Revision 2025

BTEC Level 3 Sport Unit 1
Student Notes

spotlight session

Recommended	Essential	Recommended
		
Before the revision session	**During the revision session**	**After the revision session**
Complete the 2025 National Mock Exam	Complete the notes	Review with your teacher

The EverLearner

Hot Topic 9: Skeletal adaptations

2. State **two** skeletal adaptations from weight-bearing exercise such as running.

1 *Increased* _____ *of the bone*

2 *Through* _____

Marks: [2]

Take your skeletal adaptations further using the E-I-O model.

Example of skeletal adaptation	Impact	Outcome
Increased bone density	Bone can take on more weight bearing without damage or pain.	*Rugby player can lift a teammate in the lineout with greater force.*
Increased strength of bone	More force can be applied to a bone by the muscle (transmitted via a tendon).	*Rugby player can contract muscles in the arms with greater force to wrap in the tackle and drive the opponent back.*
Increased strength of ligaments	The joint can be moved through greater dynamic movements without the risk of injury.	*Rugby player can make quicker and faster changes of direction by pushing through the ankle and greater angles without ankle sprains.*
Increased stability at joints	Joint injuries are less likely even in extreme circumstances.	*Rugby player lands on very hard ground with their shoulder first but their shoulder does not dislocate and they can play on.*

Hot Topic 8: Aerobic system

The question below is a six-mark, levelled question from your exam. Let's mark this answer together. You will notice there are a few gaps for you to complete.

23. Evaluate the contribution that the aerobic system makes to a competitive game of basketball.

A _____ of the aerobic system is that it is long duration and, as basketball lasts an hour, the system can contribute throughout. Moreover, it is also _____ during recovery periods such as timeouts and end of quarter when the aerobic system actually is the vehicle to recover the anaerobic systems. Without the aerobic system, the anaerobic systems cannot recover. The aerobic system is _____ during moderate intensity movements such as jogging back down court to set up zone defence or when in zone defence waiting for the attack to occur. A final _____ is that the aerobic system does not produce any fatiguing by-products and is, therefore, sustainable over time.

_____ the aerobic system provides a very small proportion of energy during high intensity movements such as rebounds or sprints. Another _____ is that it that oxygen is not readily available in the cell and needs to be delivered. Anaerobic systems have to fill this "immediacy gap".

In conclusion, the aerobic system is crucial in basketball but, without the anaerobic systems, basketball would be a very slow, one-paced game. It is the combination of energy systems that allow basketball to be so dynamic and varied.

Marks: [6]

What mark should this answer be awarded? View the level descriptors below.

BTEC Level 3 Physical Education **6 Mark Level Descriptors**

Level	Marks	Description
	0	• No rewardable material
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 discussion which contains generic assertions rather than considering different aspects and the relationship between them.
2	3-4	• Demonstrates some accurate knowledge and understanding, with only minor gaps and 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 discussion which considers some different aspects and some consideration of how they interrelate, but not in a sustained way.
3	5-6	• Demonstrates mostly accurate 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 discussion which clearly considers a range of different aspects and how they interrelate, in a sustained way.

Could you repeat this type of answer for other systems and other activities?

Hot Topic 6: Short-term muscular responses

10. State **three** short-term muscular responses to a 20-minute training run.

1 *Increased* _____ *of muscle contractions*

2 *Increased muscle* _____

3 *Increased muscle* _____

Marks: [3]

Look at the mark scheme for this question:

10. State **three** short-term muscular responses to a 20-minute training run.

Marking points **(maximum 3)**

(1) [AO 2] Increased blood supply

(2) [AO 2] Increased muscle temperature

(3) [AO 2] Increased muscle pliability

(4) [AO 2] Increased speed and strength of contraction

(5) [AO 2] Lactate accumulation is unlikely to occur as the exercise is not high intensity

(6) [AO 2] Microtears are unlikely as the exercise is not high intensity

What do you notice about points 5 and 6?

Complete this table:

Short- term muscular responses	
Moderate exercise	Maximal exercise
	Increased blood supply
	Increased muscle temperature
	Increased muscle pliability
	Increased speed and strength of muscle contraction
	Microtears
	Lactate accumulation

FOR STUDENTS

WANT MORE?

FOR TEACHERS