



GCSE MARKING SCHEME

SUMMER 2018

**GCSE (NEW)
PHYSICAL EDUCATION - UNIT 1
SHORT COURSE
3555U10-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2018 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 (NEW)

SUMMER 2018 MARK SCHEME

Question	Mark scheme	AO1	AO2	AO3	Total
1 (a) (i)	AWARD 2 marks for identifying any 2 of the following fitness components: balance, coordination, muscular endurance, muscular strength	2			2
(ii)	AWARD 2X1 marks for correctly justifying how the component(s) of fitness are used to hold the bar still above the lifters head at the end of the lift Definitions not enough to gain marks. Example justifications: Balance is required to maintain equilibrium and avoid movement likely to cause the lifter / bar to move and the lift to be null and void. Coordination is required to synchronise e.g. arms and legs and ensure that the bar remains still and feet / arms do not move. Muscular endurance required in lift and when in competition to enable muscles to work for extended period of time without fatigue. Muscular strength required to overcome the resistance of the bar and prevent movement		2		2
(iii)	AWARD 1 mark for a definition of specificity 2 marks for an explanation of the importance of specificity for a lifter. EXPLANATION candidates may mention specificity within the context SPORT. Lifters need to increase the amount of stress placed on the body when training / competing. Increased overload incorporates principle of Specificity. An explanation answer rather than simply listing Look for successful linking of the theory of POT and possibly, relevant examples.	1	2		3

Question	Mark scheme	AO1	AO2	AO3	Total
(b) (i)	AWARD 1 mark for ticking ISOMETRIC	1			1
(b) (ii)	AWARD 1 mark for ticking FAST TWITCH	1			1
(c) (i)	AWARD 1 mark for identifying one of the following: to remove waste products to avoid muscle soreness to return body to pre-competition state EXPLANATION AWARD 1 mark for amplification. Some candidates may give several reasons along with an explanation of why the cool down takes place.	1	1		2
(c) (ii)	AWARD 2 x 1 marks for reasons / justification of why 1 rep max test would be suitable test for lifter to use. EXPLANATION candidates may describe the VALIDITY of the test as a measure of muscular strength. Muscular strength needed to be a successful lifter. Candidates may link 1 rep max test to hand grip dynamometer test or link test to RELIABILITY of these tests to measure strength.		2		2
(d)	AWARD 1 mark(s) 2 x 1 for each correct answer to the type of movement. ADDUCTION ROTATION	2			2
Q1	AO totals for Q1	8	7	0	15

Question	Mark scheme	AO1	AO2	AO3	Total
2 (a)	<p>The evaluation must link the theory of resting, exercising and recovering heart rate with taking part in intense physical activity.</p> <p>INDICATIVE CONTENT Base rate Comparison with resting Comparison with previous performance Set targets</p> <p>EVALUATION The marking of this part of the question will be based upon the bands indicated. Important to mark positively and credit appropriate responses. Read the response and use "best fit."</p> <p>See mark bands at end of mark scheme</p>	2		4	6
2 (b) (i)	<p>AWARD 2 marks for identifying two short term effects: Raised heart rate Reddening of skin Accept any appropriate answers</p> <p>IDENTIFICATION Increased tidal volume- more O₂ to working muscles. Skin reddens. Body sweats, water evaporates, blood moved to skin surface to regulate temperature. Cardiac output increases $Q=SV \times HR$ Heart Rate increases supplying more oxygen to working muscles.</p> <p>Anything that implies deeper or faster breathing.</p>	2			2

Question	Mark scheme	AO1	AO2	AO3	Total
2 (b) (ii)	<p>AWARD 2 X 1 marks for identifying adaptations due to taking part in intense physical activity e.g. Cardiac output increases, overtime HR at rest may lower, increased tidal volume Many opportunities to answer the question and tolerance required for degree of adaptation Period of time and intensity may be interpreted differently.</p> <p>Award 3 marks for ANALYSIS Increased tidal volume- more O₂ to working muscles. Body sweats, water evaporates, blood moved to skin surface to regulate temperature. Cardiac output increases $Q=SV \times HR$ More efficient gaseous exchange Shunting of blood to working muscles becomes more efficient. Release of glycogen to allow more efficient use of working muscles. Adrenalin released to allow body to be more fully prepared for activity. Heart Rate increases supplying more oxygen to working muscles. Overtime HR at rest may lower due to training. Any other links of adaptations to improvement in performance</p>	2		3	5
(c) (i)	<p>AWARD 2 x 1 mark for correctly identifying the following components of fitness: MUSCULAR POWER MUSCULAR ENDURANCE</p>	2			2
(c) (ii)	<p>AWARD 2 marks for explicitly linking the two fitness components correctly identified in 2 (c) (i) and a named activity / sport and how performance is improved.</p> <p>The analysis could be, for example, the increased power at take-off in high jumping could enable the athlete to jump higher.</p>			4	4
Q2	AO totals	8	0	11	19

Question	Mark Scheme	AO1	AO2	AO3	Total
3 (a)	<p>4 marks for an explanation of how taking part in regular physical activity can help mental and social wellbeing</p> <p>EXPLANATION Health is a state of complete mental, physical and social wellbeing(not simply the absence of disease or infirmity). (1)</p> <p>SOCIAL EFFECTS OF EXERCISE increased confidence teamworking / cooperation development self fulfilment challenging increased self worth increased respect from peers meet new people mix with people of similar interests increased opportunities</p> <p>MENTAL EFFECTS OF EXERCISE satisfaction with own performance promotes feel good factor can provide excitement gives enjoyment can relieve stress / tension/ aggression feeling of exhilaration develops feeling of being part of something leads to feelings of success helps in forgetting life problems when performing provides new challenges</p> <p>Many opportunities available to engage with the question. Not a list, rather an opportunity to explain the merits of taking part in physical activity.</p>		4		4

Question	Mark Scheme	AO1	AO2	AO3	Total
(b)	<p>The explanation will need to link the use of technology to the motivation of an individual to take part in regular physical activity in order to access four marks.</p> <p>AWARD Maximum of 1 mark for a response providing a basic example of a device used which can be of benefit to a participant.</p> <p>EXPLANATION There are numerous examples of modern technological devices that candidates will be familiar with. Phones, I pods, apps, Fitbit, Social Media can be used to monitor, record participants efforts. Music, cameras, video facilities. GPS devices. Data analysis using a variety of sources including those found in gymnasias and technology within personal devices.</p> <p>A question where candidates can engage fully with the question using personal examples, experience and knowledge of the content.</p>		4		4
(c)	<p>AWARD 2X1 marks for giving 2 reasons for the increased gym membership</p> <p>People are more health conscious.</p> <p>Drive to reduced obesity Greater health initiatives in wider society Awareness of health benefits of exercising Risks of not exercising</p> <p>Credit appropriate responses such as more disposable income, facilities, access etc.</p>	2			2

Question	Mark Scheme	AO1	AO2	AO3	Total
(d)	<p>EXPLANATION</p> <p>The evaluation MUST link the changes in the performance AND EXPLAIN WHY the changes could have taken place.</p> <p>The indicative content should be read in conjunction with the BANDING assessment criteria sheet.</p> <p>INDICATIVE CONTENT</p> <p>Answers may be general and wide ranging or specific and detailed.</p> <p>Principles of Training = SPORT</p> <p>Overload described in terms of FITT</p> <p>Mention could be made of the TYPE of training taking place</p> <p>Links may be made between DIET and NUTRITION and progress being made in training performance</p> <p>Possible links also to MOTIVATION and ADHERENCE strategies.</p> <p>Physiological adaptations in the short and long term</p> <p>Examiners are asked to credit appropriate responses and to mark positively against the assessment criteria.</p> <p>See mark bands at end of mark scheme</p>	2		4	6
Q3	AO Totals	4	8	4	16

Mark Bands for extended answers

Bands to accompany question 2 (a)

Band	A01 2 marks	AO3 4 marks
3		4 marks Excellent, well reasoned evaluation of why measuring heart rate is important. The answer is detailed and touches on the three requirements of the question. Writing is well structured using accurate grammar, punctuation and spelling.
2	2 marks Good knowledge of why measuring heart rate is important	3 marks Good evaluation of why measuring heart rate is important. The answer is detailed and touches on two or more requirements of the question. Writing is generally well structured using reasonably accurate grammar, punctuation and spelling.
1	1 mark Limited knowledge of why measuring heart rate is important	1-2 marks Limited evaluation of why measuring heart rate is important. The answer is limited and might be generic in nature. The response shows some structure with errors in grammar, punctuation and spelling.
0	No knowledge of why measuring heart rate is important	Not attempted No analysis

Bands to accompany question 3d

Band	AO1 2marks	AO3 4 marks
3		4 Marks Excellent evaluation of principles and methods of training. Both principles and methods of training are drawn upon. The response is well balanced and detailed. The response is clearly expressed and shows accurate use of technical terminology. Writing is very well structured using accurate grammar, punctuation and spelling
2	2 Marks Good knowledge of principles and methods of training	3 marks Good evaluation of principles and methods of training. Both principles and methods of training are drawn upon. The response is balanced. The response is adequately expressed and shows appropriate use of technical terminology. Writing is generally well structured using reasonably accurate grammar, punctuation and spelling.
1	1 mark Limited knowledge of principles and methods of training	1-2 marks Limited evaluation of principles and methods of training. The response shows basic use of technical terminology. Writing shows some evidence of structure but with errors in grammar, punctuation and spelling.
0	0 marks No knowledge of principles and methods of training	0 marks Not attempted No evaluation

	Q1	Q2	Q3	TOTAL
AO1	8	8	4	20
AO2	7	0	8	15
AO3	0	11	4	15
TOTAL	15	19	16	50