The Priory Academy LSST

BTEC Extended Certificate in Sport

Physical Education

GCSE to BTEC in Sport Transition Booklet

Welcome to Physical Education and the BTEC Extended Certificate in Sport. We follow the Pearsons exam board and both internally and externally assessed units are held at The Priory Academy LSST.

Please see below how the course is assessed.

Assessments

Pearson BTEC Level 3 National Extended Certificate in Sport	360 GLH (445 TQT) Equivalent in size to one A Level. 4 units of which 3 are mandatory and 2 are external. Mandatory content (83%). External assessment (67%).	A broad basis of study for the sport sector. This qualification is designed to support progression to higher education when taken as part of a programme of study that includes other appropriate BTEC Nationals or A Levels.

Key

Unit assessed externally | **M** **Mandatory units** | **FS** **Fitness Services**

Unit (number and title)	Unit size (GLH)	Certificate (180 GLH)	Extended Certificate (360 GLH)
1 Anatomy and Physiology	120	M	M
2 Fitness Training and Programming for Health, Sport and Well-being	120		M
3 Professional Development in the Sports Industry	60		M
4 Sports Leadership	60		O

Externally-assessed units

Each external assessment for a BTEC National is linked to a specific unit. All of the units developed for external assessment are of 120 GLH to allow learners to demonstrate breadth and depth of achievement. Each assessment is taken under specified conditions, then marked by Pearson and a grade awarded. Learners are permitted to resit external assessments during their programme. You should refer to our website for current policy information on permitted retakes.

The styles of external assessment used for qualifications in the Sport suite are:

- examinations – all learners take the same assessment at the same time, normally with a written outcome
- set tasks – learners take the assessment during a defined window and demonstrate understanding through completion of a vocational task.

Some external assessments include a period of preparation using set information. External assessments are available once or twice a year. For detailed information on the external assessments please see the table in *Section 2*. For further information on preparing for external assessment see *Section 5*.

The Year 12 and 13 content is delivered by two specialist members of PE staff: Mr Hill and Mrs Porter.

Here is a link to the specification: https://qualifications.pearson.com/content/dam/pdf/BTEC-Nationals/Sport/20161/specificationand-sample-assessments/9781446938096_BTEC_Nat_ExtCert_Sport_SPEC.pdf

This pack will support you to effectively transition from GCSE to BTEC within Physical Education.

Complete the below GCSE recap content questions:

Applied Anatomy and Physiology

1 Define cardiac output.

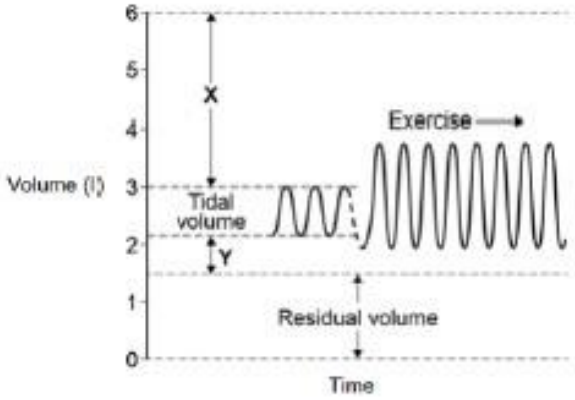
(Total 1 mark)

2 When a performer exercises, blood is redistributed to different parts of the body.

Explain **two** ways in which the body redistributes blood during exercise.

(Total 4 marks)

3 The diagram shows the lung volumes recorded on a spirometry trace.



Identify the lung volumes labelled **X** and **Y**.

(Total 2 marks)

4 Which **one** of these lung volumes is defined as the volume of air left in the lungs after maximal expiration?

A Expiratory reserve volume ☐

B Inspiratory reserve volume ☐

C Residual volume ☐

D Tidal volume ☐

(Total 1 mark)

5 Some performers include altitude training as a method of preparing for their sport.

(i) In what type of physical activity would a performer choose to include altitude training?

(1)

(ii) **Explain** what altitude training is.

(2)

(iii) **Describe** what benefits the performer gains from using altitude training.

(2)

(Total 5 marks)

6 In 1999, Michael Johnson set a new world record for the 400m with a time of 43.18 seconds.

(a) Justify why his performance was mainly aerobic or anaerobic.

(4)

(b) Athletes work at a percentage of maximal heart rate when training.

How is maximal heart rate calculated?

(1)

(Total 5 marks)

7 Define isometric contraction.

Use a sporting example in your answer.

(Total 2 marks)

8 Movement occurs through the combination of the skeletal system and the muscular system.

(i) **State one bone, one joint** and **one muscle** which would be involved when the arm is moved.

(3)

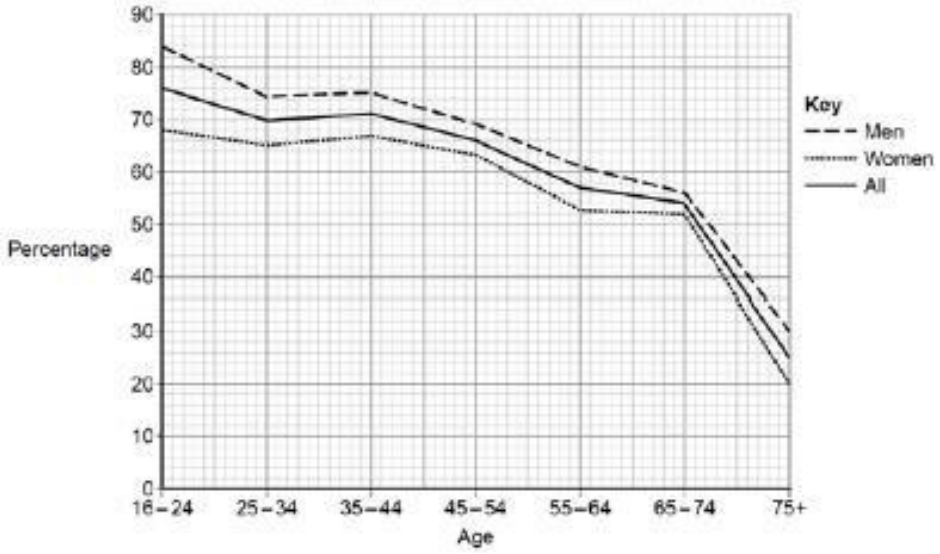
(ii) **Explain** what is meant by abduction.

(2)

(Total 5 marks)

Sport and Society

1 The graph shows the percentage of adults in 2012 who met the expected physical activity rates set by the Government.



68% of women between the ages of 16 and 24 years achieved the expected physical activity rate.

Suggest **three** factors that may be preventing other women from meeting the expected physical activity rate.

(Total 3 marks)

2 Describe **two** different ways parents could help to improve a sportsperson's performance.

(Total 4 marks)

3 In which **one** of the following do female sports performers tend to have an advantage over male sports performers?

A Flexibility ☐

B Strength ☐

C Speed ☐

D Power ☐

(Total 1 mark)

4 Role models can greatly influence the levels of both performance and participation.

(i) **Explain**, using an **example**, how a role model could help to improve the level of performance in a sport or activity.

(3)

(ii) **Explain**, using an **example**, how a role model could help to improve the level of participation in a sport or activity.

(3)

(Total 6 marks)

5 Name **two** social groups and explain how they may influence a young person's decision to participate in physical activity.

(Total 4 marks)

6 (a) Define commercialisation.

(1)

(b) Evaluate the role of the media in the relationship between sport, sponsorship and the media.

(2)

(Total 3 marks)

7 State **three** types of sponsorship an individual may receive.

(Total 3 marks)

8 Identify **two** benefits a sponsor would expect to receive as a result of sponsoring an athlete.

(Total 2 marks)

Factors effecting optimal performance in sport

1 After performing any period of training, a cool down is important.

Identify two parts of an effective cool down.

(Total 2 marks)

2 Explain how completing a cool down after a game or training session is important to help recovery.

(Total 5 marks)

3 How much fat should a balanced diet contain?

A 15–20% ☐

B 25–30% ☐

C 35–40% ☐

D 55–60% ☐

(Total 1 mark)

4 Before carrying out a weight training session using heavy weights, Robert carries out an appropriate warm up, including stretching of the major muscles that will be used.

Explain what other factors Robert should consider to reduce the chance of injury occurring during the session.

(Total 3 marks)

5 Which **one** of these performers is **most** likely to use altitude training?

A Canoeist ☐

B Gymnast ☐

C Hockey player ☐

D Marathon runner ☐

(Total 1 mark)

6 Performers should use the principles of overload (frequency, intensity and time) when training.

Define frequency, intensity **and** time.

(Total 3 marks)

7 Which one of these are suitable methods of collecting qualitative data?

A Interviews and observations ☐

B Interviews and surveys ☐

C Observations and surveys ☐

D Questionnaires and surveys ☐

(Total 1 mark)

8 A group of five friends recently counted their daily calorie intake over a period of 7 days. Their average daily intake over this period is shown in the table below.

	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5
Gender	Male	Male	Female	Male	Female
Average calories/day	2500	2300	1900	2200	2400

Analyse the information in the table above. Identify which one of the friends is eating above the recommended calorie intake per day for an average adult.

(Total 1 mark)

Biomechanical movement

1 The diagram shows a basketball player jumping to execute a shot.

Draw the lever system which operates at the ankle joint in the space below. Label the fulcrum, effort and load.

(Total 1 mark)

2 (a) The diagram shows a trampolinist performing a seat drop.

Position **A** Position **B** Position **C**

Identify the type of movement that has taken place at the hip from Position **A** to Position **B** **and** the agonist muscle which has caused the movement.

(2)

(b) Evaluate the importance of muscular endurance to a trampoline performer when performing a routine.

(4)
(Total 6 marks)

3 Which **one** of these shows how to calculate the mechanical advantage of a lever?

A Effort arm × weight (resistance) arm ☐

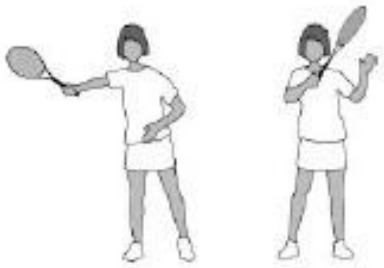
B Effort arm ÷ weight (resistance) arm ☐

C Effort arm + weight (resistance) arm ☐

D Effort arm − weight (resistance) arm ☐

(Total 1 mark)

4 Here is a diagram of a forehand tennis stroke.



Identify the plane **and** the axis when the arm bends at the elbow.

(Total 2 marks)

5 Here is a diagram of a forehand tennis stroke.

(a) Identify the type of lever being used at the elbow during the forehand tennis stroke.

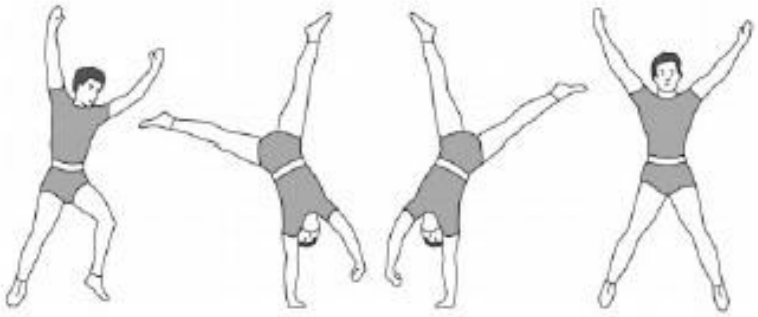
(1)

(b) Draw a fully labelled diagram to show this type of lever.

(2)

(Total 3 marks)

6 The figure shows a gymnast performing a cartwheel.



Identify the plane **and** the axis about which the movement is taking place.

(Total 2 marks)

Sport Psychology

1 Milo is having beginner lessons from a golf coach at a local club. He has been completing a putting test every week to assess the accuracy of his putting skills. The test is taken over 100 putts.

On completion of the putting test in week 4, he was then asked to set his own target score for week 5.

The table below shows the results of tests and the target score set for week 5.

	Week 1	Week 2	Week 3	Week 4	Target score week 5
Successful putts	22	30	36	38	64

Explain why the golf coach may use performance goals to help motivate Milo to improve his score in week 5.

(Total 2 marks)

2 Which **one** of these is an example of intrinsic motivation when learning to swim?

A Enjoying the swimming lessons ☐

B Moving on to the next swimming level ☐

C Receiving badges for distances swam ☐

D Receiving praise from the swimming teacher ☐

(Total 1 mark)

3 Name **two** stress management techniques that could be used to control arousal.

(Total 2 marks)

4 The winners of the FA Women's Super League win a trophy at the end of the season.

Evaluate the use of a trophy as a form of extrinsic motivation.

(Total 3 marks)

5 In 2015, Manchester City footballer, Jill Scott, was sent off for an aggressive act in a game against Arsenal ladies.

Explain the difference between direct aggression and indirect aggression in physical activity and sport.

(Total 2 marks)

6 Which **one** of these is an example of extrinsic motivation?

A Personal achievement ☐

B Praise ☐

C Pride ☐

D Self-satisfaction ☐

(Total 1 mark)

7 Anna is a young athlete who is a member of her local athletics club. She has SMART targets.

(a) What do the S, M and T in SMART stand for?

(3)

(b) Anna is running a half marathon. Her previous best of 2 hours, 20 minutes was achieved last year. She has set herself the following target for this year:

'Finish in under 2 hours, 15 minutes.'

Justify why this is a SMART target.

(4)

(c) Define the terms performance goals **and** outcome goals.

(2)

(d) Suggest **one** performance goal **and one** outcome goal for a 100 m sprinter.

(2)

(Total 11 marks)

8 Which **one** of these activities is most suited to an introvert?

A Association football ☐

B Basketball ☐

C Canoeing ☐

D Rugby League ☐

(Total 1 mark)

Define the following key terms

Balanced Diet

Cardiac Output

Dehydration

EPOC

Hypertrophy

Isometric

Motivation

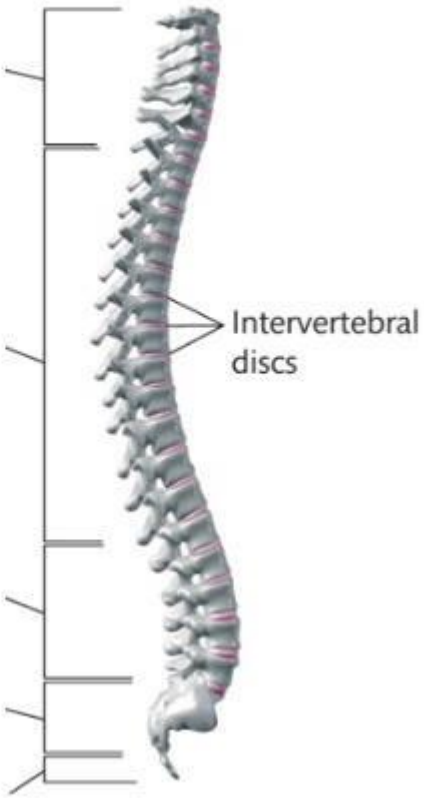
Residual volume

Spirometer Trace

Viscosity

UNIT 1 PREPARATION- Research and complete the following questions/ tasks:

Label the areas of the spine in the diagram below



Postural deviations

The 33 vertebrae of the spine have a distinctive shape when stacked on top of one another. The normal shape consists of a curve when viewed from the side. Occasionally the spine may suffer from disorders which can cause the natural curves to change.

A **neutral spine** refers to a good posture with the correct position of the three natural curves.

Disorder	Description
Kyphosis	
Scoliosis	

Complete the table below describing the types of muscle contractions.

Muscle contraction	Description	Sport Examples
1		
2		
3		

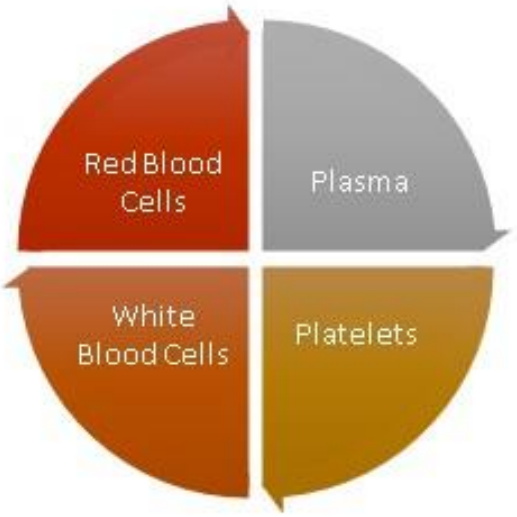
Chemical Control

Other factors that control breathing are the continually changing levels of oxygen and carbon dioxide in the blood.

Explain how **chemoreceptors** detect changes in chemical and pH levels to adapt breathing rates.

Composition of Blood

The average adult has approximately 4-5 litres of blood in their body. This blood is composed of:



Explain the structure and function of different components of blood.

Blood Component	Structure	Function
Red Blood Cells (Erythrocytes)		
Plasma		
White Blood Cells (Leucocytes)		
Platelets (Thrombocytes)		

Draw the process of ATP being broken down in to ADP.

UNIT 2 PREPARATION- Research and complete the following questions/ tasks:

1. ***List 3 different types of training methods.***

2. ***Explain how each method of training works and its effectiveness to an athlete.***

3. **Explain the difference between a healthy and an unhealthy lifestyle. Use examples in your answer.**

4. **When considering creating a diet, explain what factors should be considered and how the diet would match these factors.**

UNIT 3 PREPARATION- Research and complete the following questions/ tasks:

Using the website: https://careers-in-sport.co.uk/ Gain an understanding of the diverse range of careers on offer within the sport industry. Now complete the following:

1. ***List 5 different sports careers you have found***
2. ***Choose 3 of the above jobs and explain how they differ (discuss requirements/ skills/ qualities etc.)***
3. ***Complete your own SWOT analysis (Strengths- Weaknesses- Opportunities- Threats) as if you were applying for one of the above 5 careers***
4. ***If you were the interviewer for the above career- write 5 questions which you would ask the interview candidate***

UNIT 4 PREPARATION- Research and complete the following questions/ tasks:

1, List 3 different Sport leadership roles

2. As a Sports first aider what qualities would you require to ensure you carry this role out correctly?

3. What do you know about team cohesion? How would this affect the performance of a team?

4. what kind of sporting situations are stressful and in there any type of stress that would help a sports performer?