The EverLearner

National Mock Exams 2023

POWERED BY ExamSimulator

Mark Scheme
OCR 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 2023 infographics. We are confident that:

- We believe this mark scheme has a very strong association with the actual external exam in 2023 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 potentially educational experiences of students in other schools/colleges.
- Finally, please check the publication dates of the model answers for this paper as well as the associated revision sessions 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 2023. The model answers will be available on the 28th April and some of these questions will be discussed in the live revision show provided by James Simms (**Thursday 4th May, 15:30-17:00** on youtube.com/TheEverLearner).

All questions/mark schemes are available on ExamSimulator. Please note, there are hundreds of additional questions and mark schemes on ExamSimulator covering the OCR GCSE PE topics and skills. Within the platform, the teacher is assisted with the marking and full diagnostic feedback is also provided. ExamSimulator is a premium resource available via TheEverLearner.com.

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

James Simms

The EverLearner

Subject	
Course	OCR GCSE PE 9-1
Time allowed	1 hour

Title	OCR GCSE PE 9-1 Paper 1 National Mock Exam 2023

Guidance	• This paper is marked out of 60 marks. • You have 60 minutes (plus additional time for those who have Exam Access Arrangements). • Answer all questions. • A calculator is permitted for this exam. • This paper contains a 6-mark question. • Good luck.

Total marks	60

1. Other than tackling, give a sporting example of the use of power in rugby.

Marking guidance

Accept other appropriate AO2 examples of power during rugby.

Marking points (maximum 1)

(1) [AO 2] To lift a player in the line-out/Apply force to a tackle/Sprint to chase down the ball

2. Describe a different sporting example of the use of power.

Marking guidance

The mark scheme is not exhaustive. Accept other appropriate AO2 examples of power during sport performance.
Do not accept examples from rugby.
Lifting or jumping on its own is too vague. The example needs to be specific to a sport.

Marking points (maximum 1)

(1) [AO 2] Jumping high for a rebound in basketball/Jumping to block the ball at the net in volleyball/Pushing out of the blocks during a sprint start

3. Name the fitness test that is used to assess power.

Marking points (maximum 1)

(1) [AO 1] Standing jump test/Broad jump

(2) [AO 1] Vertical jump test/Sargeant jump

4. This image contains three different types of blood vessels.
State which blood vessels contain valves.

Marking points (maximum 1)

(1) [AO 1] Vein

5. Look closely at this image.
State which muscle is indicated by letter B.

Marking points (maximum 1)

(1) [AO 1] Triceps

6. Look closely at this image. Name **one** sporting movement where muscle B acts as the agonist.

Marking guidance

Accept other appropriate descriptions of movement when the triceps is the agonist muscle.

Marking points (maximum 1)

(1) [AO 3] Throwing the ball in during a rugby line-out/Press-up/An overarm serve in volleyball

7. Look closely at this image.
State which letter represents the correct position of the fulcrum for a 2nd class lever.

Marking points (maximum 1)

(1) [AO 1] Letter C/C

8. Give a sporting example of a 2nd class lever being used.

Marking guidance

Accept other appropriate examples of the **ankle** being using during sport performance. "Moving onto the toes" on its own is too vague. The example needs to be specific to a sport.

Marking points (maximum 1)

(1) [AO 2] Take-off phase of a long jump/Going en pointe in dance/Defender in netball raising onto the toes to mark the shot

9. Name a bone that can be found between the knee and ankle joints.

Marking points (maximum 1)

(1) [AO 1] Tibia

(2) [AO 1] Fibula

10. Define aerobic exercise.

Marking points (maximum 1)

(1) [AO 1] Glucose + oxygen = Energy + Carbon dioxide + water/Glucose + O2 + Energy + CO2 and H20

(2) [AO 1] Respiration with oxygen/With oxygen

11. An uneven playing surface is one potential hazard of doing sport on a playing field.
Identify **two** others.

Marking points (maximum 2)

(1) [AO 1] Litter/Objects/Glass

(2) [AO 1] Equipment left out/Equipment in the wrong position

(3) [AO 1] Equipment is damaged/Broken equipment/Protruding equipment

(4) [AO 1] Trip hazards

(5) [AO 1] Other users/Criminal activity/Animals

(6) [AO 1] Poor lighting/Lack of flood lights

(7) [AO 1] Distance from emergency support

(8) [AO 1] Frozen/Waterlogged

12. Look closely at the image.
Only one option describes how to increase the intensity of weight training. State which one.

Marking points (maximum 1)

(1) [AO 3] Option A/A/Use heavier weights

13. Describe the role of red blood cells during a 5km Parkrun.

Marking points (maximum 2)

(1) [AO 2] Transport oxygen to the working muscles/Oxygen transport to the leg muscles/Transport oxygen

(2) [AO 2] Transport carbon dioxide to the lungs/Carbon dioxide transport to the lungs/Transport carbon dioxide

14. Name the blood vessel that transports blood from the right ventricle to the lungs.

Marking points (maximum 1)

(1) [AO 1] Pulmonary artery

15. Look closely at this image.
State which letter is pointing at a bronchiole.

Marking points (maximum 1)

(1) [AO 1] Letter E/E

16. State which feature of the respiratory system bronchioles lead to when breathing **out**.

Marking guidance

Do not accept the alveoli (an alveolus).

Marking points (maximum 1)

(1) [AO 1] Bronchi/Bronchus

17. Look closely at the image of the gymnast performing a back somersault.
State which words have been replaced by **both** the letter A **and** B.

Marking points (maximum 2)

(1) [AO 3] A is transverse/A transverse

(2) [AO 3] B is sagittal/B sagittal

18. Look closely at this image of an athlete performing a squat.
Identify **both** the agonist and the antagonist muscle acting at the knee in the phase **B** of the movement.

Marking guidance

IMPORTANT: We made an error on this question and requested that students analysed phase B rather than the intended phase A. Therefore, the question required a knowledge of types of contraction to answer correctly. This was an error on our part.
ACTION by us: I have adjusted the mark scheme so that it identifies the quadriceps as the antagonist and the hamstring as the agonist. This is correct if we had asked about phase A.
ACTION by you: When you mark your students work, I encourage you to credit your students' knowledge of quadriceps and hamstrings as the antagonistic pair by marking correct the muscles as either an agonist or antagonist.

Accept phonetic spellings. The agonist and antagonist must be given correctly.
Do not accept the hamstrings as the agonist or the quadriceps as the antagonist

Marking points (maximum 2)

(1) [AO 2] Antagonist are the quadriceps/Agonist quadriceps

(2) [AO 2] Agonist are the hamstrings/Antagonist hamstrings

19. Look closely at this image of an athlete performing a squat.
Name **one** muscle that is acting as a fixator for the movement at the knee in phase B of the movement.

Marking points (maximum 1)

(1) [AO 3] Gluteals/Gluteus maximus/Gluteus medius

20. This is an image of a hurdler clearing a barrier.
Name the type of joint at the hip.

Marking points (maximum 1)

(1) [AO 1] Ball-and-socket joint/Ball and socket

21. Look closely at this image.
State which description is accurate for the **front (lead)** leg.

Marking points (maximum 1)

(1) [AO 3] Option C/C/Flexion of the hip

22. Look closely at this image.
If Caleb scores 19cm in the sit-and-reach test, state what rating **he** would receive.

Marking points (maximum 1)

(1) [AO 3] Rating is excellent/Excellent

23. During the 2022/23 football season, junior teams in England and Wales were banned from heading the ball as a trial.
Explain how **one** function of the skeleton allows for heading to occur in adult football.

Marking points (maximum 2)

(1) [AO 2] Cranium protects/Protection from the cranium

(2) [AO 2] No impact on the brain by the ball/Brain is a vital organ and will not be hit by the ball/Brain is not shaken by the impact

24. Describe **three** benefits of an effective warm-up for a football player.

Marking guidance

The mark scheme is not exhaustive. Accept other appropriate benefits of a warm-up. The benefits must be linked to football.

Marking points (maximum 3)

(1) [AO 2] Increased flexibility of the hip muscles when kicking

(2) [AO 2] Increased flexibility of the shoulder joints when making a save

(3) [AO 2] Increased pliability of achilles tendons when jumping

(4) [AO 2] Increased blood flow to gastrocnemius muscles when running

(5) [AO 2] Increased speed of neck muscle contraction when heading the ball/

(6) [AO 2] Decreased likelihood of injury to the joints in the leg when changing direction

(7) [AO 2] Reduced build-up of lactic acid when making repeated runs box to box

25. Using a one-word answer, state what happens to muscle temperature during exercise.

Marking points (maximum 1)

(1) [AO 1] Increases

26. Look closely at this image.
State which of the options is a long-term effect of training on the **muscular** system.

Marking points (maximum 1)

(1) [AO 3] Option A/A/Increased strength of tendons

27. Look closely at this image.
Analyse the data to answer A, B and C on the image.

Marking guidance

Only accept the correct answers to the the right part of this question.

Marking points (maximum 3)

(1) [AO 3] A is Jenson/A Jenson

(2) [AO 3] B is Maya/B Maya

(3) [AO 3] C is 2.5 litres/2.5l/2500ml

28. Describe the role of the diaphragm during expiration at rest.

Marking points (maximum 2)

(1) [AO 1] The diaphragm will relax/Diaphragm relaxes/Relaxes

(2) [AO 1] Diaphragm pushes upwards/Pushed upwards/Dome shaped

29. Long-term training can cause a road cyclist to experience hypertrophy of the heart and capillarisation.
Describe the benefit of these two training effects.

Marking points (maximum 2)

(1) [AO 2] Hypertrophy: Cyclist's heart becomes more powerful and can eject a greater stroke volume when racing

(2) [AO 2] Capillarisation: Cyclist experiences a greater rate of diffusion so can race at higher wattage aerobically

30. Identify **one** feature of the respiratory system where capillarisation would be a benefit to a performer.

Marking points (maximum 1)

(1) [AO 1] Alveoli

31. A 50m front-crawl swimmer has a personal best time of 33.6s.
State **two** ways in which a build-up of lactic acid might affect their performance.

Marking points (maximum 2)

(1) [AO 1] Causes fatigue/Tiredness

(2) [AO 1] Muscle soreness

(3) [AO 1] Aching/Cramp/Pain

(4) [AO 1] Slower time/Performance decreases/Slower recovery

(5) [AO 1] Lesser capacity to release energy aerobically

32. During a 50m front-crawl race, greater quantities of blood are delivered to the working muscles.
Identify **one** organ that would receive a smaller **total** quantity of blood during the race.

Marking guidance

Accept other alternative organs.
Do not accept the skin or the brain. These two organs receive a smaller proportion but not a lower total.

Marking points (maximum 1)

(1) [AO 1] Liver/Kidneys/Intenstines

33. Look closely at this image.
Analyse the data to answer A and B on the image.

Marking guidance

Only accept the correct answers to the the right part of this question.

Marking points (maximum 2)

(1) [AO 3] A is 80 beats per minute/80 bpm

(2) [AO 3] B is 30 beats per minute/30bpm

34. Identify **two** potential hazards of playing basketall within a sports hall and explain how both these hazards can be minimised.

Marking points (maximum 4)

(1) [AO 1] Hard flooring if a player falls

(2) [AO 2] Reduce risk by penalising contact between players/Encourage the use of kneepads/Encourage gumshields

(3) [AO 1] Debris on the court

(4) [AO 2] Inspect the playing surface before starting a session

(5) [AO 1] Unsafe equipment

(6) [AO 2] Maintain equipment such as markers, balls and bibs

(7) [AO 1] Wrong footwear

(8) [AO 2] Only allow basketball trainers to be worn

(9) [AO 1] Overcrowded playing area

(10) [AO 2] Limit playing numbers

(11) [AO 1] Poor lighting

(12) [AO 2] Maintain lights properly/Replace damaged bulbs

35. Describe **two** methods of injury prevention for a hockey player.

Marking guidance

Sub max two AO1 marks for identifying two injury prevention methods. Sub max two AO2 marks for linking the methods to preventing injury specific to hockey.

Marking points (maximum 4)

(1) [AO 1] Personal protective equipment/PPE

(2) [AO 2] Hockey player can wear shin pads to protect the lower leg/Gumshield to protect teeth/Goalkeeper pads

(3) [AO 1] Correct clothing

(4) [AO 2] Warming clothing for winter training/Wicking clothing to remove sweat/Tighter clothing to prevent it catching

(5) [AO 1] Correct footwear

(6) [AO 2] Astro trainers to prevent slipping/Grip to prevent falls/Ankle support to prevent sprains

(7) [AO 1] Appropriate level of competition

(8) [AO 2] Age groups for juniors/Men's and women's teams/Mixed hockey under specific conditions

(9) [AO 1] Use of warm-up

(10) [AO 2] Ready the body for intense exercise

(11) [AO 1] Use of cool-down

(12) [AO 2] Remove lactic acid/Train again sooner

36. Explain how a cool-down benefits a games player.

Describe the role of good hydration for a games player.

Marking guidance

Refer ro 6-Mark Level Descriptor

AO1 is KU and relates to knowledge of the benefits of a cool-down and hydration as a key focus of a balanced diet.
AO2 is Eg are practical examples related to a games player. Answers must relate to a game.
AO3 is DEV and relates to explanation of the benefits of a cool-down for an athlete in a particular game. Credit other relevant explanantion points about the benefits of a cool-down.
AO2 and AO3 points may be linked to different AO1 points than in the mark scheme. Please credit students appropriately when points have been linked together.

Marking points

(1) [AO 1] Help the body transition back to resting state/Gradually lowers heart rate/Gradually reduces breathing rate

(2) [AO 2] Tennis player does not just suddenly stop/Basketball player may jog across the court

(3) [AO 3] Aids lactic acid removal and allows the player to compete again sooner/Reduces the risk of DOMS

(4) [AO 1] Gradually lowers temperature

(5) [AO 2] Hockey player stays warm as they cool down/Puts a jacket on

(6) [AO 3] Prevents muscles tightening and reduced flexibility in joints

(7) [AO 1] Circulates blood and oxygen

(8) [AO 2] Lacrosse player flushes muscles with oxygenated blood by doing light lunges

(9) [AO 3] Waste is removed more efficiently

(10) [AO 1] Aids recovery by stretching muscle

(11) [AO 2] Rugby player stretches their quadriceps group

(12) [AO 3] Muscle stiffness is reduced/Reduced likelihood of injury

(13) [AO 1] Water should be consumed before, during and after a performance

(14) [AO 2] Games players may drink sports drinks containing sugar

(15) [AO 1] Good hydration helps with body functions

(16) [AO 2] Such as maintaining blood plasma levels/Joints remain lubricated/Brain cells are able to work efficiently and allow concentration

(17) [AO 1] Hydration provides water for sweating and cooling

(18) [AO 2] Netball player is able to regulate the temperature and not overheat/Avoid dizziness/Prevent headache