

## **PHYSICAL EDUCATION AND SPORT SUMMER RESEARCH TASK**

### **TASK 1: Anatomy and Physiology**

Your challenge is to produce a revision tool that can be used for students to learn the **types of synovial joint and bones articulating**, identify the **location of muscles** in the body and identify the **movement patterns** they create (movement patterns and muscles are identified below):

**Wrist:** flexion and extension; wrist flexors and extensors;

**Radio-ulna:** pronation and supination; pronator teres and supinator muscle;

**Elbow:** flexion and extension; biceps brachii and triceps brachii;

**Shoulder:** abduction, adduction, flexion, extension, rotation, horizontal flexion, horizontal extension, circumduction;  
deltoid, latissimus dorsi, pectoralis major, subscapularis, infraspinatus, teres major and teres minor; trapezius; the role of the rotator cuff muscles, supraspinatus infraspinatus, teres minor and subscapularis;

#### **Spine (cartilaginous, gliding and pivot):**

flexion, extension, lateral flexion; rectus abdominus, external and internal oblique and the erector spinal group; sacrospinalis (the role of the transverse abdominus and multifidus in relation to core stability);

**Hip:** abduction, adduction, flexion, extension, rotation; iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus;

**Knee:** flexion and extension;  
biceps femoris, semi-membranosus, semi-tendinosus, rectus femoris, vastus lateralis, vastus intermedius and vastus medialis;

**Ankle:** dorsi flexion, plantar flexion; tibialis anterior, soleus and gastrocnemius.

### **TASK 2: Psychology of Sport – Acquiring movement skills**

You will need to find out the difference between skill and ability.

Using your knowledge from the research on skill classification, please choose 2 sports, 1 team and 1 individual and plot them on each of the 6 continua. Please provide a paragraph of reasons for each continua.

### **TASK 3: Socio-cultural Studies relating to participation in physical activity**

Sporting activities have evolved and developed hugely over time.

For a chosen activity, research into what that sport was like in the 18<sup>th</sup> century, Pre-industrial Britain. Create a visual display explaining who participated, characteristics and when the activity was played.

If you require any further information please email:

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