



The EverLearner

# National Mock Exams 2024

POWERED BY ExamSimulator

## Model Answers WJEC GCSE PE Paper

### This document contains:

- Model answers for the National Mock Exam questions
- Model examples of extended writing

### How should schools use these papers?

These model answers are written to support PE teachers and students review the National Mock Exam 2024 and to prepare for the live revision session delivered by James in April 2024. We strongly recommend that students learn these model answers in preparation for the summer exams 2024. The questions posed and the answers provided are based on significant analysis and model BOTH content and skills.

Please, use these model answers in combination with the National Mock Exam paper, mark scheme and the revision session (Wednesday, 24th of April 2024, 16:30-18:00), available via the WJEC GCSE PE Revision page:

<https://pages.theeverlearner.com/2024-wjec-gcse-pe-revision>

All questions are taken from ExamSimulator. ExamSimulator is a premium resource available via TheEverLearner.com.

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

*James Simms*





<b>Subject</b>	Physical Education
<b>Course</b>	WJEC GCSE PE
<b>Time allowed</b>	2 hours 0 minutes

<b>First name</b>	
<b>Last name</b>	
<b>Class</b>	
<b>Teacher</b>	

<b>Title</b>	WJEC GCSE PE National Mock Exam 2024
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<b>Guidance</b>	<ul style="list-style-type: none"><li>• This paper is marked out of 120 marks.</li><li>• You have 120 minutes (plus additional time for those who have Exam Access Arrangements).</li><li>• Answer all questions.</li><li>• A calculator is permitted for this exam.</li><li>• Good luck.</li></ul>
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<b>Total marks</b>	120
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1. This image shows a GCSE PE student based in Aberaeron in Ceredigion, West Wales.

Explain why a GCSE PE student needs to maintain an energy balance during Year 11.



Energy balance is important to the student to be able to attend school and take part in recreation activities. Their energy intake should be equal to their energy expenditure, so it is important that they consume a consistent number of calories and stay active too. If the student walks or cycles to school, they may require more energy to complete these activities, so they should consume additional calories.

Marks: **[4]**

2. Identify **two** nutrients that can provide lots of energy to a GCSE PE student.



Macronutrient 1: Carbohydrates

Macronutrient 2: Fats

Marks: **[2]**

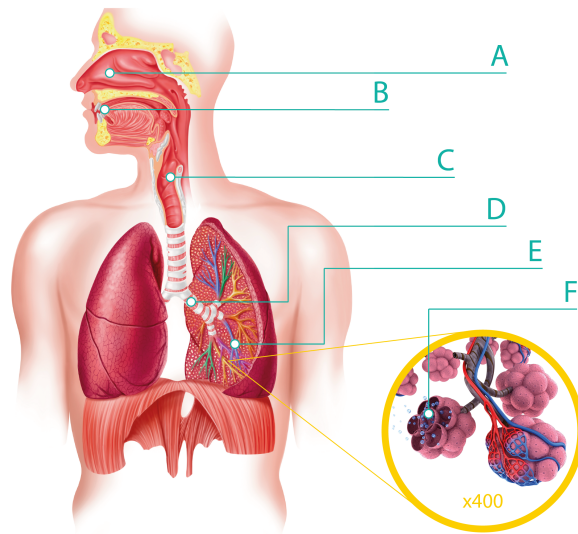
3. Explain how attending an extracurricular club can positively affect the social health of a GCSE PE student.



Attending an extracurricular club will provide opportunities to make new friends. If the club is a team sport, it will help with learning teamwork and communication skills. There will also be opportunities to learn leadership skills through the sports played, either as a performer or from coaching others.

Marks: **[3]**

4. Identify feature D **and** feature F of the respiratory system and explain how both contribute to exercise.



Feature D is the bronchi. The bronchi enter the left and right lungs, where the air is separated and goes into the bronchioles

Feature F is an alveolus. The alveolus is a site for gaseous exchange. Their structure allows gaseous exchange to occur efficiently.

Marks: **[6]**

5. The table shows a range of cardiac values for a group of GCSE and A-level PE students taking part in a practical lesson. Identify the following:

- The oldest participant
- The youngest participant
- The participant that is likely to be the most aerobically fit
- The missing value

Name	Resting heart rate	Maximum heart rate	Heart rate range
	BPM		
Celyn	55	203	148
Cerys	72	206	134
Dougie	80	205	125
Dafydd	91	205	?
Angharad	80	202	122
Glyn	68	203	135

Oldest participant is: Angharad

Youngest participant is: Cerys

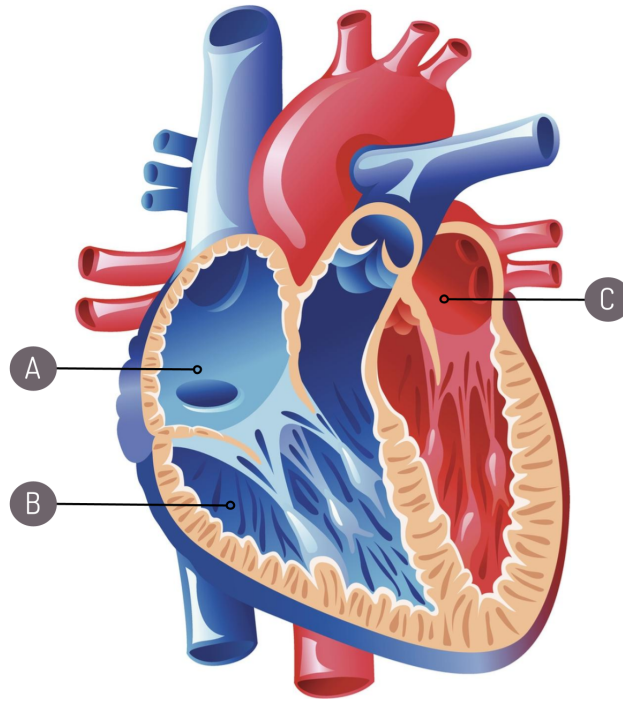
Most aerobically fit participant is: Celyn is most likely to be aerobically fit

Missing value is: The missing value is 114

Marks: **[4]**



6. Look closely at this image. Identify feature A, feature B **and** feature C.



A is the: Right atrium

B is the: Right ventricle

C is the: Left atrium

Marks: **[3]**

7. Explain why many 16-year-old people stop participating in regular physical activity in Wales.

A reason for participation rates dropping is gender: more females drop out of physical activity at 16 years old than males. Another reason is time: 16-year-olds have a lot of time constraints, including studying. Peer pressure can also be a reason, as if all their friends all decide to stop participating, so they follow. Lastly, lack of disposable income for expensive activities can also be a barrier to taking part.

Marks: **[4]**

8. Identify **one** strategy a school could employ to improve participation of 16-year-old students. Explain how the strategy could impact students.

The school could offer a broader range of extracurricular clubs. This might mean students become motivated to take part again, as they discover a passion for a new activity they haven't experienced before. The school could also offer these clubs beyond the age of 16, to assist in maintaining the participation rates of students in their late teens.

Marks: **[3]**

9. Explain why intrinsic motivation to be active is an important factor for teenagers.

Intrinsic motivation does not rely on anyone else, so the participant can take sole responsibility for taking part. Secondly, intrinsic motivation is the basis for making positive choices, so the individual has control over this positive choice.

Marks: [2]

10. The image shows Non Stanford, a Team GB and Welsh elite triathlete. Identify the components of fitness that Non has tested according to the image.



Fitness test	Score	Component of fitness
Sit-and-reach	28cm	A
Multi-stage fitness test	17	B
Illinois test	15.6s	C

A is: Flexibility

B is: Cardiovascular endurance

C is: Agility

Marks: [3]

11. Explain why fitness tests are important to an athlete like Non Stanford.



Fitness testing is important to Non Stanford, as it will allow her to establish her current fitness levels before commencing a training programme. This information can then be used as a basis to plan training sessions that are at the correct intensity. Moreover, the tests can be used to monitor progress during a training programme. Her results can be compared easily to normative data, to give instant feedback on current fitness levels compared to other elite athletes.

The fitness test scores can also be used to motivate her and can be used for setting measurable and achievable SMART targets to aim for. Lastly, the tests can provide variation in her training, to keep motivation high and avoid tedium.

Marks: **[6]**

**12.** Evaluate the use of continuous training to improve CV endurance.

Continuous training is useful to improve cardiovascular endurance, as it is cheap to set up and is easy to monitor intensity. However, the repetitive nature of continuous training means it can cause overuse injuries.

Marks: **[2]**

**13.** Other than continuous training, identify **two** training methods that could be used for CV endurance.

Fartlek and HIIT training

Marks: **[2]**

**14.** Explain how Non Stanford could apply the principle of reversibility to her training.

Non could apply reversibility by ensuring she does not get injured, forcing her to stop training. She can also ensure she trains regularly so there aren't periods of inactivity where fitness is lost.

Marks: **[2]**

**15.** Explain how media coverage influences the choices that athletes make.

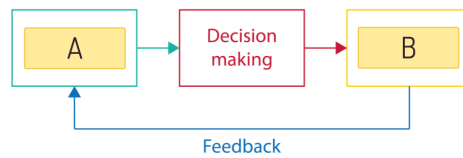
Media coverage gives athletes the opportunity to raise their profile, potentially securing a career after retiring. This can lead to becoming famous and wealthy.

Marks: **[2]**

16. Identify the missing features of the basic information processing model **and** explain how they apply to the cycling phase of Non Stanford's racing.



Information Processing



A is: **Input**

Applied to Non Stanford: **Non needs to see the spaces between riders and see where to steer the bike**

B is: **Output**

Applied to Non Stanford: **Non responds to the other riders by actually steering the bike into a space**

Marks: **[4]**

17. Explain how imagery could improve Non Stanford's performances.



Imagery will help Non to increase focus. This will help her to avoid unnecessary distractions and focus only on the race itself.

Marks: [2]

18. Please look closely at this image.

Complete a movement analysis of the elbow joint as the footballer throws the ball.



Type of joint: Hinge

Type of movement: Flexion

Agonist: Biceps

Marks: [3]



19. Define stroke volume.

The amount of blood pumped out of the heart per contraction.

Marks: [1]

20. Explain why stroke volume increases during exercise.

Stroke volume increases due to an increased venous return. There is an increased demand for oxygen to be delivered to the working muscles, so the force of ventricular contraction increases to accelerate blood flow.

Marks: [2]

21. Other than an increase in stroke volume, explain **one** other short-term impact of exercise on the heart.

Short term impact of exercise on the heart: Heart rate will increase

Explanation: There is an increase in demand for oxygen to the working muscles, so the heart beats faster to meet this demand

Marks: [3]

22. Look closely at the options.

Identify which percentage range is in the aerobic training zone.

- A** 40-50% of maximum heart rate
- B** 50-60% of maximum heart rate
- C** 70-80% of maximum heart rate
- D** 80-90% of maximum heart rate

70-80%

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Marks: **[1]**

23. Explain why agility **and** flexibility are important to the female footballer during a match.



Agility: Agility is needed for the footballer to dribble around an opponent quickly to avoid a tackle.

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Flexibility: Flexibility is needed by the female footballer at the hip joint to stretch their leg when making a slide tackle.

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Marks: **[2]**

24. Identify **three** phases of a warm-up.

Phase 1 Pulse raiser

Phase 2 Mobility exercise

Phase 3 Game related activity

Marks: **[3]**

25. Identify the correct type of guidance in this image.



- A Manual
- B Mechanical
- C Verbal
- D Visual

A - Manual (guidance)

Marks: **[1]**

**26. Evaluate the role of other types of guidance for the performer.**

Type of guidance 1: Verbal guidance can be described as giving spoken instruction

Evaluation: For example, a coach talking through the technique of a skill. An advantage of verbal guidance is that it's a quick way for the coach to give instructions to the performer. However, if the coach does not speak clearly or slowly, it might lead to confusion. Verbal guidance also does not provide a mental picture.

Type of guidance 2: Visual guidance is the use of demonstrations, videos or images to help a performer learn a skill.

Evaluation: For example, the coach demonstrating the skill for the performer to copy. An advantage is that verbal guidance allows the performer to build a mental picture of what the skill should look like. However, if the demonstration is incorrect, it could result in the performer learning poor technique.

Marks: **[6]**

27. Analyse this video of a Welsh road cyclist in training in Powys and state the following:

- Type of joint at the knee
- Movement occurring at the knee as the rider pulls up on the pedal
- Type of joint at the elbow
- Movement occurring at the elbow throughout.



Type of joint at the knee: Hinge

Movement at the knee: Flexion

Type of joint at the elbow: Hinge

Movement at the elbow: Extension

Marks: **[4]**

28. Identify the dominant muscle fibre type for the performance and explain why it is more important than the other types.



The dominant muscle fibre type is slow-twitch. This muscle fibre type is the most important because the activity is aerobic in nature and slow-twitch muscle fibres are resistant to fatigue and have a low force of contraction, so are needed for this type of activity.

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Marks: **[4]**

29. Identify the type of contraction occurring in the quadriceps as the cyclist pushes down on the pedals and explain how the contraction occurs.



The contraction at the quadriceps is concentric, as the muscle is shortening whilst contracting. The quadriceps are the agonist and are contracting. The hamstrings are the antagonist and are relaxing. The muscles work as a pair to create the movement.

Marks: **[4]**

**30.** Identify the type of tissue that transmits force from a contracting muscle to a bone.

Tendon

Marks: **[1]**

**31.** Describe **two** consequences of a sedentary lifestyle.

Leading a sedentary lifestyle means being extremely inactive and can lead to obesity. As a result of becoming obese, an individual may experience low self-esteem.

Marks: **[2]**



32. Classify the performance of cycling on the open-closed and the self-externally paced continua and justify your choices.



Cycling is a closed skill, as it's performed in a relatively stable environment. Cycling is a self-paced skill, as the performer controls when to initiate pedalling the bike

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Marks: **[4]**

**33. Evaluate fixed **and** varied practice for a road cyclist.**

Fixed practice would be useful for a cyclist, as this type of practice can be done indoors, so the performer can train on an exercise bike.

Cycling is a closed skill and these skills lend themselves to fixed practice. A weakness of using fixed practice is that it does not replicate race conditions. Varied practice, however, does replicate race conditions more accurately, so it would be beneficial in this regard.

However, varied practice requires others to take part, so the cyclist cannot complete varied practice on their own.

Marks: **[5]**

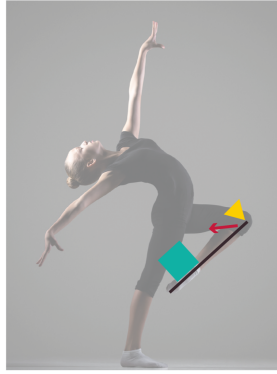
**34. Look closely at this image.  
Identify the lever operating at the knee.**



Third class lever

Marks: **[1]**

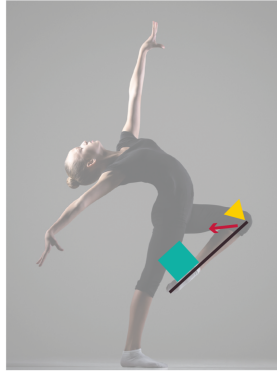
35. Identify the type of joint at the knee.



Hinge joint

Marks: **[1]**

36. Describe the role of protein as part of a balanced diet.



The role of protein in a balanced diet is to promote the growth of body tissue. Another role is to repair body tissue after exercise. Lastly, protein is broken down to produce amino acids.

Marks: **[3]**

37. Explain why anaerobic energy release is important to the performer.



Anaerobic energy release is for high-intensity activities, so the dancer can be explosive in their movements. It can last for up to three minutes, which approximately the time frame for a dance routine. For the dancer to use power moves throughout the routine, they would need to be spaced out, as anaerobic energy produces lactic acid, which could fatigue the dancer.

Marks: [2]

38. Describe **two** characteristics of skilled performance.

A skilled performer would look effortless, and coordinated movements within the performance will be consistent.

Marks: [3]

**39.** Explain how a performer would calculate their anaerobic training zone.

The performer would calculate their maximum heart rate using the sum of 220 - age.

They would then calculate 80-90% of their maximum heart rate to give them their anaerobic training zone.

Marks: **[2]**

**40.** Discuss the use of goal setting to improve sporting performance.

Goal setting can be used to improve sports performance. One way of doing this is through setting SMART targets. Setting goals improves the focus of a performer and gives them something to strive towards. This, in turn, increases motivation and assists in the performer training at the right intensity. It also means that the performer can monitor progress by measuring aspects of their training, so they know if they are improving.

Setting goals also allows the performer to work on specific weaknesses to optimise sports performance. However, it could be argued that goal setting can have a negative impact on sports performance. The performer could become bored if the goals are not challenging enough, so will not work hard in training sessions. Equally, the performer could become demotivated if goals are unrealistic and unlikely to be achieved. Therefore, the type of goals that are agreed is important, with a mixture of short-, medium-and long-term goals proven to be most effective in improving sports performance.

Marks: **[6]**

**41.** Explain why physical exercise is considered to be good for mental well-being.

Physical exercise is good for mental well-being, as it can lead to improved self-esteem and a sense of achievement. Exercise can also be used to reduce stress.

Marks: **[2]**

**END OF PAPER**