



BTEC Sport Bridging Work Booklet

Sport

BTEC Level 3

Building Better Results

BTEC Sport Bridging Work

Please look through the variety of tasks below and try to complete as many as you can over the next few weeks. All the skills used to complete these tasks will be beneficial to you whilst completing the BTEC Sport course.

Reading Tasks:

- The Sports Gene by David Epstein 2013
- Bounce by Matthew Syed 2011
- The Talent Code by Daniel Coyle 2010
- Read the Journal of Applied Physiology, Sport and Society
- Read the Journal of Sport and Exercise Psychology



Watching Tasks:

- Icarus (2017) Bryan Fogel, Netflix
- BBC One Panorama – Catch me if you can (2015)
- Sports Science (2013) ESPN
- The Program (2015)
- The Last Dance Netflix (2020)
- All or Nothing Netflix (2018)



Writing Tasks:

- Write an article for your local papers' sports pages on an area of interest to you.
- Write a glossary of terms for anatomy and physiology in your sport.
- Write a coaching session plan for any sport.
- Design a 4-week training programme for an athlete of your choice.
- Write a review of any official/referee from any sport from a game of your choice.
- Write a for and against argument for the following:
 - Hosting an Olympics where performance enhancing drugs are allowed.
 - Having a female manager in charge of a men's premier league football team.
 - The banning of heading in football completely.
 - Is racism in sport still a problem today?



External Units

Unit 1 – Anatomy and Physiology

Useful Resources

YOUTUBE CLIPS

Functions of the skeleton <https://www.youtube.com/watch?v=ltFutvTye8c>

Factors affecting the skeletal system <https://www.youtube.com/watch?v=J0QHINPBuyQ>

Types of muscles <https://www.youtube.com/watch?v=YPVnlPeZKT0>

Responses of the skeletal system to exercise <https://www.youtube.com/watch?v=w07r1e6U-54>

Channels

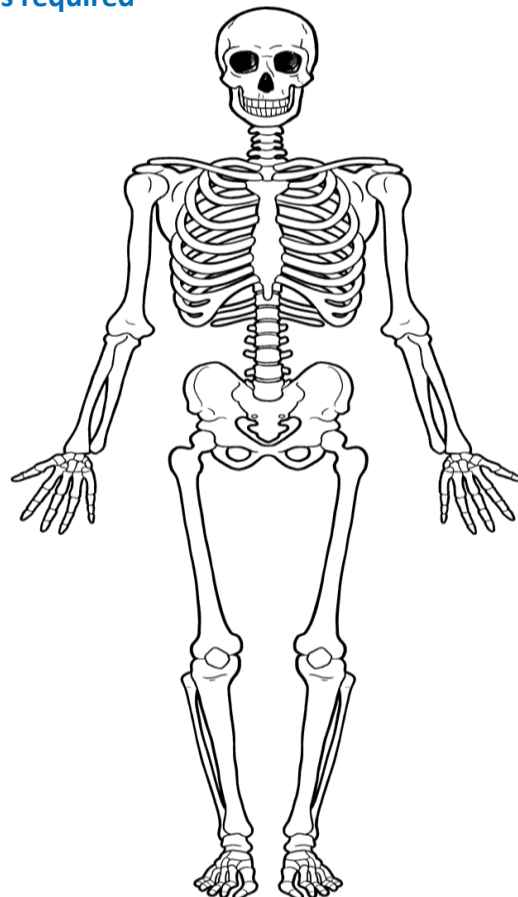
My PE Exam – <https://www.youtube.com/channel/UCtQWDngwhYgmMjKyzZy2dUQ>

The PE Tutor - https://www.youtube.com/channel/UCUVsiR-1u_oSZ32CHQmD4Ug

James Morris – <https://www.youtube.com/channel/UCChU8cYZY5xpQ7pBlku3Xw>

TASKS and ACTIVITIES

Label the skeleton - 22 names of bones required



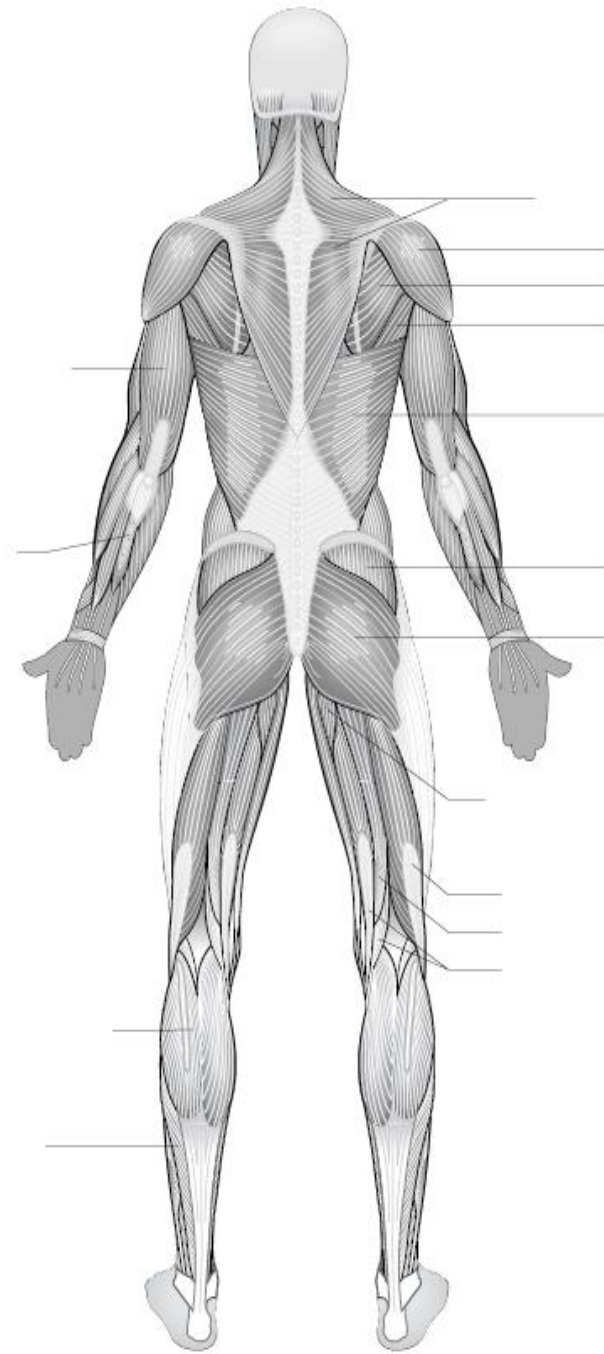
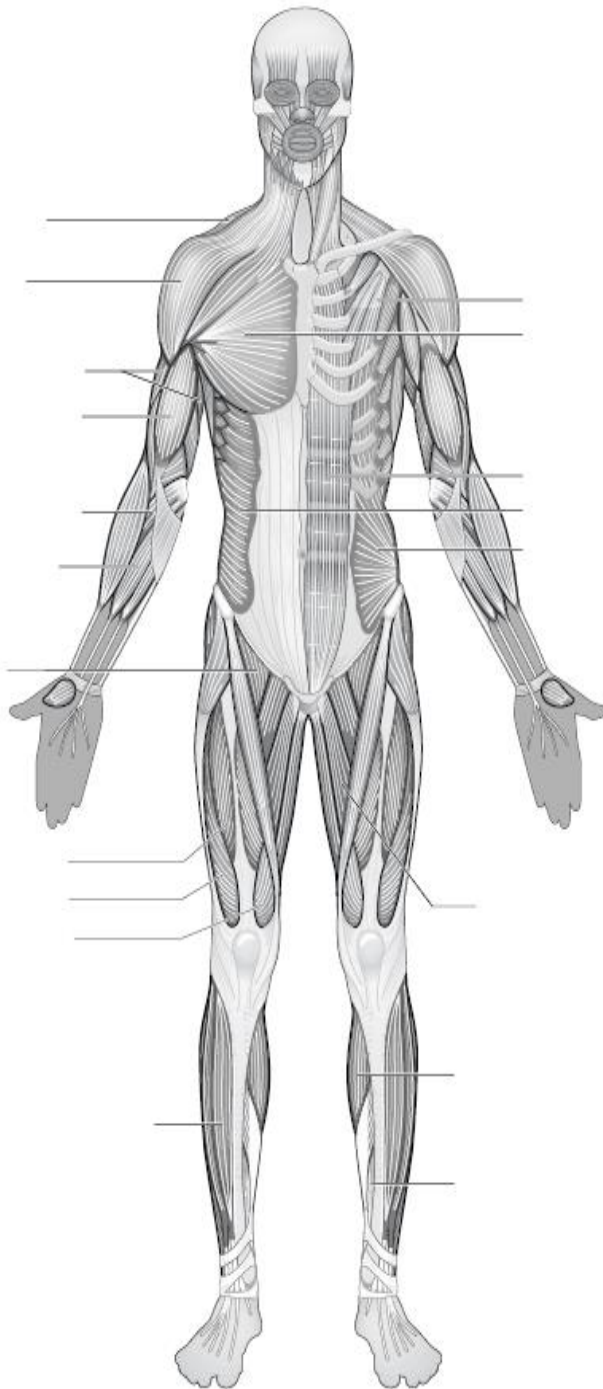
The following key terms are used to describe the location of each bone. Write out the meaning of each key term in the table below.

Term	Meaning
Anterior	
Posterior	
Medial	
Lateral	
Proximal	
Distal	
Superior	
Inferior	

The Heart - Please answer the following short mark questions.

1. The heart, lungs and the connecting vascular system are responsible for sustaining which form of exercise: Aerobic or Anaerobic?
2. What type of muscle is the heart formed of?
3. The heart consists of 2 separate pumps, a right side and a left side, but where do they pump blood to?
4. How many valves are there in the heart and why are they there?
5. Blood in the left atrium is oxygenated / deoxygenated?
6. Blood in the pulmonary vein is oxygenated / deoxygenated?
7. On average at rest, how many times should a healthy heart beat in one minute?
8. What term describes the volume of blood pumped from the heart in a single beat?
9. How do you calculate cardiac output?
10. What components in blood are responsible for carrying oxygen?
11. Name the three different forms of blood vessels.
12. List the 4 key components of blood?

Look at the diagrams below. Can you correctly name the muscles shown?



Skeletal Muscles Glossary - Find out a definition for the following key terms relating to skeletal muscles. Complete the table below.

Key Term	Definition
Agonist	
Antagonist	
Synergist	
Isometric Contraction	
Concentric Contraction	
Eccentric Contraction	
Hypertrophy	
DOMS	
Tendon	
Mitochondria	
Cramp	
Glycogen	

Training Programmes

Design 3 different training programmes for the following sports performers:

- Marathon Runner
- Long Jumper
- Shot Putt Thrower

Justify your choices of the key training methods you have applied within the program.

Exam Question Practice

1. Explain how oxygen diffuses from the lungs into the blood and how it is transported to the tissues.

(4 marks)

2. Describe the characteristics of the main muscle fibre type used by sprinters

(4 marks)

3. Name the type of muscle contraction that occurs when kicking a football in a penalty shootout and identify the agonist and antagonist.

(3 marks)

4. Basketball players need good cardiovascular endurance. State two classes of food that are most suitable for players who require cardiovascular endurance and explain why they are needed in their diet.

(3 marks)

Unit 2 – Fitness, training and programming for health sport and well being

Useful Resources

YOUTUBE CLIPS

Diet and Nutrition <https://www.youtube.com/watch?v=M2z78d2nfL4>

Sedentary Lifestyle - https://www.youtube.com/watch?v=1qZ_Miilz6U

Channels

Planet PE - <https://www.youtube.com/channel/UCZYCR8YjZlb5S3DMZW3u7g>

My PE Exam – <https://www.youtube.com/channel/UCtQWDngwhYgmMjKyzZy2dUQ>

The PE Tutor - https://www.youtube.com/channel/UCUVsiR-1u_oSZ32CHQmD4Ug

James Morris – <https://www.youtube.com/channel/UCChU8cYZY5xpQ7pBiklu3Xw>

TASKS and ACTIVITIES

TASK 1

Exercise and lifestyle factors

Explain how people are staying fit during the lockdown period?

What are physical activity guidelines and/or recommendations from the government?

Has there been an upsurge in people running and cycling due to the closure of gyms? How does Strava support people?

What has been the impact of charitable causes such as ‘five for five’ when encouraging people to lead a healthier lifestyle and exercise?



TASK 2

The Impact of a sedentary lifestyle

With more people than ever working from home, and schools closed.

What are the long term effects of a sedentary lifestyle?

What strategies and advice would you recommend to an individual leading a sedentary lifestyle?



TASK 3

Keeping the nation healthy



Nutrition is an essential factor when staying healthy.

Explain the recommendations, guidelines and benefits associated with a healthy diet. Discuss and explain the impact poor nutrition will have on an individual's health and wellbeing.

TASK 4

Benefits of a healthy diet

Data available from the Health Survey for England (HSE) suggests that in 2012 around 28% of children aged 2-15 years of age were classed as either overweight or obese. Similar figures in 2007 suggest the figure was around 24%.

Research the possible causes of this increase in childhood obesity. Consider the types of food and drink available, and the opportunities children have to exercise both at home and in school.

TASK 5

Health and Well being (Research presentation task)

Describe and explain the negative lifestyle factors below and the impact on an individual's health and wellbeing.

- Smoking
- Alcohol
- Stress
- Lack of sleep

What strategies and lifestyle modifications techniques would you recommend? Why?

Hint

Discuss the barriers to change, strategies to increase physical activity, quit smoking strategies, strategies to reduce alcohol consumption and stress management techniques

Visit <https://www.nhs.uk/live-well/>

Evidence could include;

- Assignment
- Report
- Presentation
- Statistics
- Web pages