

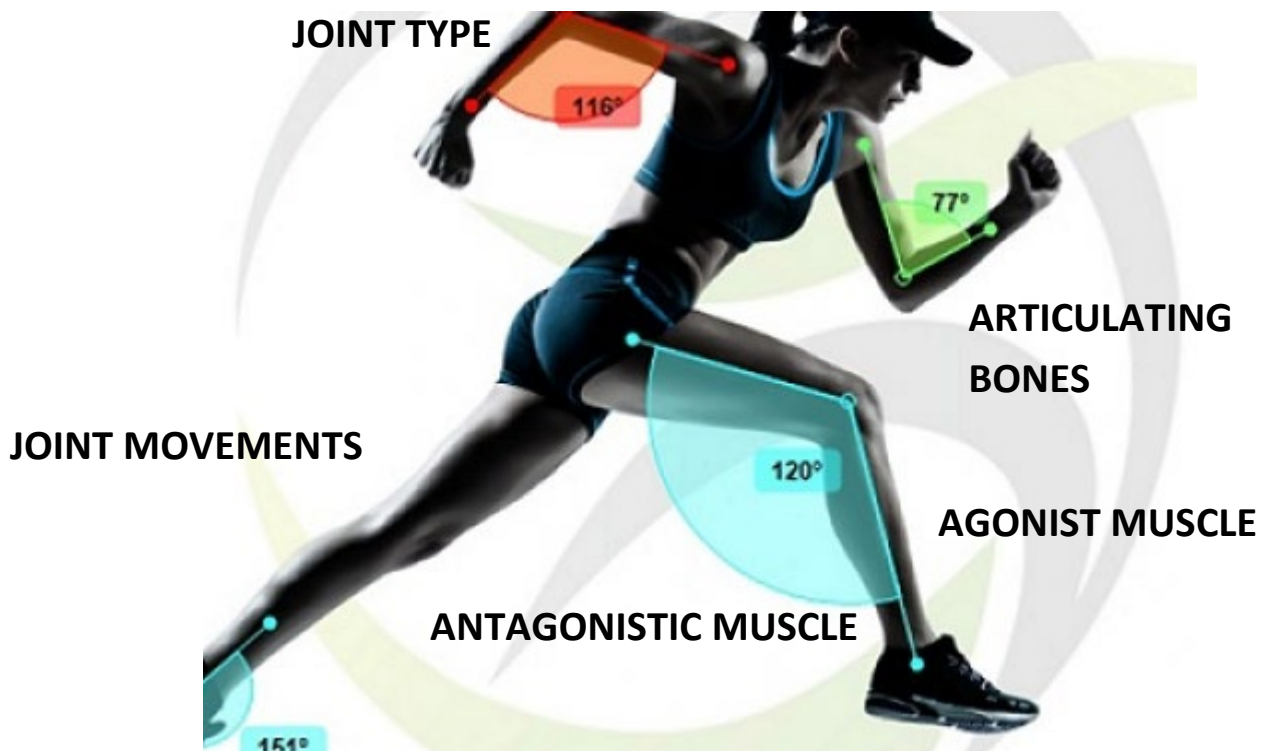
Cambridge Technicals Sport & Physical Activity Extended Certificate: Summer Work 2025/2026

Welcome to Applied Sport & Physical Activity. The Extended Certificate is the equivalent of a single A-level featuring two external examinations in Anatomy & Physiology in Year 1 & Sports Organisation & Development in Year 2. Approximately 40% of this qualification will be externally assessed with the remaining 60% made up by internal assessment across units such as Sports Coaching.

The summer work will give you some idea of the type & level of work that will be covered in preparation for the Anatomy & Physiology external assessment which will be sat in January of Year 1.

One aspect of Sport & Physical Activity that you will study in the first term is **movement analysis**. Movement analysis involves an understanding of the skeletal and muscular system and how they work together to provide movement in sport. For example, the movement analysis involved in kicking a football or a tennis serve.

You will be required to answer a movement analysis question in your exam. This question will require the following information....



Resources for this task and for the Sport & Physical Activity Extended Certificate:

1. I recommend that you consider the purchase of the specialist Cambridge Technicals Level 3 Sport & Physical Activity text book which will include work on this topic as well as many other topics covered within the two year course. This particular topic is in Unit 1 of the following publication.

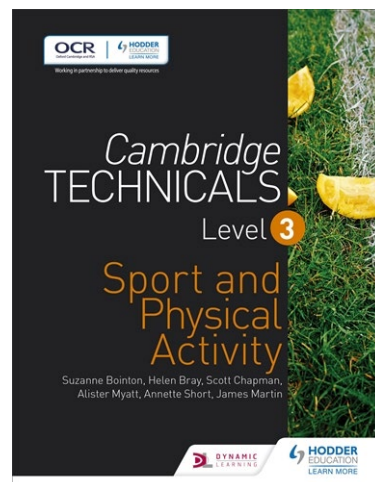
Title: Cambridge Technicals Level 3 Sport & Physical Activity

Authors: Bointon, Bray, Chapman, Myatt, Short, Martin

Publisher: Hodder Education

ISBN: 9781471874857

2. The website www.teachpe.com and the YouTube links in this document
3. We **recommend** you to spend time on the summer tasks and produce your best possible work as it will get you off to a great start and give you an indication as to what is to come in Year 1 of the Sport & Physical Activity Extended Certificate.



Good luck,

Ben Hudson

CTL Level 3 Applied Sport

**PLEASE REMEMBER PRINT OFF THIS SUMMER WORK DOCUMENT AND
BRING TO THE FIRST SPORT LESSON COMPLETED!**

Task 1: Joint Types and Articulating Bones

To allow you to gradually build up your knowledge there are **four tasks** that build on one another. Whilst there is repetition between tasks, this is deliberate and aims to reinforce some learning through repetition.

For task 1, you have to identify the **synovial joint type** and **articulating bones** in a series of common joints found in the body.

Use the link below for both this task and the second task:

<https://www.youtube.com/watch?v=otHNMOaXSns>

Key Terms

A **synovial joint** is a joint that allows a wide range of movement and which is composed of two or more bones which exist in a joint capsule.

Articulating bones are bones that move against one another within a joint.

Complete the table below:

Joint	Joint Type	Articulating bones
Elbow		
Knee		
Ankle		
Shoulder		
Hip		
Wrist		
Trunk	Cartilaginous	Vertebrae

Task 2: Adding joint movements

There are a series of possible movements that can occur at joints. These vary from joint to joint based on the **type** of joint, the **shape** of the joint and the **connective tissues around the joint** (ligaments, tendons & muscles). The most common joint movements are identified below. Remember that this task can also be completed using the YouTube video from Task 1

Define each joint movement.

Joint Movement	Definition
Flexion	
Extension	
Abduction	
Adduction	
Dorsiflexion	
Plantar flexion	
Rotation	
Horizontal adduction	
Horizontal abduction	

Now add possible joint movements (**only from the above list**) to the table below. The number of spaces in the final column indicates the number of joint movements possible at the named joint.

Joint	Joint Type	Articulation bones	Joint Movements			
Elbow						
Knee						
Ankle						
Shoulder			1.	2.	3.	
			4.	5.	6.	7.
Hip			1.		3.	
			2.		4.	
					5.	
Trunk						

Task 3: This involves adding the agonist muscle

STUDENT NAME: _____

You use earlier work to complete the **Joint type, Articulating bones and Joint movement** columns and then watch a second James Morris Joint Action and Muscles YouTube video via the link below to complete Task 3

<https://www.youtube.com/watch?v=2MOK3NrWTUE>

Joint	Joint Type	Articulating bones	Joint movement	Agonist muscle(s)
Elbow				
			→	
Knee				
			→	
Ankle				
			→	
Shoulder				
			→	
			→	
			→	
			→	
			Horizontal adduction	→
			Horizontal abduction	→
Rotation	→	Subscapularis/ infraspinatus		

Hip			→
			→
			→
			→
	Rotation		→ Gluteus medius Gluteus maximus

Well done if you have got this far! The final task involves taking what you have learnt and applying it to a series of sporting pictures to test your application of knowledge.

Remember only Task 3 and Task 4 will be marked. When complete, print off Task 3 and Task 4 and bring to your first PE lesson at Long Road



It is helpful to answer the movement analysis question in a table format. It structures your answer and makes sure you don't leave out any information.

Example: **Upward phase** of a sit up



Joint	Joint Type	Articulating bones	Joint movement	Agonist	Muscle contraction type
Trunk/ Spine	Cartilaginous	Vertebrae	Flexion	Rectus Abdominus	Concentric

Vertical Jump. Complete the box below based on what is **shown in the picture for the ankle, knee and hip**



Joint	Ankle	Knee	Hip
Joint type			
Articulating bones			
Joint movement			
Agonist			
Antagonist			

The Bench Press- **upward phase**. Complete the box below based on what is **shown in the picture**



Joint	Joint type	Articulating bones	Joint movement	Agonist	Antagonist
Elbow					
Shoulder					

Biceps Curl- **Upward phase.** (Picture B) Complete the box below based on what is **shown in the picture**



Joint	Joint type	Articulating bones	Joint movement	Agonist	Muscle contraction type
Elbow					

Additional Work Task 5: Sports Injuries

For those of you who choose to complete the additional summer work we would like you to research 5 common sports injuries to include **sprains, strains, dislocations, tendinitis and concussion.** We would like you to complete the table below providing information on the typical symptoms of each injury and the recommended first response treatment and typical rehabilitation for each injury.

Common Sports Injury	Symptoms	Treatment/ rehabilitation

--	--	--

Additional 'Extra Challenge' – Revise and Test your understanding

Well done on completing the written part of the summer work on joints and joint movements. To consolidate your understanding, can you please complete the Summer Work Quizlet below by clicking on the link below: -

https://quizlet.com/_8dyvvr?x=1jq&i=2qrluZ

[Summer Work Quizlet Flashcards | Quizlet](#)

Learn to 'Mastered' level Learn with flashcards, games, and more – for free.

quizlet.com

If you have not used Quizlet before then your task is to complete the Quizlet to **Mastered** level. To do so, you click on the link below and from the Study menu on the left hand side of the page you choose the **Learn** option and answer each question until you achieve the **Mastered** level. Once the Mastered level is achieved, you need to screenshot the page, print off and bring to your first SPORT lesson.

WELL DONE FOR COMPLETING THE SPORT & PHYSICAL ACTIVITY SUMER WORK