

Cambridge Technical Diploma in Sport and Physical Activity

Unit 1 : Body Systems and the effects of physical activity

The first unit we do is 'Body systems and the effects of Physical activity, this is an exam that we will take in January of Year 12. This task is to help you familiarise yourself with the content taught in the Body systems unit. It is set out in the same way the coursework units are throughout the course. You need to follow the instructions to complete the work and use the evidence checklist at the bottom to make sure you have included all the different assessment criteria.

Summer task:

Unit 1: Body systems and the effects of physical activity

Scenario

You have been asked to assist your PE teacher with the teaching of GCSE PE lessons. You have been given the skeletal system, muscular system and cardiovascular system as the topics you will be teaching.

Task 1: Designing a Lesson

Your task is to:

Design a PowerPoint presentation (or similar) covering the following

- Bones that make up the skeletal system
- Function of the skeletal system
- The muscles that make up the muscular system
- The structure of the heart and the role of each part of the heart

Pass	Merit	Distinction
P1. Identify the main bones that make up the skeletal system	M1. Describe the functions of the skeletal system	D1. Explain how the type of bone relates to the function it has
P2. Identify the muscles that make up the Muscular system	M2. Explain the role of each structure of the heart	
P3. Describe the structure of the heart		
Evidence		
PowerPoint presentation or similar printed out to hand in to your teacher		

Evidence Checklist

Unit 1: Body Systems and the Effects of Physical Activity

For PASS have you:	Completed (tick)	Ref/Page numbers / DVD timings / witness statements
P1. Identified the main bones that make up the skeletal system		
P2. Identified the muscles that make up the Muscular system		
P3. Described the structure of the heart		

For MERIT have you:	Completed (tick)	Ref/Page numbers / DVD timings / witness statements
M1. Described the functions of the skeletal system		
M2. Explained role of each structure of the heart		

For DISTINCTION have you:	Completed (tick)	Ref/Page numbers / DVD timings / witness statements
D1. Explained how the type of bone relates to the function it has		

Further Reading / Research

In the unit one exam you will be taught about 'energy systems' and how they work to provide your body with the energy (ATP) required for movement. This is one of the more complex topics we cover and might be one you haven't covered in detail in KS4.

To help you prepare for this unit there are some key words you could familiarise yourself with:

Keywords:

- ATP (Adenosine Triphosphate)
- Phosphocreatine
- Lactic Acid
- Aerobic energy production
- Anaerobic energy production
- Mitochondria
- Sarcoplasm
- Aerobic energy system
- Lactic Acid energy system
- ATP PC energy system