

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Compulsory Task 1

WELCOME TO

BTEC LEVEL 3 SPORT



UNIT 1 ANATOMY AND PHYSIOLOGY

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

SKELETAL SYSTEM



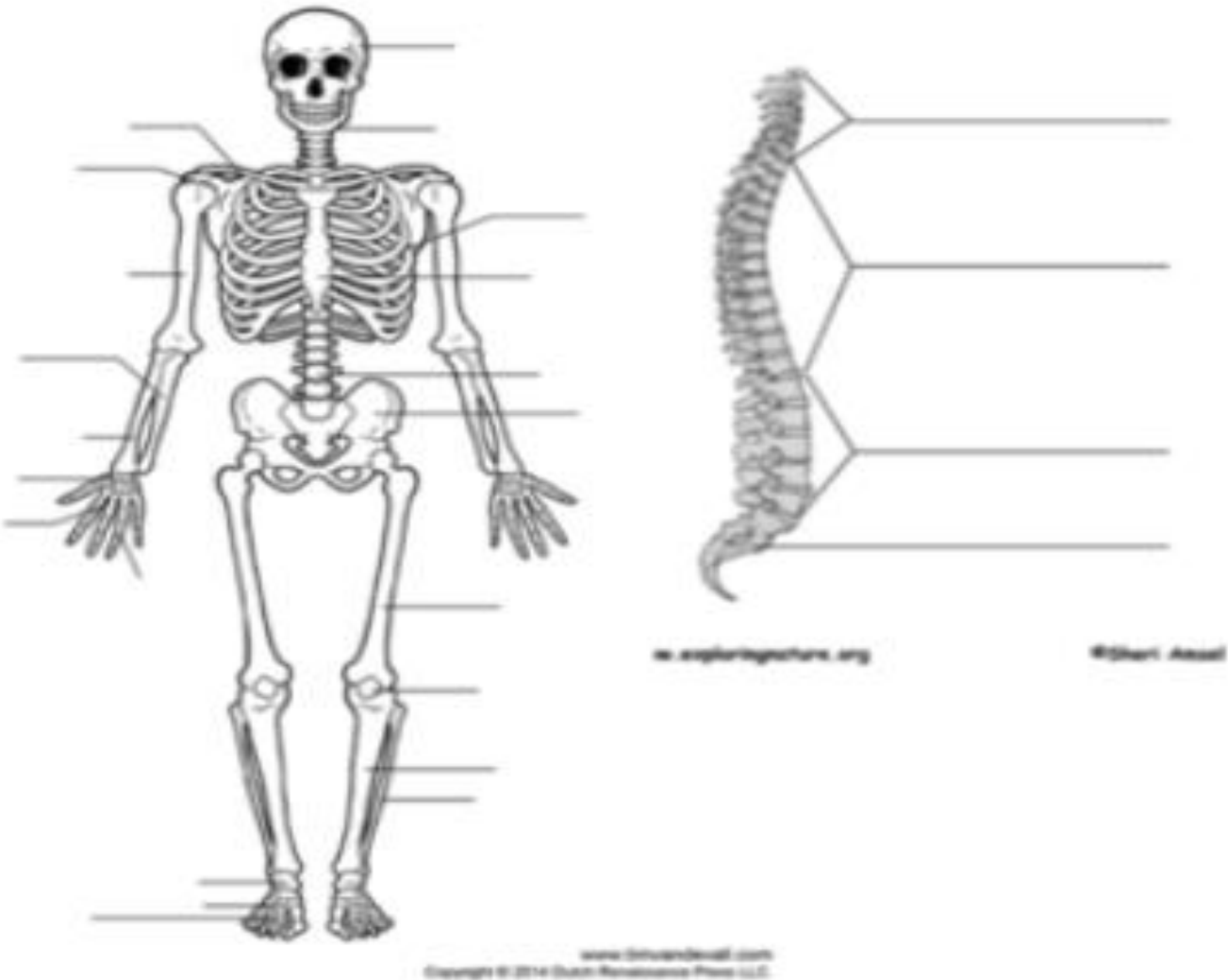
www.5mivandevall.com
Copyright © 2014 Dutch Renaissance Press LLC.

LABEL THE ABOVE DIAGRAM WITH THE FOLLOWING COMPONENTS:

- cranium, clavicle, ribs, sternum, humerus, radius, ulna, scapula, ilium, pubis, ischium, carpals, metacarpals, phalanges, femur, patella, tibia, fibula, tarsals, metatarsals.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

SKELETAL SYSTEM



LABEL THE ABOVE DIAGRAM WITH THE FOLLOWING COMPONENTS:

- Identify and colour in the Axial and Appendicular Skeleton.
- Identify at least 1 example of each bone type; long bones, short bones, flat bones, irregular bones, sesamoid bones

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Questions

Q1.

Figure 1 shows the bones of the upper body.
Identify the bones labelled **A-C**.

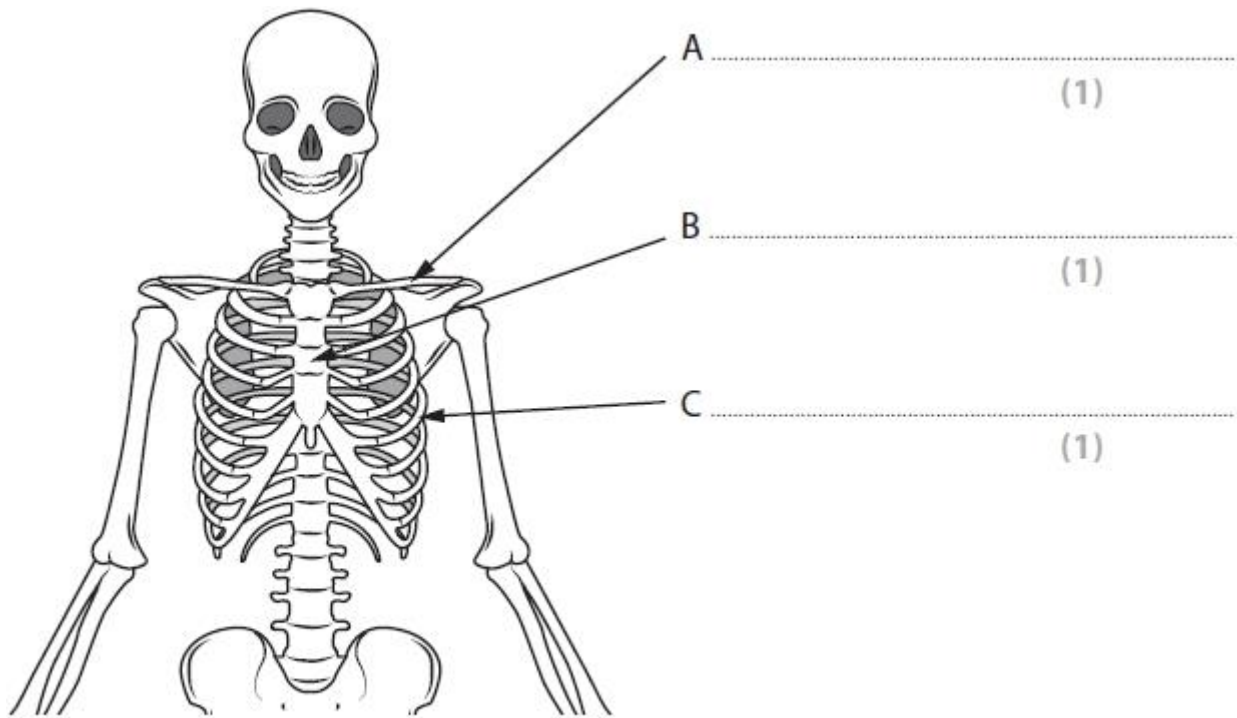


Figure 1

(Total for question = 3 marks)

Q2.

Figure 1 shows the regions of the vertebral column.
Identify the regions labelled **B** and **E**.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

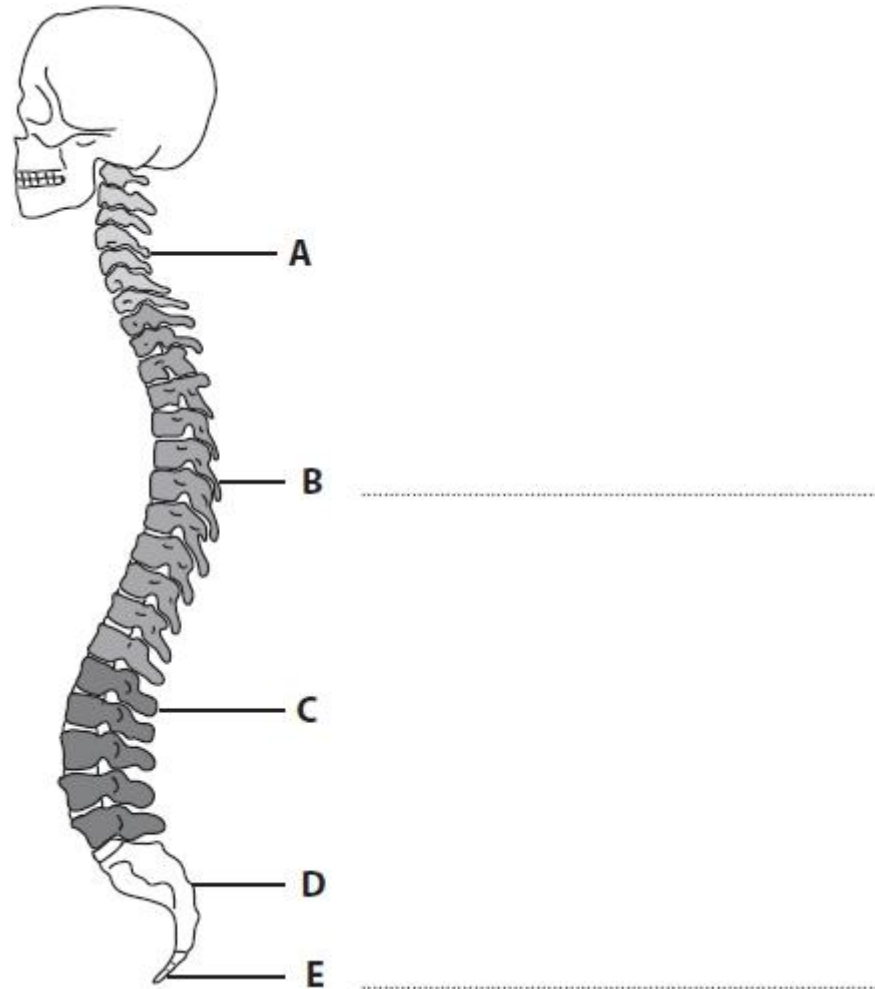


Figure 1

(Total for question = 2 marks)

Q3.

Figure 1 shows the regions of the vertebral column.

Identify the regions labelled **A** and **C**.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

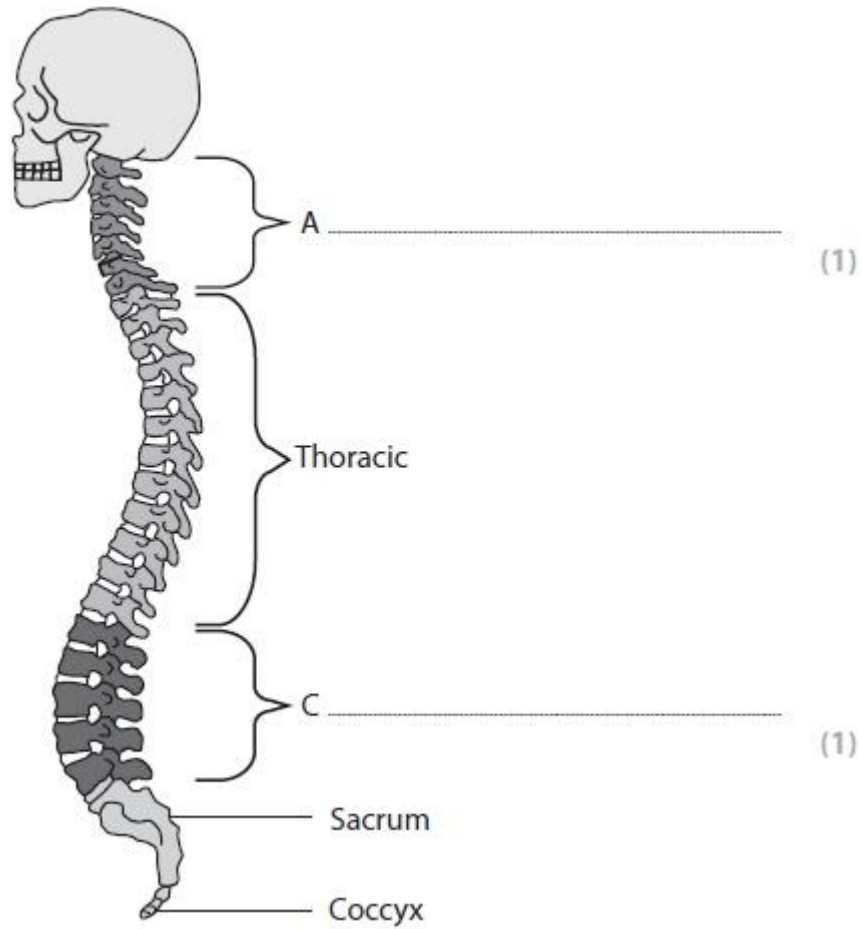


Figure 1

(Total for question = 2 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

MUSCULAR SYSTEM

 newcollaborative
Learning Trust



Identify and describe the 3 different types of muscle found within the body.

LABEL THE DIAGRAM ABOVE WITH THE FOLLOWING MUSCLES:

biceps, triceps, deltoids, pectoralis major, rectus abdominis, rectus femoris, vastus lateralis, vastus medialis, vastus intermedius, semimembranosus, semitendinosus, biceps femoris, gastrocnemius, soleus, tibialis anterior, erector spinae, teres major, trapezius, latissimus dorsi, obliques, gluteus maximus

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q4.
Figure 2 shows the posterior view of the skeletal muscles of the body.
Identify the muscles labelled **A** and **B**.

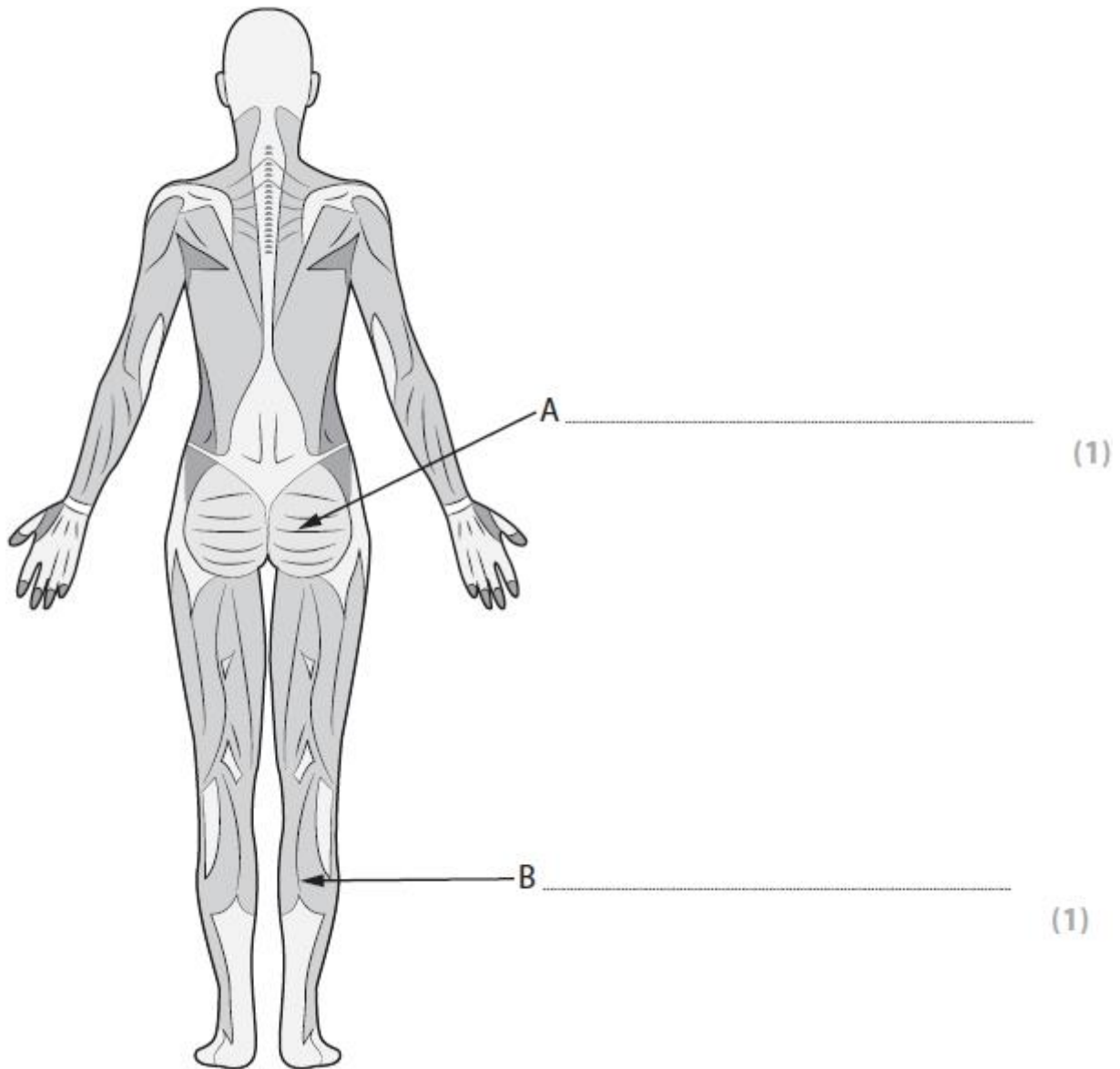


Figure 2

(Total for question = 2 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q5.

Figure 2 shows the muscles in the lower leg.

Identify the muscles labelled **A–C** in **Figure 2**.

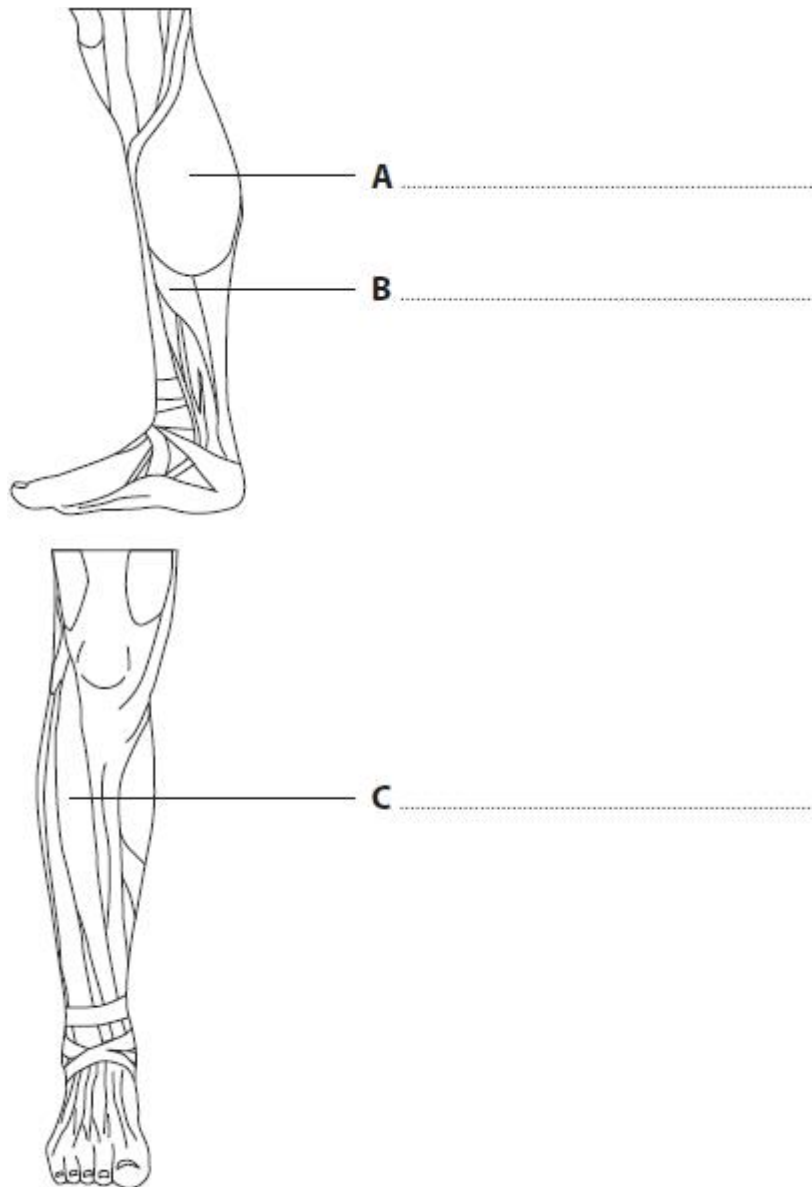


Figure 2

(Total for question = 3 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q6.

Figure 2 shows the muscles in the upper body.

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

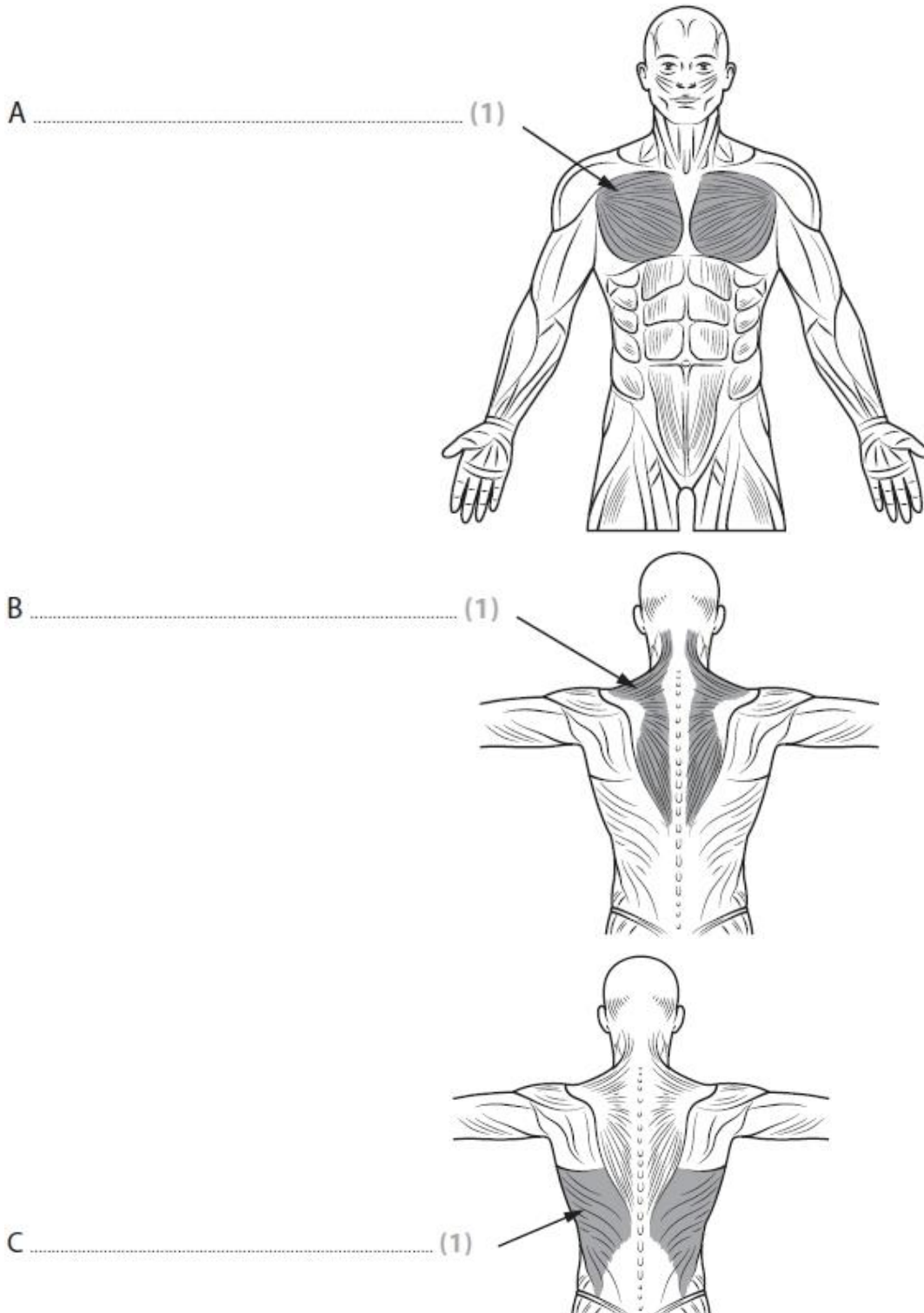


Figure 2

(Total for question = 3 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q7.

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)

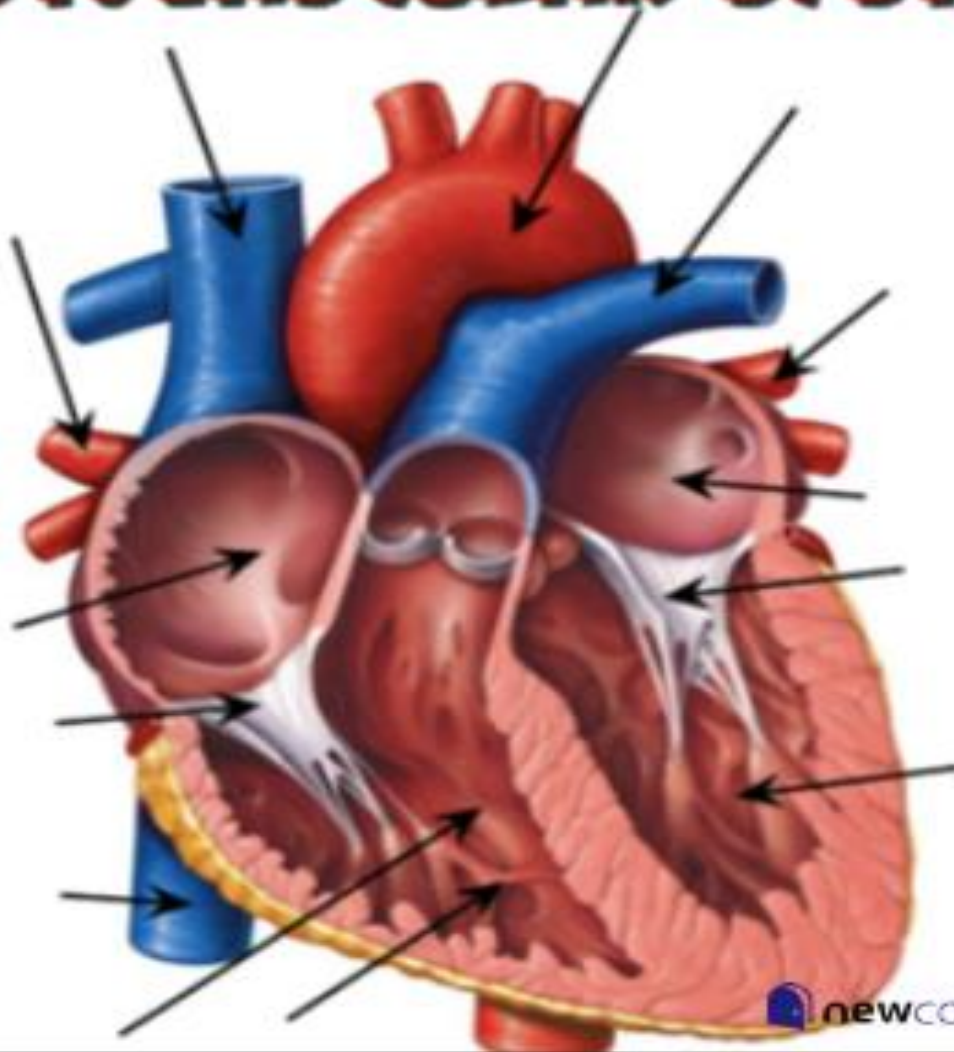
Joint movement	(a) Agonist	(b) Type of contraction
Knee extension (lead leg)		
Knee flexion (trail leg)		

Table 2

(Total for question = 4 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

CARDIOVASCULAR SYSTEM



Describe the 5 different types of blood vessel (Arteries, Arterioles, Capillaries, Venules, Veins)

LABEL THE ABOVE DIAGRAM WITH THE FOLLOWING COMPONENTS:

atria, ventricles, bicuspid valve, tricuspid valve, aortic valve,
pulmonary valve, aorta, vena cava - superior and inferior,
pulmonary vein, pulmonary artery

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q8.
 One characteristic of cardiac muscle is that it is non-fatiguing.
 State **one other** characteristic of cardiac muscle.

(1)

.....

(Total for question = 1 mark)

Q9.
 State the function of the tricuspid valve.

.....

(Total for question = 2 marks)

Q10.
Figure 3 shows the heart.
 Identify the structures of the heart labelled **A–D** in **Figure 3**.

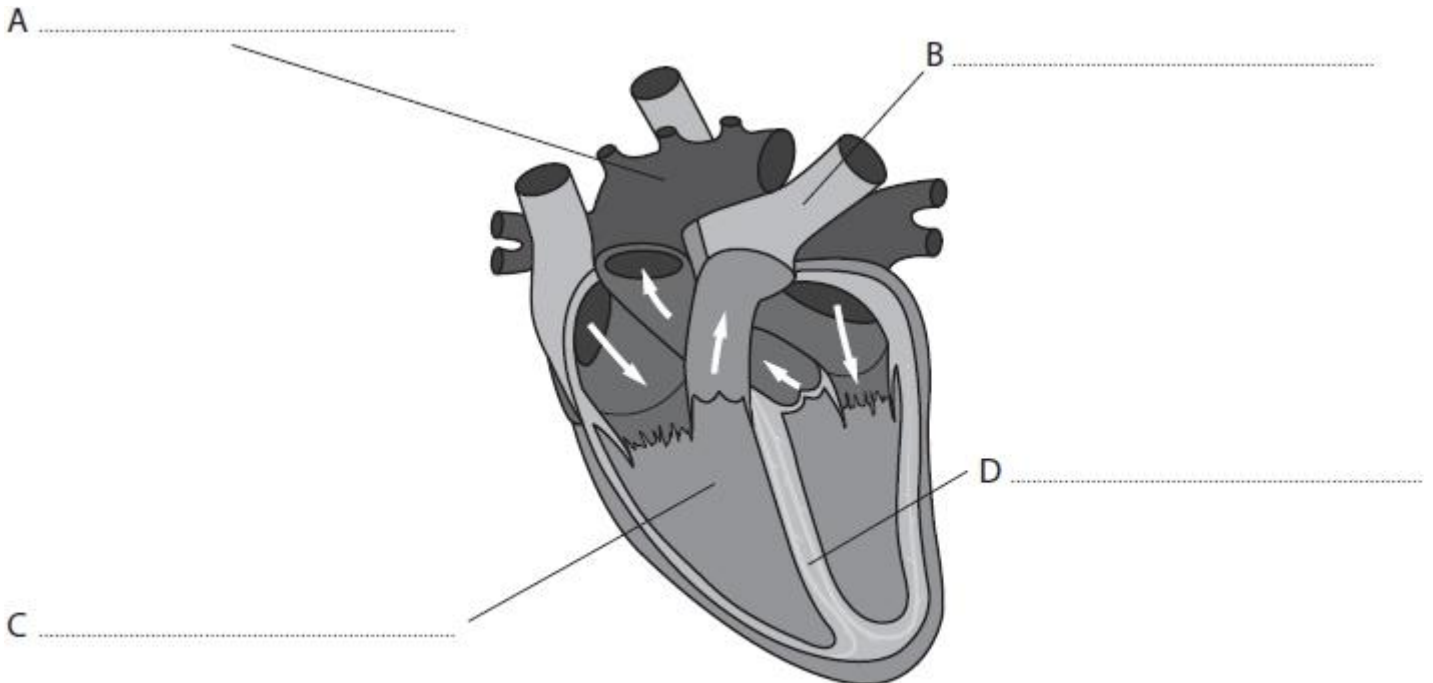


Figure 3

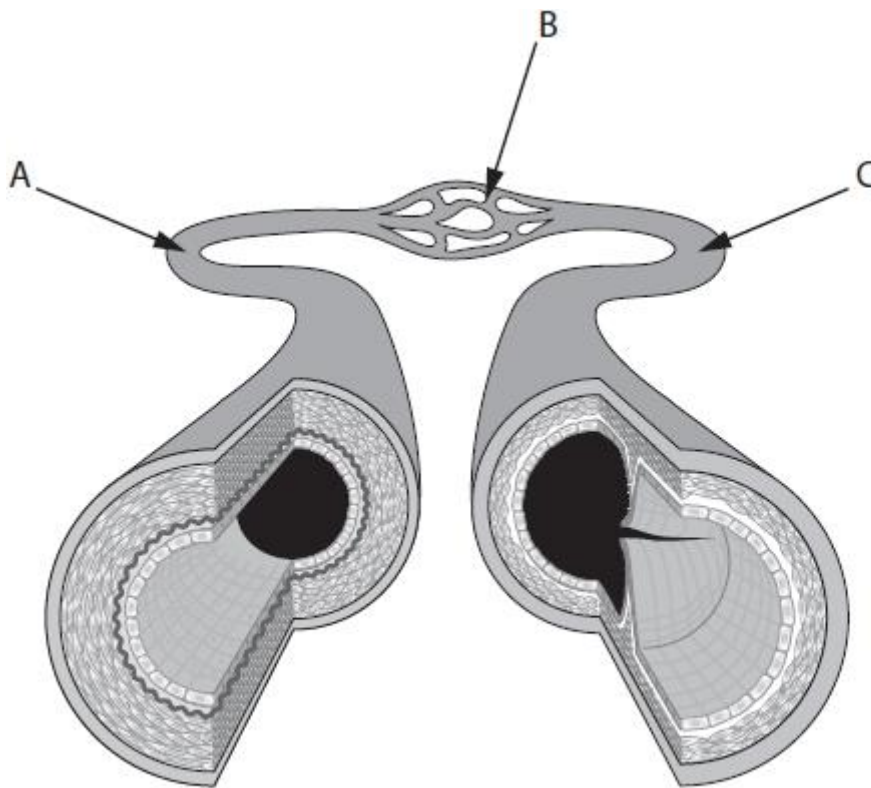
Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

(Total for question = 4 marks)

Q11.

Figure 2 shows the various types of blood vessel.

Name the blood vessels labelled A–C in **Figure 2**.



(Source: © Blamb/Shutterstock)

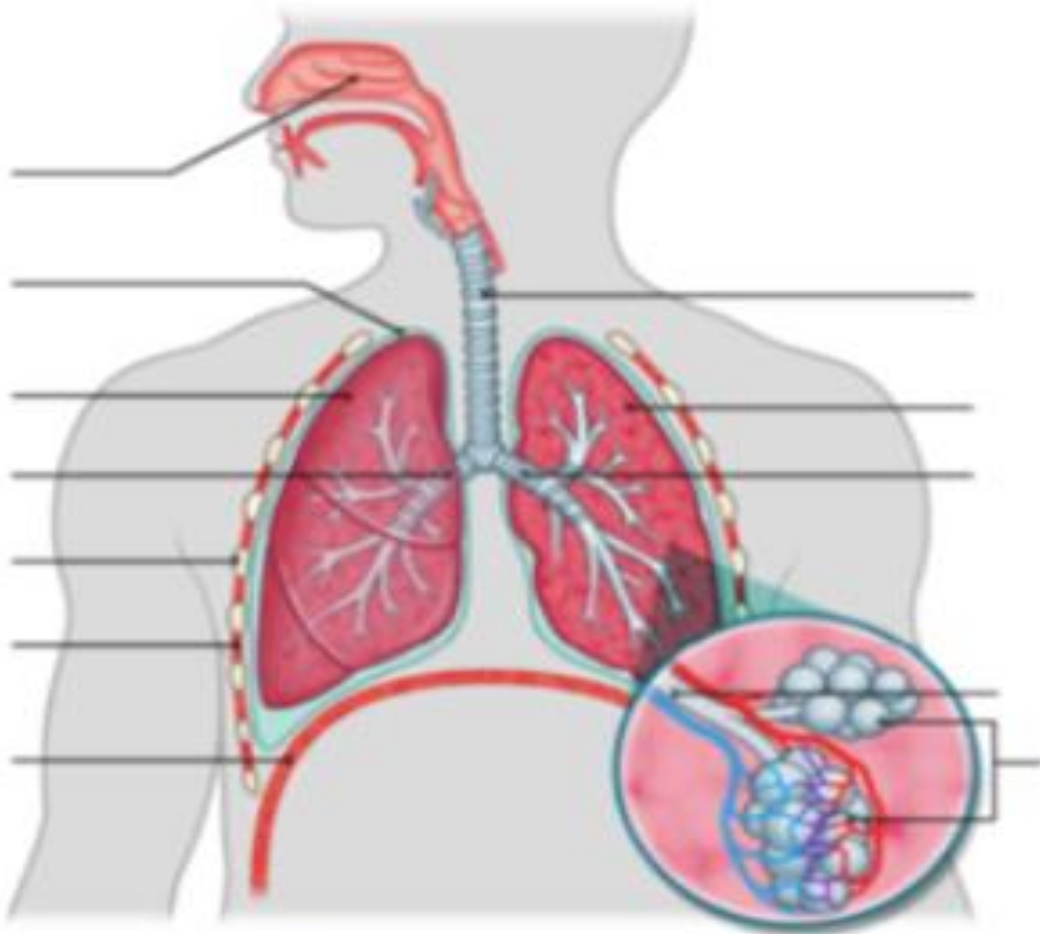
Figure 2

- A
- B
- C

(Total for question = 3 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

RESPIRATORY SYSTEM



LABEL THE ABOVE DIAGRAM WITH THE FOLLOWING COMPONENTS:

nasal cavity; epiglottis; pharynx; larynx; trachea; bronchus; bronchioles; lungs (lobes, pleural membrane, thoracic cavity, visceral pleura, pleural fluid, alveoli); diaphragm; intercostal muscles (external and internal)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q12.

Figure 5 is an incomplete flow diagram of the route that air passes through when travelling from the nasal cavity to the alveoli.

Identify the **four** structures needed to complete the flow diagram shown in **Figure 5**.

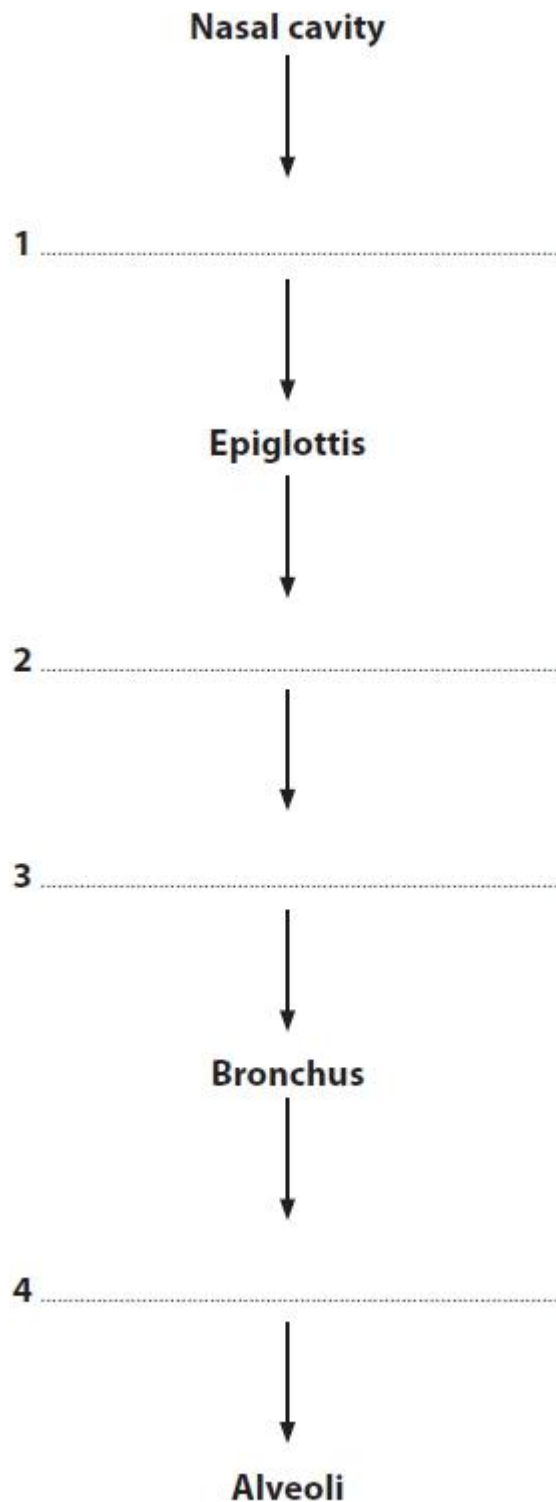


Figure 5

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

(Total for question = 4 marks)

Q13.

Name the structures, A–C, described in **Table 1**.

Structure	Description
A	A flap of cartilage at the base of the tongue, which prevents food from entering the windpipe.
B	Large single tube strengthened by rings of cartilage.
C	Tiny airways that carry oxygen to the alveoli.

Table 1

(Total for question = 3 marks)

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Compulsory Task 2

Creating positive lifestyle habits

Think about members of your family or close friends (four in total) and how you might change one negative factor of their lifestyles. (Do not name them on the worksheet.) What would you change and what would you suggest as an alternative?

Remember to provide a justification for your suggested change (see example below):



Subject	Negative factor	Positive alternative	Justification
	Smoking	Stop smoking and start gentle exercise routine (walk dog twice a day)	Stopping smoking and starting exercise routine will reduce hypertension and risk of CHD

Subject	Negative factor	Positive alternative	Justification
1			
2			
3			
4			

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

What do the following terms mean to you...?

Exercise: Physical activity requiring effort, carried out to sustain or improve health and fitness...

Health: A complete state of social, physical & mental well-being with the absence of illness / injury.

Lifestyle: The way in which a person lives, influenced by a number of factors...

Diet Poster Task:

Create a poster explaining the below points about diet...!!!

- Define diet
- Calorie recommendations (why males and females are different)
- 5-a-day (why a different 5?) Why eat fruit & veg?
 - E.g vitamins and minerals
- Food groups (job of each one + a food e.g.) + Water consumption!!!
- Why different people need different diets (compare 2 people)
- Diet effects:
 - A good diet leads to...? (x5 explained points)
 - A poor diet leads to...? (x5 explained points)
- Images



Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Compulsory task 3

How many British NGB's can you name?

FA =	SE =	TTE=
BAFA=	EG=	VE=
AGB=	BG=	RFL=
UKA=	EIHA=	RFU=
NE=	RE=	Any others that you might know...?
BE=	BR=	•
ECB=	LTA=	

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Strongly Recommended task:

Watch 6 and read 4 and complete the tasks as outlined below in the green box:

**OCR A LEVEL PHYSICAL EDUCATION
 DEVELOP YOUR KNOWLEDGE OF SPORTING CONTEXT IN
 PREPARATION FOR YOUR 2 YEAR COURSE**



Books to Read

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

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

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

*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/Dopamine*

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

Choose 2 from the lists above and write a report (minimum 1 xA4 for each) which;
 (A01) Describes an overview of the Video/Book
 (A02) Explains the relationship between the video/book and your OCR A level PE Specification
 (A03) 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

Compulsory Task:

Compulsory task 4

Mark your answers and add the corrections in a different colour pen. Self assessment task:

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Mark Scheme

Q1.

Question Number	Answer	Mark
	<p>Award one mark for labelling each bone correctly.</p> <ul style="list-style-type: none"> • A – Clavicle (1) (DNA collarbone) • B – Sternum (1) (DNA breastbone) • C – Ribs/Rib Cage (1) <p>Accept phonetic spelling.</p> <ul style="list-style-type: none"> • *DNA = Do not accept 	3

Q2.

Question Number	Answer	Mark
	<p>Award one mark for correctly labelling each region.</p> <ul style="list-style-type: none"> • B - Thoracic • E - Coccyx 	2

Q3.

Question Number	Answer	Mark
	<p>Award one mark for identifying each correct region of the vertebral column, up to a maximum of two marks.</p> <p>A - Cervical C - Lumbar</p> <p>Accept phonetic spelling.</p>	2

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q4.

Question Number	Answer	Mark
	<p>Award one mark for identifying each muscle, up to a maximum of two marks.</p> <p>A - Gluteals B - Gastrocnemius</p> <p>Accept phonetic spelling.</p>	2

Q5.

Question Number	Answer	Mark
	<p>Award one mark for labelling each muscle correctly.</p> <ul style="list-style-type: none"> • A – Gastrocnemius (1) (DNA Calf) • B – Soleus (1) • C – Tibialis anterior/Tibialis ant (1) <p>Accept phonetic spelling. *DNA = Do not accept</p>	3

Q6.

Question Number	Answer	Mark
	<p>Award one mark for labelling each muscle correctly.</p> <ul style="list-style-type: none"> • A – Pectorals/Pectoralis/Pectoralis Major/Pectorialis Minor (1) (DNA Pecs) • B – Trapezius (1) (DNA Traps) • C – Latissimus dorsi (1) (DNA Lats) <p>Accept phonetic spelling. *DNA = Do not accept</p>	3

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q7.

Question Number	Answer	Mark									
(a) & (b)	<p>Award one mark for each identification of an agonist muscle, up to a total of two marks.</p> <p>Award one mark for each identification of a type of contraction, up to a total of two marks.</p> <table border="1"> <thead> <tr> <th>Joint movement</th> <th>(a) Agonist</th> <th>(b) Type of contraction</th> </tr> </thead> <tbody> <tr> <td>Knee extension (lead leg)</td> <td>Quadriceps</td> <td>Concentric</td> </tr> <tr> <td>Knee flexion (trail leg)</td> <td>Hamstrings</td> <td>Concentric</td> </tr> </tbody> </table> <p>Accept phonetic spelling. DNA abbreviated versions of the muscle.</p>	Joint movement	(a) Agonist	(b) Type of contraction	Knee extension (lead leg)	Quadriceps	Concentric	Knee flexion (trail leg)	Hamstrings	Concentric	2 + 2
Joint movement	(a) Agonist	(b) Type of contraction									
Knee extension (lead leg)	Quadriceps	Concentric									
Knee flexion (trail leg)	Hamstrings	Concentric									

Q8.

Question Number	Answer	Mark
	<p>Award one mark for identification of a characteristic of cardiac muscle</p> <ul style="list-style-type: none"> Cardiac muscle is involuntary (1) <p>Accept any other appropriate answer.</p>	1

Q9.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Question Number	Answer	Mark
	<p>Award one mark for stating the function of the tricuspid valve for a maximum two marks.</p> <ul style="list-style-type: none"> Control blood flow between the right atrium and right ventricle/controls blood flow on the right-hand side of the heart (1) and prevent backflow (1) 	2

Q10.

Question Number	Answer	Mark
	<p>Award one mark for labelling each structure of the heart correctly.</p> <ul style="list-style-type: none"> A – Aorta (1) B – Pulmonary artery/PA (1) C – Right ventricle/RV (1) D – Septum (1) <p>Accept phonetic spelling.</p>	4

Q11.

Question Number	Answer	Mark
	<p>Award one mark for naming each of the blood vessels correctly.</p> <ul style="list-style-type: none"> Artery/Arteriole – A Capillary – B Venule/Vein – C <p>Accept specific examples (e.g. Pulmonary Artery/Pulmonary Vein)</p>	3

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Q12.

Question Number	Answer	Mark
	<p>Award one mark for labelling each respiratory structure correctly.</p> <ul style="list-style-type: none"> • 1- Pharynx • 2- Larynx • 3- Trachea (DNA Windpipe) • 4- Bronchioles <p>Accept phonetic spelling. *DNA = Do not accept</p>	4

Q13.

Question Number	Answer	Mark
	<p>Award one mark for naming each structure.</p> <ul style="list-style-type: none"> • Epiglottis – A • Trachea – B • Bronchioles – C 	3

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Video Analysis task. Find a video from Olympic Badminton match (Preferably Tokyo 2021!)
Observe and analyse the performance and include a video link to the match.

The practical element of this course

The two sports you will be assessed using are;

Team Sport: **Volleyball**



Individual Sport: **Badminton**



Importance of the practical element...!!!

Half of your assessment is based around the practical element of this course.

- You have to gather video evidence each week and compile this into one video at the end of the unit.
- This will then be used for performance analysis and to create a development plan.
- This means you will need a recording device at each of the practical lessons.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Example of how to tally and analyse a match. You have to find out the key skills and tactics for badminton. Observe, analyse and tally:

E.g. Full match videos (with annotations)

E.g. Badminton Week 1 - Game 3:

Result: Won 15 - 9 / 11-15 / 15 - 4



Video Time	Skill Evidenced	Successful or not
38s	Underarm short serve	Yes
1:01	Underarm Clear	Yes
1:18	Underarm Drop-Shot	No

I would recommend this method as it saves time on video editing and is simple to lay out.

Just make sure your timings are correct in the table and you label each shot correctly.

Present a table as above and show the full match video link to accompany the table.

Y12 BTEC Extended Diploma in Sport: Summer Independent Learning Task (SIL)

Answers to National Governing Body Quiz:

How many British NGB's can you name?

FA= The Football Association

BAFA= British American Football Association

AGB= Archery Great Britain

UKA= UK Athletics

NE= Netball England

BE= Basketball England

ECB= English Cricket Board

SE= Swim England

EG= England Golf

BG= British Gymnastics

EIHA= England Ice Hockey Association

RE= Rounders England

BR= British Rowing

LTA= Lawn Tennis Association

TTE= Table Tennis England

VE= Volleyball England

RFL= Rugby Football League

RFU= Rugby Football Union

Any others that you might know...?