

Pearson BTEC

Tech Award Level 1/2 in

Sport

Component 3: Developing fitness to improve other participants performance in sport and physical activity

L1/2

Sample Assessment Materials

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Publication code VQ000081

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Please check the examination details belo	ow before enter	ing your candidate information Other names
Carrainate surname		other numes
Centre Number Learne	r Registratior	n Number
Sample assessment materials for the same of the same o		ng September 2022
Time 1 hour 30 minutes	Paper reference	XXXXX/XX
Time 1 hour 30 minutes Sport		XXXXX/XX
	reference	ess to Improve Other

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and learner registration number.
- Answer all questions.
- Answer the questions in the spaces provided
 - there may be more space than you need.

Information

- The total mark for this paper is 60.
- The marks for **each** question are shown in brackets
 - use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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Answer ALL questions. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box $oxtimes$. If you change your mind about a	n
answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .	

Luca plays tennis. Tennis matches usually last longer than 30 minutes.

1	(a) Which one of the following components of fitness is required in sports lasting
	longer than 30 minutes?

(1)

- A Balance
- **B** Aerobic endurance
- C Muscular strength
- D Flexibility

Luca is very motivated to increase his fitness for tennis.

(b) Name **one** type of motivation.

(1)

To increase his fitness for tennis, Luca applies a FITT principle to his fitness training.

(c) Which **one** of the following is a component of the FITT principle?

(1)

- A Intensity
- B Individual
- C Intrinsic
- D Increase

Luca cannot decide whether to join a private provision or a public provision fitness club to increase his tennis fitness.

- (d) Complete Table 1 by stating:
 - (i) **one** advantage of **private** provision and the benefit of this to the performer
 - (ii) **one** advantage of **public** provision and the benefit of this to the performer.

(4)

Provision	Advantage of type of provision	Benefit to the performer
Private provision	(i)	(i)
Public provision	(ii)	(ii)

Table 1

Luca completes a questionnaire to help plan his fitness programme.

(e)	Name one type of questionnaire Luca should complete to plan his fitness
	programme.

(1)

	Luca takes part in some fitness tests to assess his fitness for t	tennis.
(f)	Explain one reason why Luca would use the 30m sprint test t for tennis.	o assess his fitness
		(2)
	(Total for	Question 1 = 10 marks)

Catherine is a gymnast. She trains regularly to improve her gymnastic performance.

Each picture (**A** and **B**) shows a type of fitness training.

2 (a) Identify the fitness training method shown in pictures **A** and **B**.

(2)

Draw a straight line to match each picture to the correct fitness training method.

Picture

Fitness training method

A



(Source: © TORWAISTUDIO/Shutterstock)

Ballistic

Static passive

В



(Source: © Jasminko Ibrakovic/Shutterstock)

Plyometrics

Proprioceptive Neuromuscular Facilitation (PNF)

Circuit training

Catherine applies the SMARTER principles of goal setting to her training programme.

- (e) Complete Table 2 by stating:
 - (i) the name of the principle of goal setting represented by each letter
 - (ii) why this principle will increase Catherine's motivation to train.

(4)

SMARTER principle	Name of principle of goal setting represented by letter	Why this principle will increase Catherine's motivation to train
M	(i)	(ii)
т	(i)	(ii)

Table 2

(Total for Question 2 = 12 marks)

a)	Which	on	e of the following fitness tests is used to measure power?	(1)
	×	A	Ruler drop test	
	X	В	Stork stand test	
	X	C	Standing long jump	
	×	D	T test	
b)	State (one	reason for fitness testing.	(1)
	Jenny	/ als	o completes the vertical jump test to measure her power.	
	Explai	n or	ne reason why the vertical jump test would be a more valid test for a	
	Explai	n or		(2)
	Explai	n or	ne reason why the vertical jump test would be a more valid test for a	(2)
	Explai	n or	ne reason why the vertical jump test would be a more valid test for a	(2)

					(2)
Jenny	cools down af	ter every trainin	g session.		
(e) Explai	n two reasons f	or cooling dowr	n after a training s	session	
(c) Explui	Treate reasons r	or cooming down	raiter a training .		(4)

Picture C shows Jenny batting in a game of cricket.



(Source: ISHARA S. KODIKARA / Contributor)

Picture C

Jenny has high levels of muscular endurance and reaction time.

(f) Assess the importance of high levels of muscular endurance and reaction time when batting during a game of cricket.	(6)
(Total for Question 3 – 16 ma	rke)

in Sport and Physical Activity – Sample Assessment Materials – Issue 1 – July © Pearson Education Limited 2021

Lionel trains regularly to increase his fitness for football.

4 (a) Name the additional principle of training being described: 'altering types of training to avoid boredom'.

(1)

Lionel carries out fitness testing to assess his fitness for football.

- (b) Complete Table 3 by stating:
 - (i) a fitness test that could be used to test each component of fitness
 - (ii) why each fitness test is suitable to assess a footballer's fitness.

(4)

Component of fitness	Fitness test	Why this fitness test is suitable to assess a footballer's fitness
Aerobic endurance	(i)	(ii)
Muscular strength	(i)	(ii)

Table 3

(c) Explain one reason why the 30 metre flying sprint would also be an appropriate fitness test for a footballer.	
	(2)
(d) Describe how the 30 metre flying sprint test is carried out.	(3)

Lionel is training to improve his muscular strength and speed.

Table 4 shows two weeks of Lionel's training programme.

Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	Weights at 60% 1RM 3 sets × 8 reps	Rest day	Resistance drills	Rest day	Weights at 60% 1RM 3 sets × 8 reps	Rest day	Resistance drills
2	Weights at 60% 1RM 3 sets × 8 reps	Resistance drills	Rest day	Weights at 70% 1RM 3 sets × 6 reps	Resistance drills	Rest day	Weights at 70% 1RM 3 sets × 6 reps

Table 4

Table 4	
(e) Explain two additional principles of training that Lionel is applying in his training programme.	(5)
	(4)
1	
2	

Table 5 shows some of Lionel's fitness test results.

Fitness test	Rating
Illinois agility run test	Average
Timed plank test	Poor
Body Mass Index	Excellent
Alternate-Hand Wall Toss Test	Excellent

Table 5

(Total for Question 4 = 16 n	narks)
p. ove 1.15 maness for rootsa	(2)
(f) Explain, using the data in Table 5, one component of fitness Lionel should train timprove his fitness for football.	0

Technology is often used in fitness testing.	
5 Evaluate the use of technology when carrying out the 30 metre sprint test.	
(Total for Question 5 = 6 marks)	
TOTAL FOR PAPER = 60 MARKS	

Component 3: Developing Fitness to Improve Other Participants Performance in Sport and Physical Activity

General marking guidance

- All learners must receive the same treatment. Examiners must mark the first learner in exactly the same way as they mark the last.
- Mark grids should be applied positively. Learners must be rewarded for what they have shown they can do rather than be penalised for omissions.
- Examiners should mark according to the mark grid, not according to their perception of where the grade boundaries may lie.
- All marks on the mark grid should be used appropriately.
- All the marks on the mark grid are designed to be awarded. Examiners should always award full marks if deserved. Examiners should also be prepared to award zero marks if the learner's response is not rewardable according to the mark grid.
- Where judgement is required, a mark grid will provide the principles by which marks will be awarded.
- When examiners are in doubt regarding the application of the mark grid to a learner's response, a senior examiner should be consulted.

Points-Based Mark Scheme Guidance

Points-based mark schemes are made up of:

- 1. Mark scheme rubric:
 - A mark scheme rubric instructs an examiner as to how each mark is awarded.
- 2. Example responses:
 - These demonstrate the type of acceptable responses that a learner might provide and where each mark is awarded.
- 3. Additional marking guidance:
 - This informs examiners about any parameters which should be applied, for example 'accept any other appropriate/alternative responses'.

Applying the points-based mark scheme guidance

Examiners should follow the mark scheme rubric and use the example responses as a guide for the relevance and expectation of the responses. Learners must be credited for any appropriate response. Should learners provide answers that meet the rubric but in an alternative order, credit should be given.

Levels-Based Mark Scheme Guidance

Levels-based mark schemes (LBMS) have been designed to assess learners' work holistically. They consist of two parts:

1. Indicative content:

Indicative content reflects content-related points that a learner might make but is not an exhaustive list. Nor is it a model answer. Learners may make some or none of the points included in the indicative content as its purpose is as a guide for the relevance and expectation of the responses. Learners must be credited for any appropriate response.

2. Levels-based descriptors:

Each level is made up of a number of traits which when combined together articulate the quality of response that a learner needs to demonstrate. The traits progress across the levels to demonstrate the different expectations of each level. When using a levels-based mark scheme, the 'best fit' approach should be used.

Applying the levels-based descriptors

Examiners should take a 'best fit' approach to determining the mark.

- Examiners should first make a holistic judgement on which level most closely matches the
 learner's response. Learners will be placed in the level that best describes their answer.
 Answers can display characteristics from more than one level, and where this happens
 markers must use any additional guidance (for example weighting of traits) and their
 professional judgement to decide which level is most appropriate.
- The mark awarded within the level will be decided based on the quality of the answer and will be modified according to how securely all traits are displayed at that level:
 - o marks will be awarded at the top of that level if the learner has evidenced each of the descriptor traits securely.
 - where the response does not securely meet all traits, the marks should be awarded based on how closely the descriptor has been met.

Question Number	Answer	Mark
1 a)	Award one mark for the correct response.	(1)
	Aerobic endurance	

Question Number	Answer	Mark
1 b)	Award one mark for a correctly named motivation from:	(1)
	Intrinsic (motivation)Extrinsic (motivation)	

Question Number	Answer	Mark
1 c)	Award one mark for the correct response.	(1)
	Intensity	

Question Number	Answer			Mark
1 d)	Award one mark for each correctly stated advantage for each type of provision and one mark for each correctly linked benefit, up to a maximum of four marks.			
	Provision	Advantage of type of provision	Benefit to the performer	
	Private provision	High tech equipment/up-to-date equipment (1)	More motivating (1)	
		More equipment (1)/ Exclusive (1)	More chance of getting on the fitness machine you want (1)	
	Public provision	Cheaper membership/pay per visit (1)	Will be able to afford to join/play (1)	
		Easily accessible (1)	Nearer to where the performer lives (1)	
	Accept any c	other appropriate response		

Question Number	Answer	Mark
1 e)	Award one mark for a correctly named questionnaire from:	(1)
	 lifestyle questionnaire (1) physical activity history (1) PAR-Q (physical activity readiness questionnaire) (1) 	
	Accept any other appropriate response.	

Question Number	Answer	Mark
1 f)	Award one mark for a correct reason (1) and one mark for a justification for that reason (1), up to a maximum of two marks.	(2)
	To test his speed (1) as he needs to be quick to get to the ball before it bounces out of the court/before it bounces twice (1)	
	Marking points may be reversed/given in any order. Accept any other appropriate response.	

Question Number	Answer	Mark
2 a)	Award one mark for each correctly matched line, up to a maximum of two marks.	(2)
	A – Static passive	
	B - Plyometrics	

Question Number	Answer	Mark
2 b)	Award one mark for a correct reason (1) and one mark for a justification for that reason (1), up to a maximum of two marks.	(2)
	To jump that high from the floor she must be developing her power (1) which she will need to get the required time in the air to complete the tumbling phase of her floor routine (1)	
	Marking points may be reversed/given in any order.	
	Accept any other appropriate response.	

Question Number	Answer	Mark
2 c)	Award one mark for each of the following linked points, up to a maximum of three marks.	(3)
	 She would take 85% (1) of her heart rate maximum (HRM) (1) and work between this and her HRM (1) 220-21 (1) then work out 85% (1) and 100% of this(1) Work out 85% (1) and 100% (1) of her heart rate maximum (HRM) (1) 220 - 21 = 199 (1), 0.85 x 199 = 169.15, (1) 1 x 199 = 199 (1) 	
	Accept any other appropriate response.	

Question Number	Answer	Mark
2 d)	Award one mark for a correctly given technology from:	(1)
	Heart rate monitorSmart watchApps	
	Accept any other appropriate response.	

Question Number	Answer			Mark
2 e)	I .		ly stated principle and one mark up to a maximum of four marks.	(4)
	SMARTER principles	Name of principle of goal setting represented by letter	Why this principle will increase Catherine's motivation to train	
	м	Measurable (1)	Allows Catherine to see her progress/knows she is improving (1)	
	т	Time-related (1)	Knows she will have to keep working to meet her deadline (1)	

Question Number	Answer	Mark
3 a)	Award one mark for the correct response.	(1)
	Standing long jump	

Question Number	Answer	Mark
3 b)	 Award one mark for a correctly stated reason from: gives baseline data for monitoring/improving performance can design training programmes based on test results determine if training programmes are working results can give a performer something to aim for provide goal setting aims. 	(1)
	Accept any other appropriate response.	

Question Number	Answer	Mark
3 c)	Award one mark for a correct reason (1) and one mark for a justification for that reason (1), up to a maximum of two marks. • The test measures power to jump high (1) rather than power to dive from the blocks/push from the wall so is more sports specific for the cricketer when jumping high to catch a ball. (1) Marking points may be reversed/given in any order.	(2)
	Accept other appropriate responses	

Question Number	Answer	Mark
3 d)	Award one mark for a correct reason (1) and one further mark for a justification for that reason (1), up to a maximum of two marks.	(2)
	To give accurate results (1) so they are reliable/consistent over time (1)	
	Marking points may be reversed/given in any order.	
	Accept other appropriate responses.	

Question Number	Answer	Mark
3 e)	Award one mark for each correct reason (1) and one mark for a justification of each reason (1), up to a maximum of four marks.	(4)
	 To gradually lower the pulse (1) to reduce risk of blood pooling/dizziness/fainting (1) To stretch to help return muscles to pre-exercise length (1) so that flexibility is not reduced (1) 	
	Marking points may be reversed/given in any order.	
	Justifications may be interchangeable but must only be rewarded once.	
	Accept other appropriate responses.	

Question Number	Answer	
3 f) (synoptic)	Responses will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below.	(6)
	The indicative content that follows is not prescriptive. Responses may cover some or all indicative content, but learners should be rewarded for other relevant responses.	
	Assessment may consider:	
	Muscular endurance	
	 Muscular endurance – the ability of the muscular system to continue to contract at a light to moderate intensity to allow repetitive movements throughout a long event or game 	
	 Useful in a match/innings if she is batting for a long time 	
	 Useful as she has to wear personal protective equipment, which adds extra weight she needs to carry whilst running 	
	$_{\circ}$ Otherwise she could fatigue and not reach the stumps in time	
	 However, if she is out first ball due to poor reaction time muscular endurance will be of limited importance. 	
	Reaction time	
	 Reaction time – the time taken between a stimulus and the start of a response, useful in fast-paced sports to make quick decisions about what to do 	
	 Useful in a match/innings as the ball will be travelling at a fast pace so limited time to make a decision about the shot to play 	
	 The better her reaction time the more time she will have to place the ball to score more runs 	
	 However, she will also need to speed to get between the wickets before being stumped out. 	
	Assessment:	

 A good reaction time is most important otherwise she will miss the ball and be bowled out before she can utilise her muscular endurance. 	

Level	Mark	Descriptor		
	0	No rewardable content		
1	1-2	 Demonstrates isolated knowledge and understanding, there will be major gaps or omissions. Few of the points made will be relevant to the context in the 		
		 question. Limited assessment which contains generic assertions rather than considering the factors or events and their relative importance, leading to judgements which are superficial or unsupported. 		
2	3-4	 Demonstrates some accurate knowledge and understanding, with only minor gaps or omissions. Some of the points made will be relevant to the context in the question, but the link will not always be clear. Displays a partially developed assessment which considers some of the factors or events and their relative importance leading to partially supported judgements. 		
3	5-6	 Demonstrates mostly accurate and thorough/detailed knowledge and understanding. Most of the points made will be relevant to the context in the question, and there will be clear links. Displays a well-developed and logical assessment which clearly considers the factors or events and their relative importance, leading to supported judgements. 		

Question Number	Answer	Mark
4 a)	Award one mark for a correctly named additional principle.	(1)
	• Variation	

Question Number	Answer			Mark
4 b)		rk for each correctly stat correctly linked reason, u	ed fitness test and one up to a maximum of four	(4)
	Component of fitness	Fitness test	Why this fitness test is suitable to assess a footballer's fitness	
	Aerobic endurance	Multi-stage fitness test/Yo-yo test/ 12-minute Cooper run (1) Also accept: Harvard step test/12-minute Cooper swim (1)	 The test involves running, which is specific to football (1) Measures their ability to play for 90 minutes without fatigue (1) 	
	Muscular strength	1 Rep max (1) Also accept: grip dynamometer (1)	 This will allow them to assess the strength of specific muscles used in the game (1) Measures their upper body strength so they are effective on the ball (1) 	

Question Number	Answer	Mark
4 c)	Award one mark for a correct reason (1) and one mark for a justification for that reason (1), up to a maximum of two marks.	(2)
	It tests speed (1) once already sprinting, replicating the use of speed in a football match(1)	
	Marking points may be reversed/given in any order.	
	Accept any other appropriate response.	

Question Number	Answer	Mark
4 d)	 Award one mark for each of the following linked points, up to a maximum of three marks. The runner runs as fast as they can for 60 metres (1) the timer starts as they pass the 30 metre mark (1) and stops as they reach the 60 metre mark (1) 	(3)
	Accept any other appropriate response.	

Question Number	Answer	Mark
4 e)	Award one mark for each correct additional principle of training (1) and one mark for a justification of each additional principle of training (1), up to a maximum of four marks.	(4)
	• Rest and recovery (1) as he does not train every day/includes rest days (1)	
	• Progressive overload (1) because he has fewer rest days in week 2/increases the % 1RM/increases the weight lifted (1)	
	Specificity (1) as he is lifting heavy weights with low reps to develop strength (1)	
	Marking points may be reversed/given in any order.	
	Accept any other appropriate response.	

Question Number	Answer	
4 f)	Award one mark for a correct component of fitness (1) and one mark for a justification for that component of fitness (1), up to a maximum of two marks.	(2)
	 Agility (1) although average he will need a higher rating to effectively avoid opponents when he has the ball (1) Muscular endurance (1) because his rating was poor and he needs this in football so his muscles can continue to work throughout the game (1) 	
	Marking points may be reversed/given in any order.	
	Accept any other appropriate response.	

Question	Indicative content		
Number			
5 (synoptic)	Responses will be credited according to the learner's demonstration of knowledge and understanding of the material, using the indicative content and level descriptors below.	(6)	
	The indicative content that follows is not prescriptive. Responses may cover some or all indicative content, but learners should be rewarded for other relevant responses.		
	Evaluation may consider:		
	Pros:		
	Use timing gates rather than a stopwatch		
	 More accurate results due to timing, therefore increased reliability of testing 		
	Better footwear/surfaces to give improved grip when testing		
	Using the most appropriate footwear for surfaces will reduce time taken to complete test/therefore improved results		
	 Use of video playback to improve technique so better result. 		
	Cons:		
	Equipment/timing gates are expensive therefore not available to all		
	Can take time to set up equipment/store equipment so becomes more onerous to run tests		
	Without use of this technology results will appear worse, giving a false indication of someone's fitness if used for selection		
	Becomes elitist/not practical to fitness test/provides an unfair advantage to wealthier clubs/individuals.		
	Conclusion/Evaluation:		
	Overall viewpoint that if test results are being compared the same technology should be available for all being compared to ensure parity.		
	With technology an individual's test results should be more reliable and therefore useful when monitoring progress.		
	Technology can lead to improved fitness test scores, giving a more accurate reflection of the individual's ability.		

Level	Mark	Descriptor
	0	No rewardable content
1	1-2	 Demonstrates isolated elements of knowledge and understanding, there will be major gaps or omissions. Few of the points made will be relevant to the context in the question. Limited evaluation which contains generic assertions leading to a conclusion that is superficial or unsupported.
2	3-4	 Demonstrates some accurate knowledge and understanding, with only minor gaps or omissions. Some of the points made will be relevant to the context in the question, but the link will not always be clear. Displays a partially developed evaluation which considers some different competing points, although not always in detail, leading to a conclusion which is partially supported.
3	5-6	 Demonstrates mostly accurate and thorough/detailed knowledge and understanding. Most of the points made will be relevant to the context in the question, and there will be clear links. Displays a well-developed and logical evaluation which clearly considers different aspects and competing points in detail, leading to a conclusion that is fully supported.

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