration.

Marking points (maximum 1)

- (1) [AO 1] Process of releasing energy from glucose using oxygen

**16.** Give one example of when a rugby player will be working **anaerobically** during a match.

Marking guidance

Accept any appropriate example that links to a rugby match. **Do not** accept examples linked to rugby training.

Marking points (maximum 1)

- (1) [AO 2] Sprint to the try line/Sprint to a loose ball/Explosive tackle on an opponent

**17.** Explain why lactic acid can be produced during respiration.

Marking points (maximum 2)

- (1) [AO 1] Produced during anaerobic respiration
- (2) [AO 1] Due to a lack of oxygen/Insufficient oxygen
- (3) [AO 1] Due to the high intensity of an activity

**18. Identify the class of lever system.**

Marking points (maximum 1)

(1) [AO 3] First class lever/1st class lever/First

**19. Give a sporting example of this lever system.**

Marking guidance

Accept any appropriate sporting example.

Marking points (maximum 1)

(1) [AO 2] Looking up to see the ball above the head/Looking up at the hoop when shooting in netball

(2) [AO 2] Extension at the elbow when punching in boxing/Extending the elbow when hitting a smash in badminton/Elbow extension when holding a javelin before it is thrown

**20. Explain why this lever system operates at mechanical advantage.**

Marking points (maximum 2)

(1) [AO 1] Effort arm is longer than load arm

(2) [AO 2] Heavy load can be lifted with relatively little effort

**21. Movement in the body occurs in a range of planes and around different axes. Complete the table by stating the plane and axis for the two skills.**

Marking points (maximum 4)

(1) [AO 3] A is frontal plane

(2) [AO 3] B is sagittal axis

(3) [AO 3] C is transverse plane/C is horizontal plane

(4) [AO 3] D is vertical axis

**22.** Which one of the following is being described?

""The ability to meet the demands of the environment.""

Marking points (maximum 1)

(1) [AO 1] B - Fitness/Fitness/B

**23.** Juan takes part in the vertical-jump test during his PE lesson. He scores 10.8cm. Which one of the following is the correct score rating for Juan?

Marking points (maximum 1)

(1) [AO 3] C - Average/Average/C

**24.** Which one of the following injuries occurs when a muscle is overstretched?

Marking points (maximum 1)

(1) [AO 1] D - Strain/Strain/D

**25.** Which of the following is the correct percentage of exhaled oxygen during exercise?

Marking points (maximum 1)

(1) [AO 1] B - 16%/16%/B

**26.** Darren competes in fitness racing, which combines running and workout stations. In total, he runs 8km and completes 8 high-intensity workout stations during each race, which include throwing, jumping and lifting.  
Define the term muscular strength.

Marking points (maximum 1)

(1) [AO 1] Ability to exert a maximum force against a resistance/Amount of force muscles can generate against a resistance

**27.** Explain why Darren requires the following components of fitness to be successful in his fitness race:

- (i) Muscular endurance
- (ii) Power

### Marking guidance

Accept any other appropriate answers linking muscular endurance and power to examples in the sport.

### Marking points (maximum 4)

- (1) [AO 2] Muscular endurance to sustain movement in the main muscle groups and maintain repeated contractions to complete the running
- (2) [AO 2] Muscular endurance to delay fatigue, slowing a competitor down, meaning they might not win or finish the race/ Muscular endurance to delay fatigue, which can prevent them from completing all workout stations leading to disqualification
- (3) [AO 2] Power to propel the competitor's body upwards on the jumping stations
- (4) [AO 2] Without power, the competitor might not reach the height and might trip, leading to potential injury
- (5) [AO 2] Without power, the competitor might not reach the height and might have to repeat the jump, wasting time and energy

**28.** Justify, using the data, why Darren is ranked number one in his team going into the fitness-racing event.

### Marking guidance

One mark for analysis of data in table (AO3) and one mark for applied reason (AO2).

### Marking points (maximum 2)

- (1) [AO 3] Very good ratings for speed and strength
- (2) [AO 2] Needed to create power in the throwing and jumping events
- (3) [AO 3] Very good rating for cardiovascular fitness
- (4) [AO 2] Needed to maintain energy and prevent fatigue slowing Darren down during the event

(5) [AO 3] Very good ratings for speed, strength and cardiovascular fitness

(6) [AO 2] All three components are required in fitness racing to be successful and he has scored highest out of the four performers on these tests

**29.** A netball team want to improve their speed and flexibility.

Complete the table below by:

- (i) Stating which method of training would be most appropriate for them.
- (ii) Stating an advantage of each training method.

### Marking guidance

Accept any other appropriate training methods linked to the relevant component of fitness.

Do not accept stretching. Do not accept duplicate answers for the advantage.

### Marking points (maximum 4)

(1) [AO 1] A is interval training

(2) [AO 2] B: Little equipment is required/B: Develops power as well/B: Can be done as a team to increase motivation

(3) [AO 1] C: Fitness classes/C: Yoga/C: Pilates

(4) [AO 2] D: Provides variety in training/D: Can be done as a team to increase motivation/D: Also develops strength

**30.** Part way through the season, the netball team have decided to work on their cardiovascular fitness.

Justify their choice of Fartlek training instead of continuous training.

### Marking points (maximum 2)

(1) [AO 3] Fartlek training matches the changing pace of a game/Matches the changing intensities of a match

(2) [AO 3] Fartlek training is more engaging than continuous training/Continuous training can be boring and demotivating

(3) [AO 3] Fartlek training works on speed and power as well as cardiovascular fitness/Continuous training only focuses on cardiovascular fitness/Continuous can lead to decreased speed



(4) [AO 3] Continuous training can lead to overuse injuries such as stress fractures

(5) [AO 3] Continuous training is more time-consuming than Fartlek training

**31.** Erika is 22 years old. Calculate her maximum heart rate.

### Marking guidance

Answers must include the units to be credited.

Marking points **(maximum 1)**

(1) [AO 2] 198bpm

**32.** Erika will be completing training in her anaerobic target zone.  
State the percentages she will need to work between.

### Marking guidance

Answers must include **both** upper and lower percentages.

Marking points **(maximum 1)**

(1) [AO 1] 80 to 90 percent/80-90%

**33.** Describe how rest and recovery can reduce the risk of injury.

Marking points **(maximum 2)**

(1) [AO 1] Allows breaks in training to recover/Prevents overtraining/

(2) [AO 1] Body has time to repair and strengthen after exercise/Adaptations occur to repair body tissues

(3) [AO 1] Greater adaptations from higher quality rest and recovery

**34.** State, using different examples, **two different** methods used by a showjumping team to reduce the risk of injury when riding a horse.

### Marking guidance

One mark for stating method to reduce risk and one mark for applied example to equestrian and showjumping.

Accept any other appropriate responses.

### Marking points (maximum 4)

- (1) [AO 1] Use protective clothing/Use protective equipment
- (2) [AO 2] Body protector/Airbag jacket/Helmet
- (3) [AO 1] Adherence to the rules/Adherence to the officials
- (4) [AO 2] Follow the direction of jumps/Only start when instructed
- (5) [AO 1] Check clothing/Check equipment
- (6) [AO 2] Make sure saddle is correctly fitted
- (7) [AO 1] Check facilities
- (8) [AO 2] Check the arena floor is clear of dangerous debris/Check the jumps are correctly set up

**35.** The image contains several performance-enhancing drugs (PEDs). For each of the performers below, state which performance-enhancing drug would most likely be used and explain how it would benefit their performance:

- (i) Archer
- (ii) Weightlifter
- (iii) Injured athlete

### Marking guidance

Accept any other appropriate response linked to a suitable example of how it would benefit performance. Students must use different types of performance-enhancing drug for each performer.

Select only the first PED for each performance if multiple are given.

### Marking points (maximum 6)

- (1) [AO 2] Archer: Beta blockers
- (2) [AO 3] Beta-blockers increase steadiness and precision needed in target sports/Beta-blockers steady the hand and decrease muscle tremors needed to improve accuracy
- (3) [AO 2] Weightlifter: Anabolic steroids
- (4) [AO 3] Anabolic steroids promote muscle growth leading to increased strength to lift heavier weights

(5) [AO 2] Weightlifter: Human growth hormone

(6) [AO 3] HGH promotes muscle growth leading to increased strength to lift heavier weights

(7) [AO 2] Injured athlete: Narcotic analgesics

(8) [AO 3] Narcotic analgesics relieve pain and can allow an athlete to train even when injured

**36.** Lilah has just joined the regional swim team. At the start of the six-month training programme, her coach wants to measure the whole team's fitness levels. Evaluate the suitability of the three fitness tests in the image to measure the team's fitness for swimming.

### Marking guidance

Edexcel GCSE PE (9 marks Extended writing guidance)

Reward acceptable answers. Responses may include (but not be limited to) the mark scheme.

### Marking points (maximum 9)

(1) [AO 1] Sit-and-reach test measures flexibility of the hamstrings and lower back

(2) [AO 2] Flexibility in the hip and shoulder joints is important in swimming to increase the range of the stroke/Flexibility is important to improve technique/Flexibility aids technique, allowing a swimmer to have more power in the water and swim faster

(3) [AO 3] Sit-and-reach test is appropriate when measuring hip flexibility but does not cover shoulder and upper-body flexibility, which is important for arm technique

(4) [AO 1] 12-minute Cooper run measures cardiovascular fitness

(5) [AO 2] Cardiovascular fitness is important in swimming, as it can delay fatigue which would cause the swimmer to slow down/Cardiovascular fitness allows the swimmer to swim for longer before tiring and decreasing their stroke rate

(6) [AO 3] 12-minute Cooper run would be more suitable and specific for a swimmer if it was conducted in the swimming pool than as a run

(7) [AO 1] One-minute press-up test measures muscular endurance in the arms and upper body

- (8) [AO 2] Muscular endurance in the arms is important to prevent fatigue in the muscles, which could affect the swimmer's technique/Muscular endurance is important to delay fatigue which would slow down the swimmer's stroke rate causing them to lose a race
- (9) [AO 3] One-minute press-up test is suitable, as it targets a specific muscle group for a swimmer/Completing muscular endurance tests on the legs would also be beneficial
- (10) [AO 1] 12-minute Cooper run and one-minute press-up test both measure endurance
- (11) [AO 2] 12-minute Cooper run and one-minute press-up test more suited to a long-distance swimming event
- (12) [AO 3] If the swimmer was participating in short events, fitness tests measuring speed and power would be more appropriate/Vertical-jump test and 30m sprint test would be more appropriate for a swimming racing in short events



## Edexcel GCSE Physical Education **9 Mark Level Descriptors**

Level	Marks	Description
	0	No rewardable material
1	1-3	Demonstrates isolated elements of knowledge and understanding, with limited technical language used (AO1). Limited attempt to apply knowledge to question context (AO2). Generic assertions may be presented (AO3 – evaluation).
2	4-6	Demonstrates mostly accurate knowledge and understanding, including appropriate use of technical language in places (AO1). Applied knowledge to question context (AO2). Attempts at drawing conclusions, with some support from relevant guidance (AO3 – evaluation).
3	7-9	Demonstrates accurate knowledge and understanding throughout, including appropriate use of technical language in places (AO1). Applied detailed knowledge to question context throughout (AO2). Reaches valid and well-reasoned conclusions, supported by relevant evidence (AO3 – evaluation).