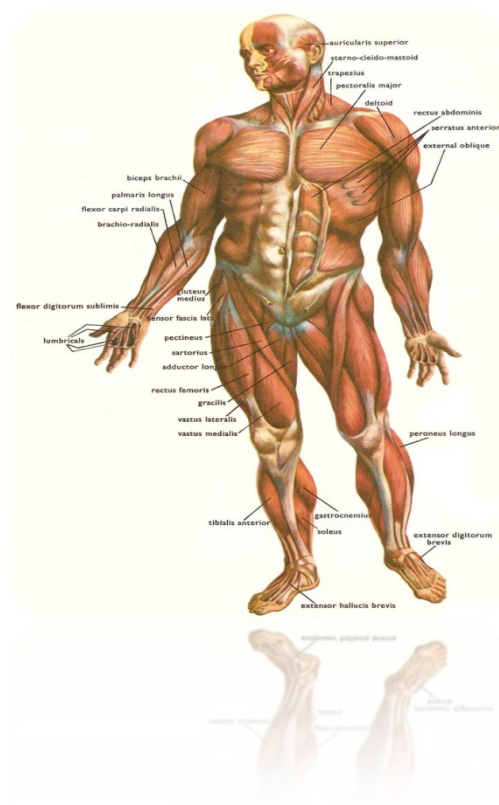


Sports Science Smarter Starter pack



Name.....

Teacher.....

Sports Science 2017 /18

Q What's the main difference between Sports Science BTEC and GCSE.

You're expected to work independently and if you don't know something, you find out through the support system provided.

Within this booklet there is important information on the topics that you need to cover before you come to college in September.

There are also details of the extensive support that you can access to guide you through your studies. You will need to access the web sites and videos to answer the questions for the summer work. Your work will be assessed on your return so please be very resourceful when completing the work.

There is a dedicated web page for your sports science studies as well as a you-tube channel. You need to access this web page and channel to support your studies over the summer and throughout the year.

Task 1) Access the you-tube channel and locate the playlist, induction videos. Watch all three videos and then make notes based on the main points.

Task 2) Complete all questions within the booklet.

www.ashpe.weebly.com

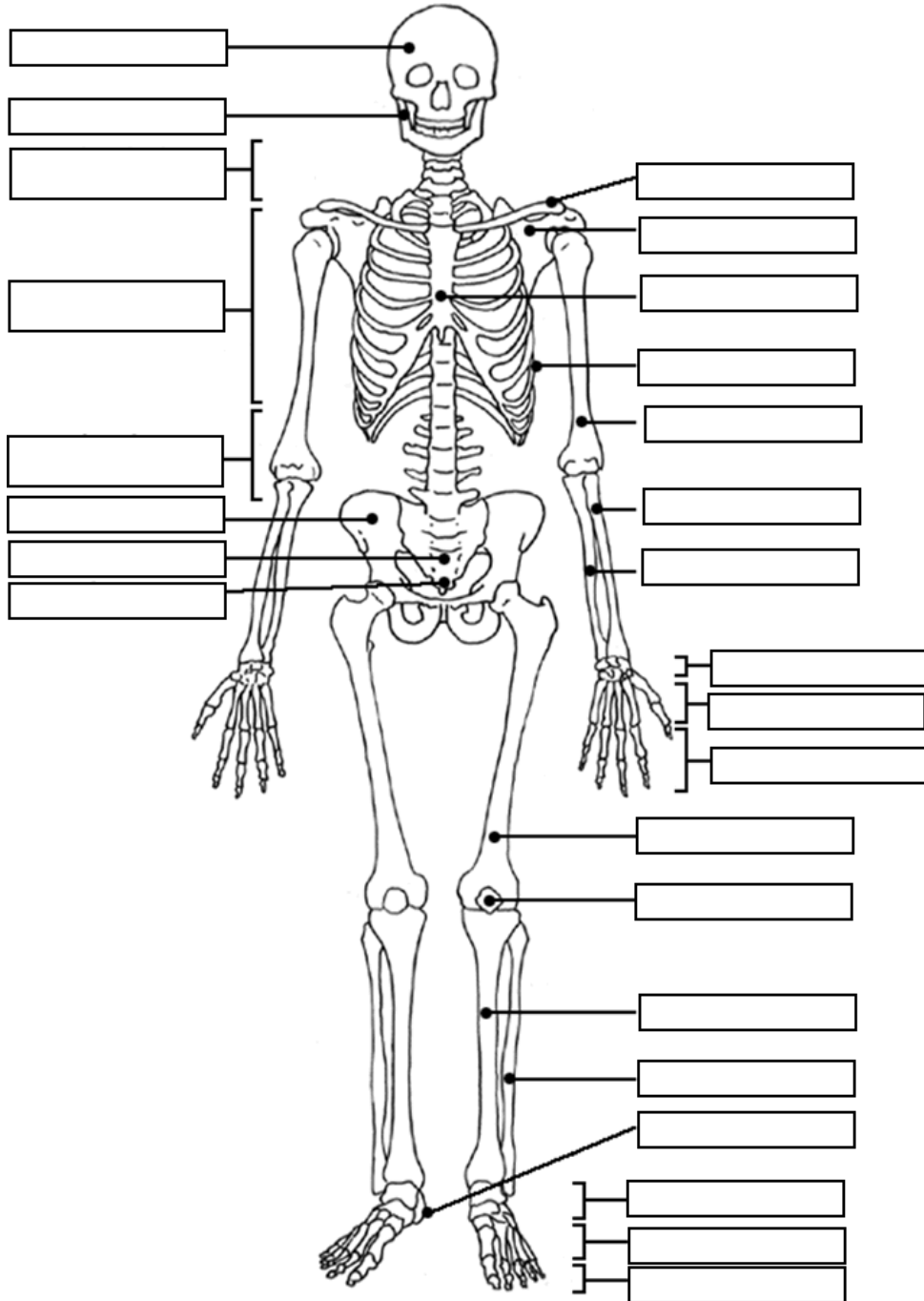
d.asheighmorris@bhasvic.ac.uk

r.seaman@bhasvic.ac.uk

ashPE you tube

Summer worksheets

Q List the names of the bones: label the diagram.

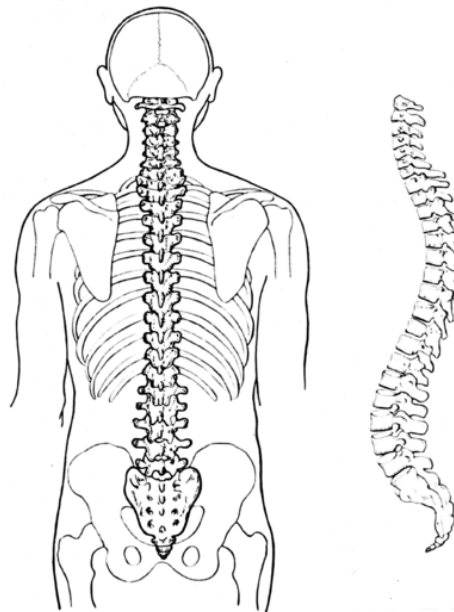


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There are 5 different types of bones identified. Describe and place two examples of each type of bone in each column.

Long	
Short	
Flat	
Irregular	
Sesamoid	

Label the spine into sections



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Identify and *where possible explain* the functions of the skeleton. So for this you need to give examples of detail and not just state what the function is.

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Application of Knowledge: State the main bones that are being used.

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Joints

Describe with examples the classifications of joints.

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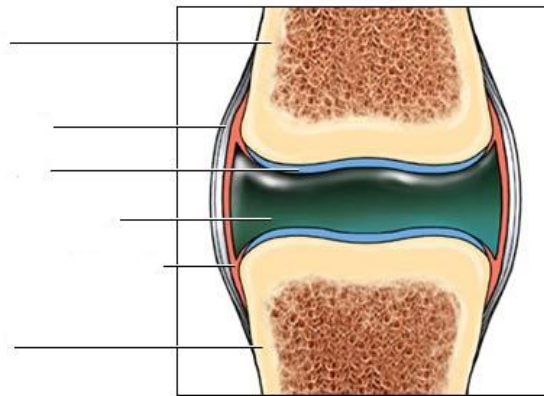
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Synovial Joint.

Type of joint	Location	Notes:

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Label the synovial Joint



Cross section of a healthy joint

Describe the synovial joint and state how the structure will aid movement.

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Movement

Remember that all movements are from the anatomical position. List the movements possible

Flexion & Extension notes;

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Abduction & Adduction

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Movements Possible

Joint	Type of movement Possible

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Q State the movement possible at the elbow and *describe* the sport where this would take place.

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Q State the movement possible at the shoulder and *describe* the sport where this would take place.

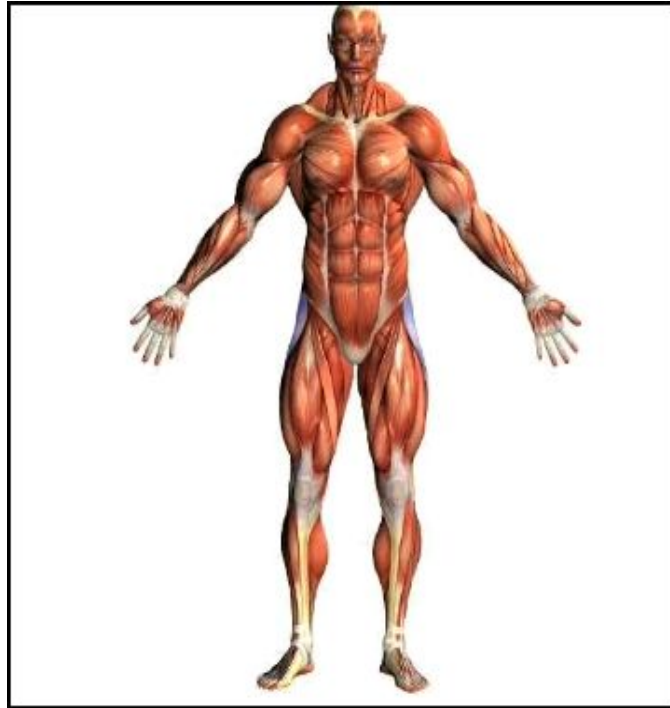
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Summer worksheets



Identify the muscles on the diagram.

Rotator cuff muscles

Name the muscles in the group

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State the role of the muscles in the rotator cuff group.

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Quadriceps Group

Name the muscles for this group.

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Name the Hamstring group.

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Notes on Muscle movements:

Agonist:.....

Antagonist:.....

Antagonistic pair: Notes:

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.....
.....
.....

Contractions: Notes

Isometric

Isotonic

Isometric

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An eccentric contraction

An isometric contraction

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There is a lot of information here, however, this is the foundation of developing your understanding of the great question of how and why does that happen. To develop your understanding you must research an athlete. Imagine you're a physiotherapist and an athlete comes to you complaining of a pain when they run. We need to analyse their movement and establish where the problem is.

- **Scenario 1**
- Owen Farrell comes to you and says that he feels a pain when he brings his lower leg back when kicking.



- You need to investigate the problem.

Name muscle/s	
Name movement	
Name the agonistic pairing	

- **Scenario 3**
- Greg Rutherford has come to you saying that he has pain in a muscle when he has a flexion in the quadriceps group.

Name muscle/s	
Name movement	
Name the agonistic pairing	