

BTEC LEVEL 3
EXTENDED CERTIFICATE IN SPORT
Transition Booklet



Welcome to BTEC Level 3 Sport.

This transition work has been specifically designed for you to complete over the summer break. This will help you bridge the gap between GCSE P.E/BTEC L2 Physical Education and BTEC Level 3 Sport Studies.

Please complete and bring to your first BTEC level 3 lesson at the start of September. Thank you.

Course Content over 2 years.

Learners will study three mandatory units 1-3

- Unit 1: Anatomy and Physiology
- Unit 2: Fitness Training and Programming for Health, Sport and Well-being
- Unit 3: Professional Development in the Sports Industry.
- Unit 4: Practical Sports performance.

Task 1: Background reading.

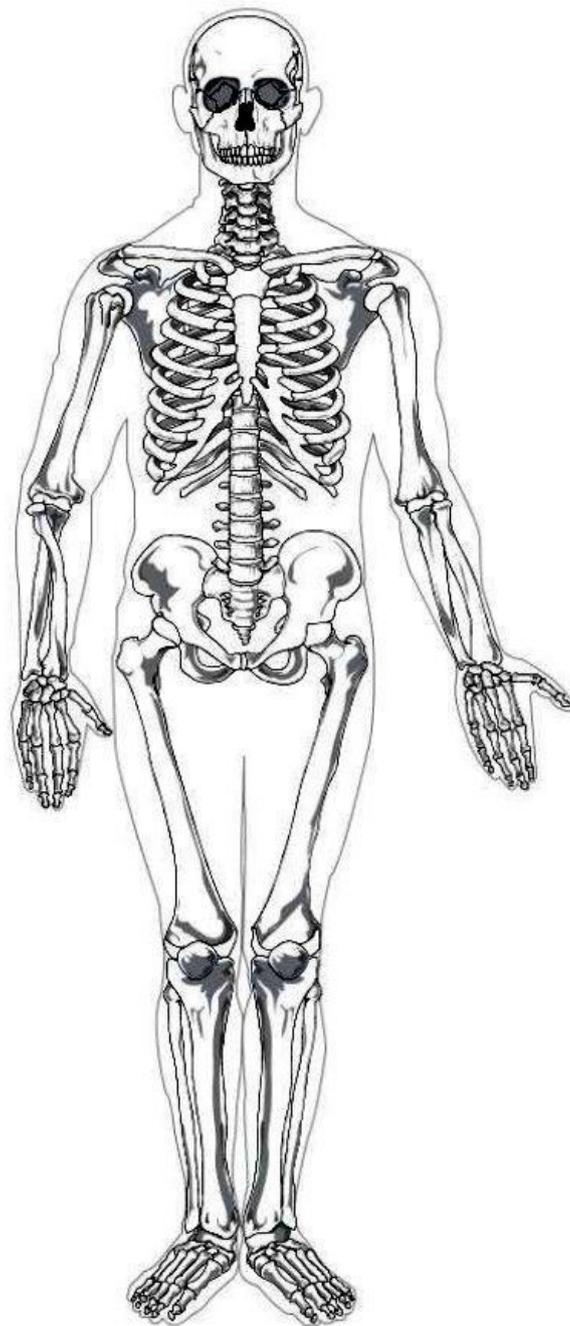
Please read the specification to the 2-year course. You will need to have a deeper understanding on the following topics. Please open the link below and read before the first September lesson.

<https://qualifications.pearson.com/en/qualifications/btec-nationals/sport-2016.html>

Unit 1-Anatomy and Physiology

Unit 2- Fitness Training and Programming for Health, Sport and Well-Being.

Task 2: Label the skeletal system with the correct scientific terminology.



Head

Shoulder

Collarbone

Chest Bone

Upper arm

Lower arm

Hip

Upper leg

Lower leg

Top of hand

Lower part of Hand

End of Hands and Feet

Top of Feet

Lower part of feet.

Task 3: Explain what is meant by the following with regards to functions of the skeletal system.

Supporting framework

Protection

Attachment for skeletal muscle

Source of blood cell production

Store of minerals

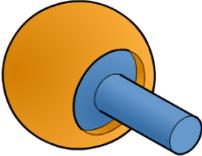
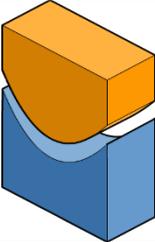
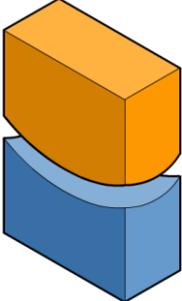
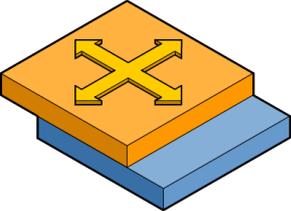
Leverage

Weight bearing

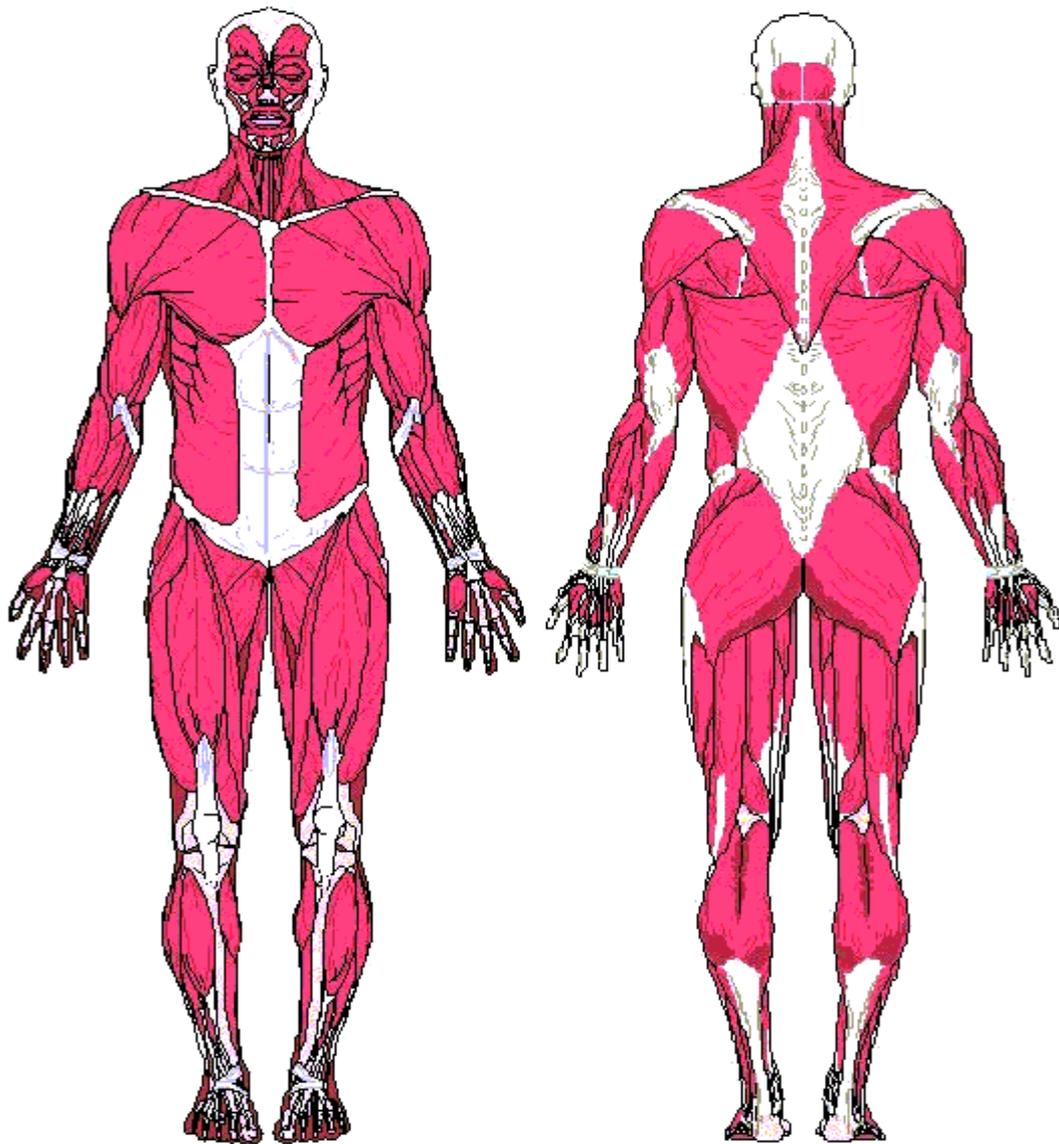
Reduce friction across a joint

Task 4: Skeletal System – Joints

The site at which two bones link is called a joint or an *articulation*. Joints can be classified according to their structure and by the types of movement they allow. Complete the Table.

Joint	Example	Bones which Articulate	Movement that Occurs
Ball and Socket			
Hinge			
Condyloid			
Saddle			
Pivot			
Gliding			

Task 5: Label the below muscles in the body.



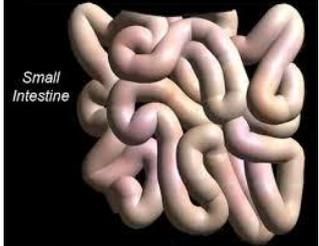
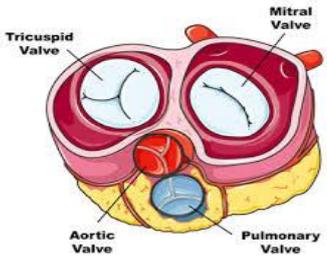
Abdominals	Triceps
Biceps	Gastrocnemius
Quadriceps	Deltoid
Pectoralis major	Trapezius
Latissimus Dorsi	Hamstrings
Gluteus Maximus	Erector Spinae

Task 6: Complete the following

The Muscular System

The human body is made up of over 600 muscles. These muscles can be categorised into **3** groups.

Complete the table below by putting the muscles into the correct column.

Voluntary	Involuntary	Cardiac
		

Muscle types

The _____ muscle is unique to the _____. It never tires.

The body's _____ muscles work our _____ organs. They are outside our control.

_____ muscles make the body _____. They are attached to the _____ and can be controlled.

Heart	Internal	Voluntary	Skeleton	Move	Cardiac	Involuntary
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Muscle Fibres

Voluntary muscles have **fast twitch** and **slow twitch** fibres.

Fast twitch fibres contract quickly, but do not use oxygen well and tire quickly.

Slow twitch fibres contract slowly, but use oxygen well and keep going for a long time.

Top sprinters have more _____ fibres. Endurance athletes tend to have more _____ fibres.

Complete the table by filling in what sports use Fast and Slow twitch muscles. The first one has been done for you.

Fast Twitch Muscles	Slow Twitch Muscles
100m sprinter	Marathon runner



Extended Activity

1. Name the muscle that is located on the back of the upper leg.
2. What sporting action would the muscle help you do?
3. What is the anatomical name for the calf muscle?
4. Name a muscle located in the back.
5. Think of the main sport you play. Do you require mainly fast or slow twitch muscles and why?