

## Summer Work for New Lower 6<sup>th</sup> PE Students

### Anatomy and Physiology

Students need to find a suitable diagram of the skeleton and the muscular system. All the major bones should be labelled and the following muscles: (find their location and add them if they do not appear on your diagram):

1. wrist flexors and extensors
2. pronator teres and supinator muscle
3. biceps brachii and triceps brachii
4. deltoid, latissimus dorsi, pectoralis major, trapezius
5. teres major and teres minor; supraspinatus, subscapularis, infraspinatus
6. rectus abdominus, external and internal oblique and the erector spinal group
7. iliopsoas, gluteus maximus, medius and minimus, adductor longus, brevis and magnus
8. biceps femoris, semi-membranosus, semi-tendinosus (hamstring group),
9. rectus femoris, vastus lateralis, vastus intermedius and vastus medialis (quadriceps group)
10. tibialis anterior, soleus and gastrocnemius

Complete a joint analysis of the following joints: ankle, knee, hip, wrist, elbow, shoulder.

For each joint, you should provide the following information:

- Joint type
- Bones articulating either side of the joint
- Movement pattern it can create e.g. flexion, abduction etc.
- Muscles controlling the movement at the joint (agonist and antagonist)

### Biomechanics

Research the following:

- Newtons 3 laws of motion. Then apply them to sporting movements
- Use of force plates in movement analysis
- What is Limb Kinematics?

### Skill Acquisition

On the school website, click 'students' then 'webmail and folders'. Log in using your Anglo password and access the shared drive folders. Find the PE folder – A Level – Summer work for new lower 6<sup>th</sup> – Skill acquisition. In here there are 2 scanned chapters from a PE text book.

-Read the chapters and make notes

-Answer the questions at the end of each chapter

**If you are unable to access the school folders complete the following:**

Use the internet to help complete the following: For each of the below **Classification Of Skills**, define what they mean at each end of the continuums and give a practical example:

- THE MUSCULAR INVOLVEMENT (**GROSS – FINE**)
- 2. THE ENVIRONMENTAL INFLUENCE (**OPEN – CLOSED**)
- 3. THE CONTINUITY (**DISCRETE – SERIAL –CONTINUOUS**)
- 4. THE PACING (**EXTERNALLY PACED – SELF PACED**)
- 5. THE DIFFICULTY (**SIMPLE – COMPLEX**)
- 6. THE ORGANISATION (**LOW – HIGH**)

Make notes on the Methods of Teaching Skills (outlined below) and provide a practical example of how these methods could be implemented into a training programme.

1. Whole Practise
2. Part Practise
3. Progressive Part
4. Whole-part-whole

### **Socio-Cultural Issues in Sport**

Using the internet for research. Explain how the Olympics were used as a political tool. In particular look at the following examples:

- o Berlin 1936, Third Reich Ideology
- o Mexico City 1968 'Black Power' demonstration
- o Munich 1972 Palestinian terrorism
- o Moscow 1980 boycott lead by USA
- o Los Angeles 1984 boycott by Soviet Union.

For each example:

- Explain the background to the incidents
- What were the political issues at this time?
- What effect did this have on the games?
- How was this reported by the media?
- Did the demonstrations/incidents achieve their aims?
- What has history taught us about politics and sport?

<http://www.theguardian.com/politics/politicspast/page/0,9067,892902,00.html>

[https://www.google.co.uk/?gws\\_rd=ssl#safe=strict&q=sports+politics+and+the+Olympic+games+ppt](https://www.google.co.uk/?gws_rd=ssl#safe=strict&q=sports+politics+and+the+Olympic+games+ppt)