



GCSE MARKING SCHEME

SUMMER 2023

**PHYSICAL EDUCATION – UNIT 1
SHORT COURSE
3555U10-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2023 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

WJEC GCSE PHYSICAL EDUCATION

SUMMER 2023 MARK SCHEME

Question	Mark scheme	AO1	AO2	AO3	Total
1. (a) (i)	Identify the correct definitions for each of the three components of fitness. Draw lines to match the components to the correct definition BALANCE = DEFINITION 2 COORDINATION = DEFINITION 3 REACTION TIME = DEFINITION 1	3			3
(ii)	Identify one recognised test for balance and explain how the test is carried out IDENTIFY = STORK STAND / FLAMINGO STAND or similar answers. Accept any recognised test of balance. EXPLAIN=up to three marks. NB Stand on both feet and place hands on hips Lift one leg and place toes against knee of other leg When told to do so, raise the heel and stand on your toes. Balance for as long as possible without letting heel touch floor or other foot moving away from knee. Have your balance timed in seconds Have three attempts, record best score, compare to norms.	1	3		4
(b)	Justify how improving balance could be of help to a sportsperson such as the canoeist in Figure 1 The question asks for how improvements in balance could improve the performance of the canoeist. Look for specific detail about the above. At a basic level you may find content relating to not capsizing as often during competition Better balance would give the performer better seating position in the canoe Better balance could lead to a more efficient stroke technique. better position and therefore enable better turns to be made. Move the paddle through (waves / currents in the water. Accept other appropriate responses 2X1		2		2

Question	Mark scheme	AO1	AO2	AO3	Total
(c)	Assess how taking part in physical activities and sports can improve the physical well-being of an individual The question is asking candidates to link taking part in physical activities and sports such as canoeing to the physical well-being of an individual. Physical obviously has some relationship to social and mental, however, please ensure that answers relate directly to the physical well-being benefits of involvement in said activities. Possible content may include some of the following; improved body shape and posture reduced chance of illness increased physical fitness components specific to activity stronger more toned muscles improved heart and lung system better weight control look better and feel better better body self-image improved bone strengthening more efficient movements more effective performances less prone to injury increased life expectancy physically feeling less stressed as a result of doing physical activity improved competitive performances due to being fitter improved confidence Please see separate banded response mark sheet Read the banded response mark sheet. Allocate a band then allocate a mark.	2		4	6
Total Q1		6	5	4	15

Question	Mark scheme	AO1	AO2	AO3	Total
2. (a) (i)	Analyse the training data in Figure 2, making specific reference to the following; • The component of fitness being developed • The content (reps, sets, number of exercises and rest intervals) • Why the session has been designed in this way The question is related to the analysis of data for a pyramid strength training schedule. Responses should be able to make use of data when answering the question with reference to; Fitness component being developed Content of the session outlined, reps, sets, exercises, rest Why the session has been designed like this Potential benefit to the sportsperson Strength is the component being developed. Pyramid system, weight training session, Heavy weights/ low reps knowledge of 1 rep max and training principles needed in order to be effective To develop muscular strength, be progressive in nature, rest periods designed to assist recovery. Improved strength therefore enhanced performances in specific sports, e.g. rugby player lifting in line-out. Please see separate banded response mark sheet Read the banded response mark sheet. allocate a band then allocate a mark. AO1 marks will be awarded in relation to knowledge of training method and content including Principles of Training. AO3 marks will be awarded in relation to the analysis of the information provided and the reference made to points 1 to 4 shown above.	2		6	8

Question	Mark scheme	AO1	AO2	AO3	Total
(ii)	Explain why the sportsperson in Figure 2 would consume high protein foods. Answers may include some of the following information; PROTEINS are needed for the growth, repair and efficient working of body tissues. Answers may also make reference to proteins being broken down into amino acids There are animal and plant proteins. Candidates may provide specific details about proteins as part of a balanced diet and make reference to specific sports such as boxing, rugby, martial arts etc energy		2		2
(b)	Identify the nutrient that matches the description A= MINERALS B= FIBRE / ROUGHAGE C= WATER	3			3
(c)	Explain, using specific examples, the term antagonistic muscle action. There will be several ways of answering the question. Up to two marks for explanation of antagonistic muscle action Up to two marks for the use of specific examples, which may include joints or actions There may be factual answers relating to what antagonistic muscle action is whilst others may refer to the diagram and sporting activity taking place along with reference to the prime mover contracting and the antagonist relaxing. Lengthening and shortening Reference may be made to specific muscle groups. For full marks one would expect answers to refer to the diagram make reference to the prime mover and antagonistic groups used. 2x2 = 4 marks.		4		
Total Q2		5	6	6	17

Question	Mark scheme	AO1	AO2	AO3	Total
3. (a) (i)	Define agility. AGILITY DEFINITION Ability to change direction at speed dodging	1			1
(ii)	Identify the description that matches the term below. MINUTE VENTILATION = C BREATHING FREQUENCY= B TIDAL VOLUME = D VITAL CAPACITY = A	4			4
(b) (i)	Explain how the body regulates temperature when we become too hot and too cold 2X2 marks for too hot / too cold. MAY INCLUDE; <i>When we get too hot;</i> Blood vessels under the skin widen= vasodilation More blood flows nearer to the surface where heat is lost by radiation Sweat glands produce more sweat and body makes sweat evaporate which helps to cool the body <i>When we get too cold;</i> Body stops sweating blood vessels under the skin contract = vasoconstriction less blood flows near the surface of the skin therefore less heat is lost Body shivers which can make slight adjustments to the body systems methods of avoiding heat loss For a basic response maximum 1 mark.		4		4

Question	Mark scheme	AO1	AO2	AO3	Total
(b) (ii)	Identify two methods that sportspersons could use to aid recovery after taking part in physical activity Accept any relevant / acceptable response. The question asks for an outline of two methods of cooling down to assist recovery. Examples may include light exercise, less intense exercise, jogging- walking-stretching, massage, ice baths and consumption of food / fluid to assist recovery. There are many possibilities for candidates to use. In some cases one or two words will be sufficient to outline the method.	2			2

Question	Mark scheme	AO1	AO2	AO3	Total
(c)	Discuss the use of technology to analyse movement and sporting performance. Use examples to support your answer. The question is a Discuss question therefore accept any appropriate response where possible. There may be few negative reasons as to why video recordings are not useful therefore look for positive responses to the question. e.g. shows strengths and weaknesses e.g. too much analysis over-complicates skills and techniques development-keep it simple. The question asks for the use of technology to analyse movement and improve performance. Main points of discussion could include; ANALYSIS enables performers to watch their performances. Skills and techniques can be broken down and analysed. analysis will help performer to become more efficient Possible use of slow motion should aid performer to improve. Too much analysis could over- complicate coaching and learning. Other types of feedback apart from visual are needed. visual analysis combined with data analysis and use of modern tracking devices could aid the performer PLEASE: read the answer first then award a band and finally a mark. Good use of specific sporting examples is expected. PLEASE SEE SEPARATE BANDED RESPONSE MARK SHEET	2		5	7
Total Q3		9	4	5	18

Assessment Grid

	AO1	AO2	AO3	Total
Q1	6	5	4	15
Q2	5	6	6	17
Q3	9	4	5	18
Total	20	15	15	50

Performance bands for question 1 (c)

Band	AO1 2 marks	AO3 4 marks
3		4 marks Excellent, well reasoned assessment of how taking part in sports and physical activities such as canoeing can improve the physical well-being of an individual. Answer is detailed and effectively links involvement to physical well-being Writing is well structured using accurate grammar, punctuation and spelling. Many aspects of key content are included in the answer.
2	2 marks Good knowledge of the physical benefits of participating in physical activities and sports such as canoeing.	2-3 marks Good, assessment of how taking part in sports and physical activities such as canoeing can improve the physical well-being of an individual. Answer contains some detail and links are made between involvement and physical well-being. Writing is generally well structured using reasonably accurate grammar, punctuation and spelling. Some important aspects of key content are included in the answer.
1	1 mark Limited knowledge of the physical benefits of participating in physical activities and sports such as canoeing.	1 mark Limited assessment of how taking part in sports and physical activities such as canoeing can improve the physical well-being of an individual Answer is limited as much of the content is in list form and covers generic points. Writing shows some structure but with errors in grammar, punctuation and spelling
0	No knowledge is evident	No assessment is evident

Performance bands for question 2 (a) (i)

Band	AO1 2 marks	AO3 6 marks
3		5-6 marks Excellent analysis of the data provided. Specific reference is made to 3 / 4 of the KEY CONTENT areas requested. Answer is very detailed and excellent grammar, punctuation and spelling are used in the answer.
2	2 marks Good knowledge of the training method principles of training and fitness component being developed.	3-4 marks Good analysis of the data provided. Reference is made to 2 / 3 of the KEY CONTENT areas requested. Answer gives some detail and good use is made of grammar, punctuation and spelling.
1	1 mark Some knowledge of training methods, principles of training is evident in the answer.	1-2 marks Some analysis is made of 1 / 2 of the KEY CONTENT areas requested in the question. Answer may be generic in nature with some errors in grammar, punctuation and spelling
0	No knowledge is evident	No analysis is evident

Performance bands for question 3 (c)

Band	AO1 2 marks	AO3 5 marks
3		5 marks Excellent discussion regarding the use of technology as a strategy to enable sportspersons to perform more effectively. The answer refers to the benefits of analysis and gives specific sporting examples to support the points made. Excellent use of grammar, punctuation and spelling.
2	2 marks Good knowledge of analysis including video analysis as a strategy for improving sporting performance.	3-4 marks Some discussion regarding the use of analysis as a strategy to enable sportspersons to perform more effectively. Some benefits of analysis along with some sporting examples are included in the answer. Good use of grammar, punctuation and spelling.
1	1 mark Some knowledge of video analysis as a strategy for improving sporting performance.	1-2 marks Limited discussion of the benefits of using analysis in order to enable sportspersons to perform more effectively. The answer is generic in nature with some errors in grammar, punctuation and spelling.
0	No knowledge is evident	No discussion is evident