

# BTEC Level 3 Extended Diploma in SPORT



Summer Homework 2019

Sixth Form College, Solihull

Student Name:.....

# Sport Nutrition

All activity stimulates your body's need for fuel and fluid. Knowledge and understanding of the nutrients your body requires and their functions to carry out everyday activities including physical exercise is important when you come to complete Unit 11 Sports Nutrition work. The 6 main nutrients that you will study are; **Carbohydrates, Protein, Fat, Vitamins and Minerals, and Fibre.**

Please complete the following tasks:

**Task 1** – answer the following questions-

**What are macronutrients?**

Source:

**What are micronutrients?**

Source:

## Sport Nutrition

**Task 2** – Research to complete the table. Please keep a note of the sources (books, website- not wiki) you have used.



Describe the <b>Nutrients</b> , saying what their <b>function is</b> .	What <b>type of foods</b> are they found in?	<b>Source</b> –record where you found the information
<b>Carbohydrates</b> Simple		
Complex		
<b>Proteins</b>		
<b>Fats</b>		

<b>Describe the Nutrients, saying what their function is.</b>	<b>What type of foods are they found in?</b>	<b>Source –record where you found the information</b>
<b>Vitamins</b>		
<b>Minerals</b>		
<b>Fibre</b>		

### The Skeletal System

Describe the 5 functions of the skeleton:

Support	
Protection	
Attachment	
Blood cell production	
Mineral Storage	

What is the role of Axial skeleton?	What is the role of Appendicular skeleton?
	

Types of Bones: Read the description of the bones and identify which type they are.

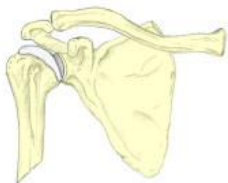
### \_\_\_\_\_ Bones

These are some of the longest bones in the body, such as the Femur, Humerus and Tibia but are also some of the smallest including the Metacarpals, Metatarsals and Phalanges. The classification of a long bone includes having a body which is longer than it is wide, with growth plates (epiphysis) at either end, having a hard outer surface of compact bone and a spongy inner known as cancellous bone containing bone marrow. Both ends of the bone are covered in hyaline cartilage to help protect the bone and aid shock absorption.



### \_\_\_\_\_ Bones

These bones are defined as being approximately as wide as they are long and have a primary function of providing support and stability with little movement. Examples of these bones are the Carpals and Tarsals - the wrist and foot bones. They consist of only a thin layer of compact, hard bone with cancellous bone on the inside along with relatively large amounts of bone marrow

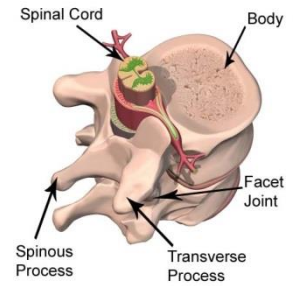


### \_\_\_\_\_ Bones

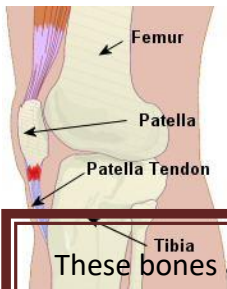
These bones are strong, plates of bone with the main function of providing protection to the body's vital organs and being a base for muscular attachment. The classic example is the Scapula (shoulder blade). The Sternum (breast bone), Cranium (skull), pelvis and Ribs. Anterior and posterior surfaces are formed of compact bone to provide strength for protection with the centre consisting of cancellous (spongy) bone and varying amounts of bone marrow. In adults, the highest number of red blood cells are formed in these bones

[http://www.teachpe.com/anatomy/types\\_of\\_bones.php](http://www.teachpe.com/anatomy/types_of_bones.php) Accessed on 10/09/2013

**Bones**



These are bones in the body which do not fall into any other category, due to their non-uniform shape. Good examples of these are the Vertebrae, Sacrum and Mandible (lower jaw). They primarily consist of cancellous bone, with a thin outer layer of compact bone.



**Bones**

These bones are usually short or irregular bones, imbedded in a tendon. The most obvious example of this is the Patella (knee cap) which sits within the Patella or Quadriceps tendon. These bones are usually present in a tendon where it passes over a joint which serves to protect the tendon

[http://www.teachpe.com/anatomy/types\\_of\\_bones.php](http://www.teachpe.com/anatomy/types_of_bones.php) Accessed on 10/09/2013

Task: - Label the bones of the skeleton.

