BTEC Level 3 Diploma in Sport

(Year12 Preview)

Summer Independent Learning 2025

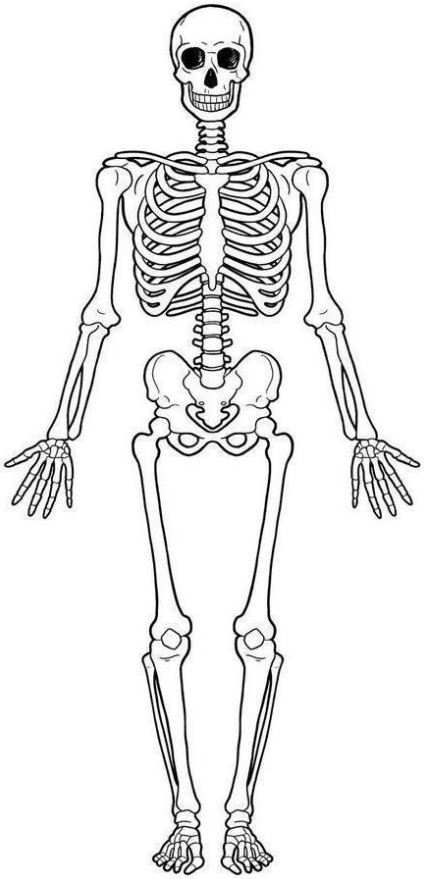
Part 1 – Compulsory Element
Preview section

This links into the topics you will be looking at in September.

- This work is linked to
    - Unit 1 - Anatomy and Physiology
    - Unit 2 - Fitness Training and Programming for Health, Sport and Well-being

Task 1

• **Label all the major bones** - cranium, clavicle, ribs, sternum, scapula, humerus, radius, ulna, carpals, metacarpals, phalanges, pelvis, vertebral column, femur, patella, tibia, fibula, tarsals, metatarsals.

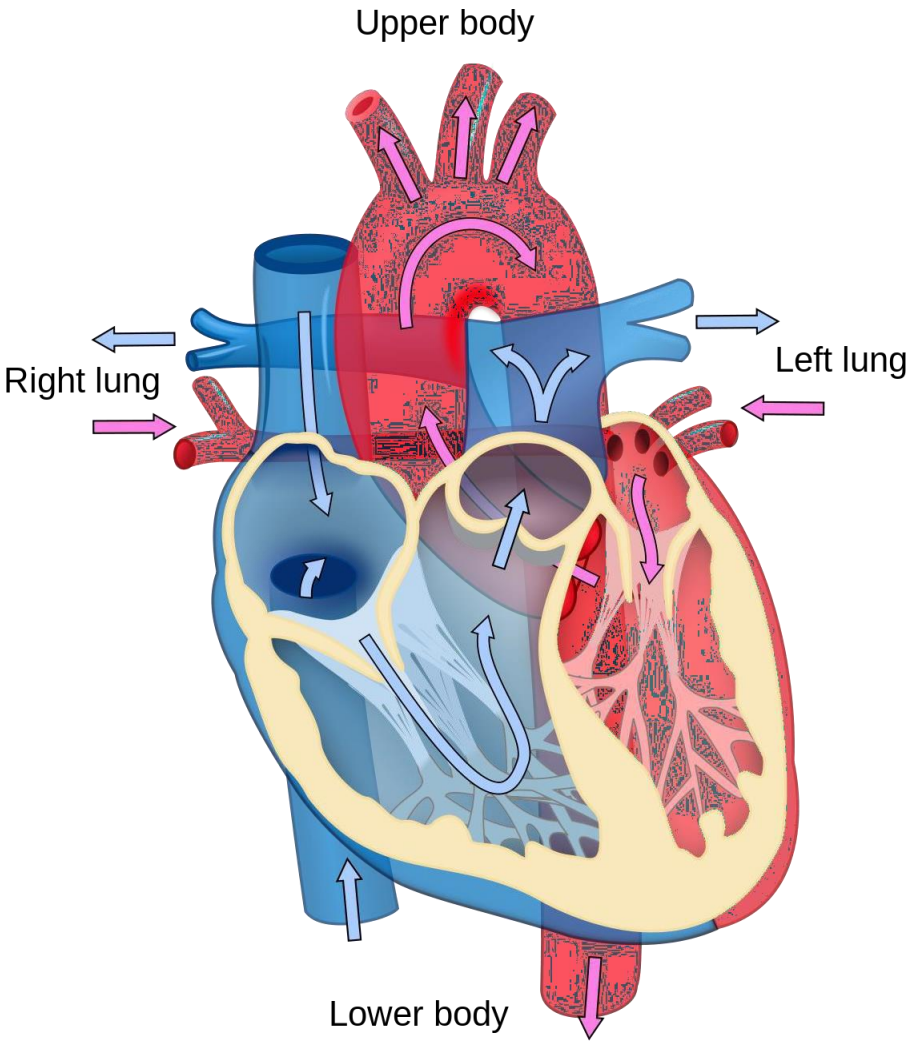


Task 2

• **Label all the major muscles** - Deltoids, biceps, triceps, wrist flexors, wrist extensors, supinators and pronators, pectorals, abdominals, obliques, quadriceps, hip flexors, tibialis anterior, erector spinae, trapezius, latissimus dorsi, gluteals, hamstrings, gastrocnemius, soleus.

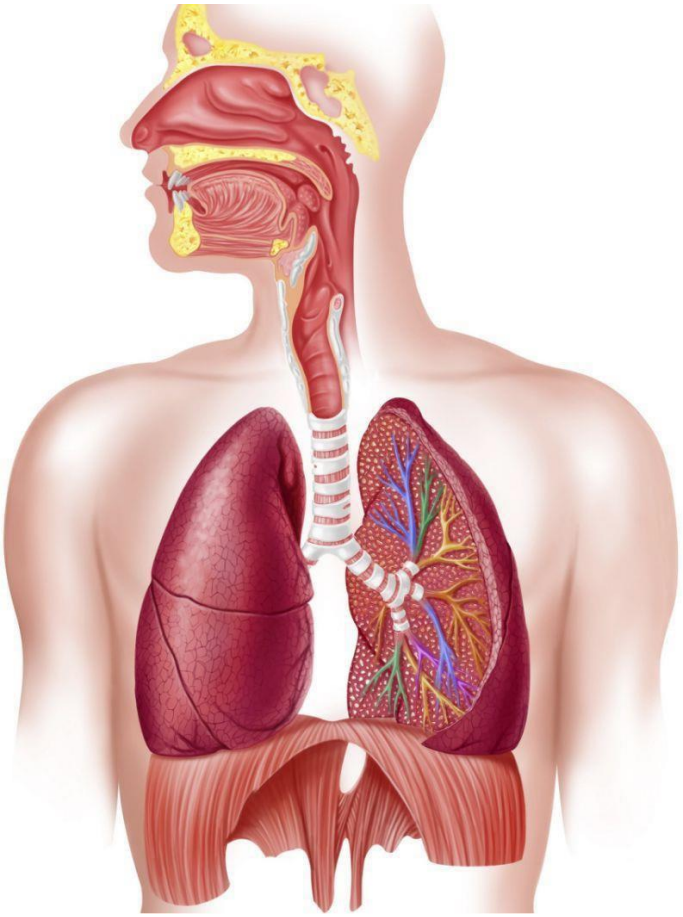
Task 3

- **Label the heart** - atria, ventricles, bicuspid valve, tricuspid valve, semi-lunar valves, septum, major blood vessels (aorta, vena cava, pulmonary artery, pulmonary vein), coronary arteries



Task 4

- **Label the respiratory system** - nasal cavity, epiglottis, pharynx, larynx, trachea, bronchus, bronchioles, lungs, alveoli, diaphragm



Task 5

Complete the table below

Lifestyle Factor	Recommended guideline
Physical Activity	
Alcohol	
Smoking	
Sleep	

Diet	Describe the Eat Well Guide -

Macronutrient	How much a day should you have?	Why do we need it?	What foods do we get it from?
Protein			
Carbohydrate			
Fat			

Task 6

Complete the table below

Type of Training	Description
Continuous training	
Circuit training	
Interval training	
Plyometrics	

Questions

Q1.

Describe the range of movement at the ankle.

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.....

.....

.....

(Total for question = 2 marks)

Q2.

Explain how bones of the skeleton are used in movement for sport.

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.....

(Total for question = 2 marks)

Q3.

Efi has been playing rugby for 5 years. Efi's skeletal system has adapted during those 5 years.

Explain **two** long-term adaptations to Efi's skeletal system from playing rugby.

(i) .....

.....

.....

.....

(ii) .....

.....

.....

.....

(Total for question = 4 marks)

Q4.

Frances is a 100 m sprinter. She uses weights as part of her training schedule.

Figure 3 shows Frances completing a concentric contraction of her quadriceps.

(Source: © Syda Productions/Shutterstock)

Figure 3

Describe a concentric contraction.

.....

.....

.....

.....

(Total for question = 2 marks)

Q5.

Describe the range of movement at the ankle.

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.....

(Total for question = 2 marks)

Q6.

Explain the role of the diaphragm during inspiration and expiration.

Inspiration

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.....

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Expiration

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.....

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.....

(Total for question = 4 marks)

Q7.

Give **one** example of a sporting action that requires an isometric contraction.

.....

.....

(Total for question = 1 mark)

Q8.

Describe the process of gaseous exchange at the alveoli.

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.....

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(Total for question = 4 marks)

Q9.

A flat bone is one type of bone. One function of a flat bone is to protect vital organs of the body.

Complete **Table 1** by:

(a) giving **two** other types of bone in Column A

(b) giving **one** function of each type of bone in Column B.

An example has been provided.

	Column A	Column B
	(a) Type of bone	**(b) Function of the bone given in Column A**
Example	Flat bone	Protect vital organs
1	(1)	(1)
2	(1)	(1)

Table 1

(Total for question = 4 marks)

Q10.

Frances is a 100 m sprinter. She uses weights as part of her training schedule.

Figure 3 shows Frances completing a concentric contraction of her quadriceps.

(Source: © Syda Productions/Shutterstock)

Figure 3

Describe a concentric contraction.

.....

.....

.....

.....

(Total for question = 2 marks)

Q11.

Carbon dioxide (CO_2) is a by-product of respiration.

Describe how carbon dioxide (CO_2) is transported in the blood.

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(Total for question = 2 marks)

Q12.

Describe the function of the synovial membrane.

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(Total for question = 2 marks)

Q13.

The knee is a hinge joint.

Describe the range of movement at the knee.

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(Total for question = 2 marks)

Q14.

Describe the role of the **internal** intercostal muscles during **expiration** when **exercising.**

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(Total for question = 2 marks)

Q15.

Explain the role of the diaphragm during inspiration and expiration.

Inspiration

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.....

.....

Expiration

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.....

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.....

(Total for question = 4 marks)

Q16.

Give an example of a flat bone.

.....

(Total for question = 1 mark)

Q17.

Give **one** example of a sporting action that requires an isometric contraction.

.....

.....

(Total for question = 1 mark)

Q18.

Figure 3 shows an athlete jumping over a hurdle.

Figure 3

Complete **Table 2** by

(a) identifying the agonist muscles

(2)

(b) identifying the type of contraction of the agonist for each movement.

(2)

Joint movement	(a) Agonist	(b) Type of contraction
Knee extension (lead leg)		
Knee flexion (trail leg)		

Table 2

(Total for question = 4 marks)

Q19.

Figure 1 shows the bones of the upper body.

Identify the bones labelled **A-C**.

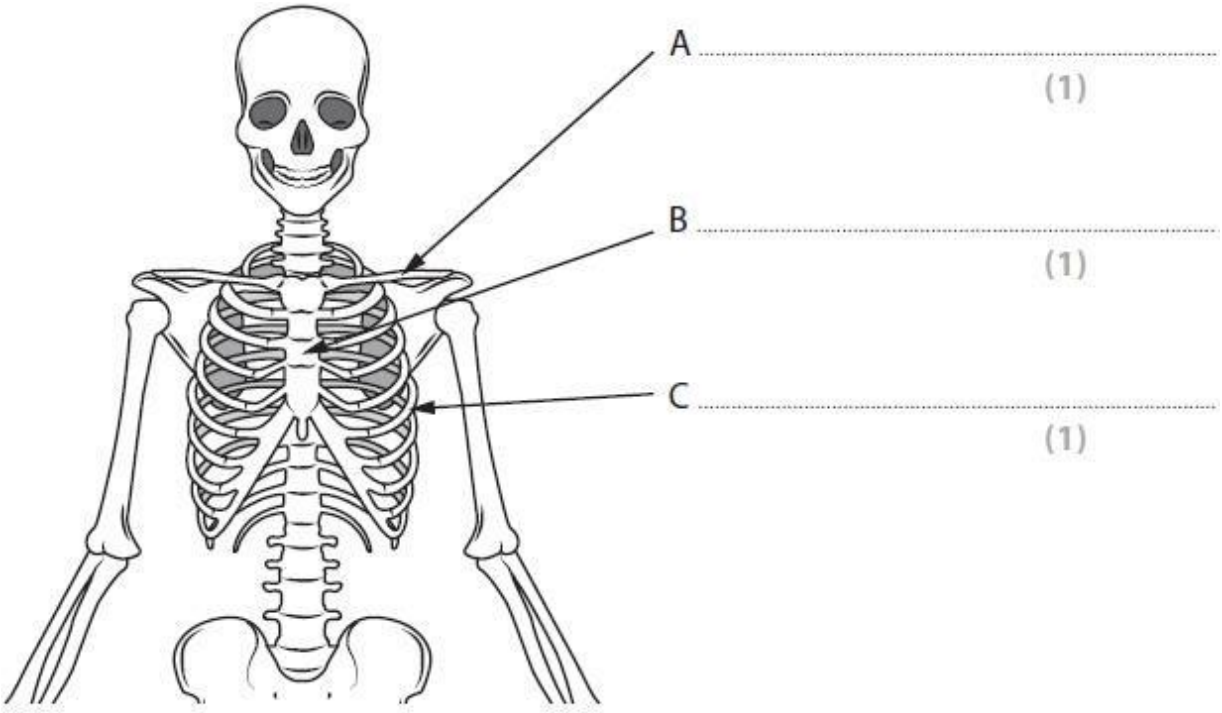


Figure 1

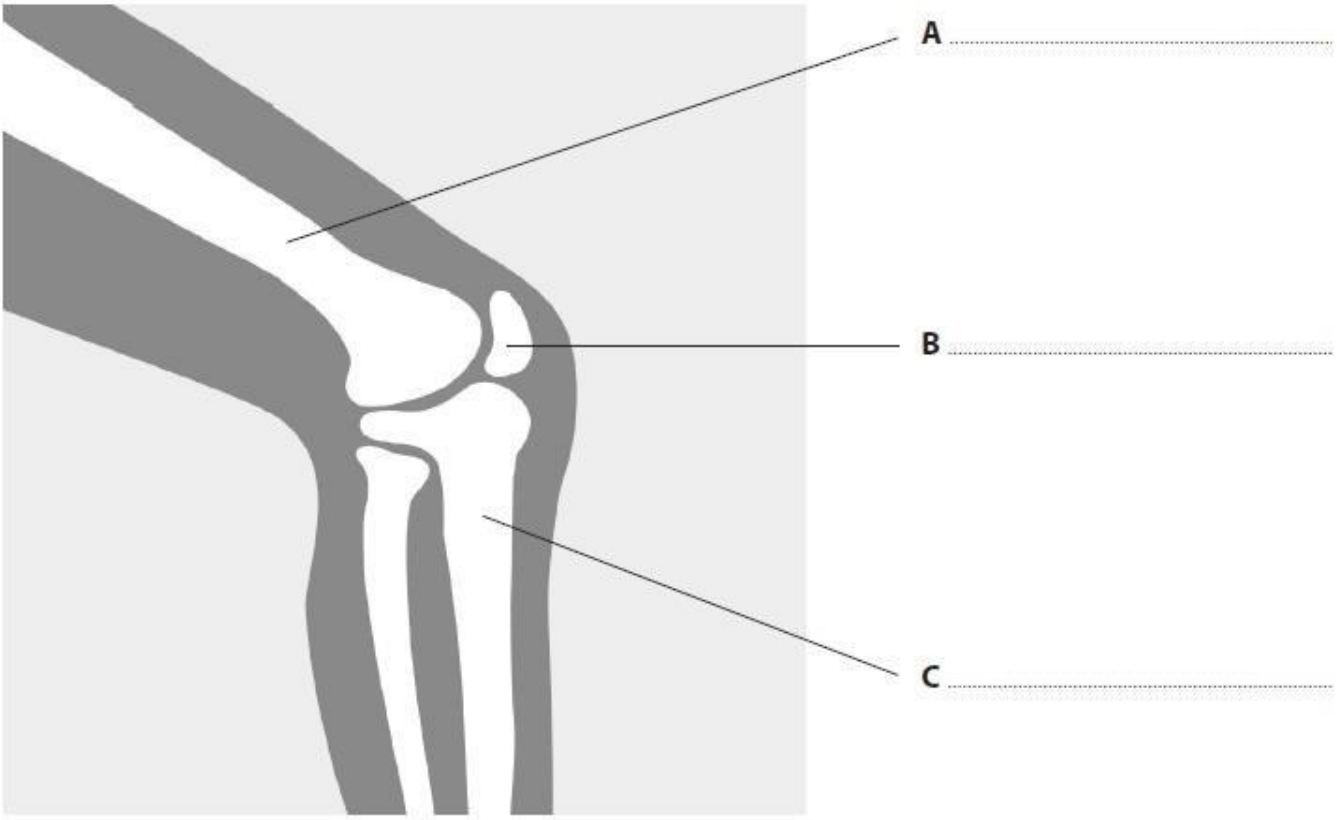
(Total for question = 3 marks)

Q20.

Figure 1 shows the bones at the knee.

Identify the bones labelled **A–C** in **Figure 1**.

(3)



Source: © Oleksandr Malysh/Shutterstock

Figure 1

(Total for question = 3 marks)

Q21.

Figure 1 shows the bones of the lower leg and foot.

Identify the bones labelled A–C.

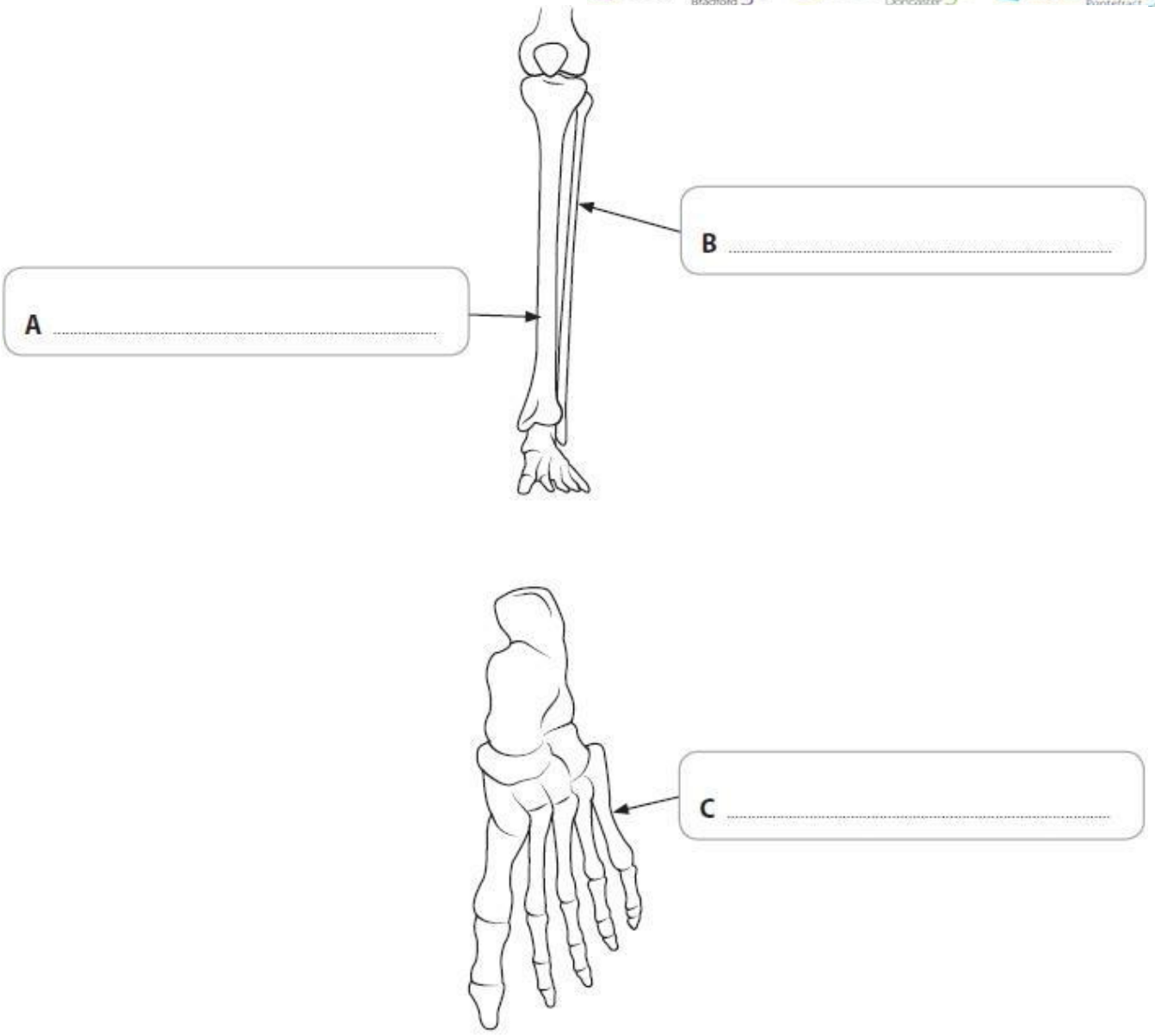


Figure 1

(Total for question = 3 marks)

Q22.

Figure 2 shows Claire performing a squat.

Figure 2

Complete **Table 1** by:

(a) identifying the joint type at the knee and hip

(2)

(b) identifying the movement from standing to the position shown in **Figure 2**.

(2)

	(a) Joint type	(b) Movement
Knee		
Hip		

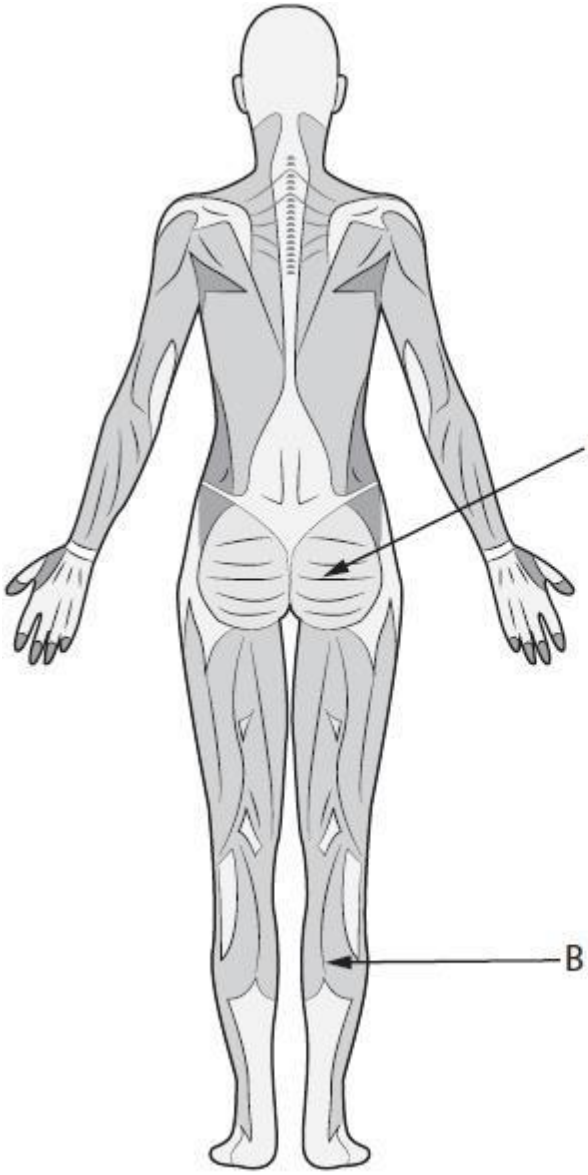
Table 1

(Total for question = 4 marks)

Q23.

Figure 2 shows the posterior view of the skeletal muscles of the body.

Identify the muscles labelled **A and B**.



A _____ (1)

B _____ (1)

Figure 2

(Total for question = 2 marks)

Part 2 – Additional recommended Element

Expanding your subject knowledge section

This section is designed to develop your understanding of a sporting context and recent contextualisation in Sport and Leisure settings.

Choose 1 Option from the lists below and write a report (minimum 1 xA4) which;
Describes an overview of the Video/Book
Explains the relationship between the video/book and your BTEC Sport Course
Analyses the video/book and discuss your opinion and conclusion
Tick the boxes of the ones you are completing. Feel free to watch as many as you want if you have time

LEVEL 3 BTEC SPORT

DEVELOP YOUR KNOWLEDGE OF SPORTING CONTEXT IN PREPARATION FOR YEAR 2 OF YOUR COURSE

NETFLIX

The English Game (Sport and Society)	
Unstoppable (Sport Psychology)	
Icarus (Drugs/Performance)	
Stop at Nothing (Doping in Sport)	
Coach Carter (Sport Psychology)	
The Game Changers (Diet and Nutrition)	
Supersize Me (Diet and Nutrition)	
Blindside (American Football)	
Last Chance U (American Football)	
The Last Dance (Michael Jordan)	
Losers (Adversity in Sport)	
Moneyball	
Formula 1 Drive to Survive	

prime video

All or Nothing Manchester City	
All or Nothing New Zealand All Blacks	
This is Football	
4 Minute Mile	
The Program (Lance Armstrong)	
Andy Murray-Resurfacing (Injury Rehabilitation)	
Dan Carter - Perfect 1	
The Unknown Runner	
The Race to Dope (Doping System in Sport)	
Muscle and Medals	

YouTube

Subscribe to the Body Coach (Joe Wicks) (Types of Training/Nutrition)	
Kobe Bryant Black Mamba Doc	
Being Serena Series	
"Is Professionalism Killing Sport" BBC Documentary	
The Psychology of a Winner 2020 Documentary	
Trent Alexander Arnold Living the Dream	
Tyson Fury Road to Redemption	
Crossing The Line Australian Cricket	
Jurgen Klopp Journey to Top	
Strive for Greatness Lebron James	

Keep up to date with all the latest news in the world of sport, there is always something happening that links to the course.....

Books to Read

- Shoe Dog - Phil Knight History/Story of Nike
- Bounce - Matthew Syed Neuroscience/Psychology
- Black box thinking Matthew Syed Psychology
- Unbeatable - Jessica Ennis
- No Limits - Michael Phelps
- My Time - Bradley Wiggins
- Between the lines - Victoria Pendleton
- Legacy - James Kerr All Blacks (New Zealand Rugby)
- The Secret Race - Tyler Hamilton and Daniel Coyle Drugs/Energy Systems/Deviance

Expanding your subject knowledge Learning Log

Record here any additional reading/viewing you are undertaking in order to show what you have been completing in order to prepare you for the course. Use the reading list on the previous slides you have been given for guidance on what you could you watch/read.

Date	Title	Summary of content	My thoughts