**Human Performance and Biomechanics**

How can we run faster, lift heavier, jump higher and generally expand the limits of human speed, endurance and strength? Studying human performance and biomechanics helps us see how humans “perform” a wide range of tasks and activities.

* Nutrition is a major contributor to human performance as the body needs energy for a particular activity or sport. We have a Sports Nutritionist coming in to speak in a couple weeks so we will skip this section…for now.
* Performance Enhancing Substances and Techniques are often used in an attempt to increase human performance. In today’s world athletes are increasingly pressured to improve their performance to not only achieve victory but also to benefit from the economic and social rewards of success.

Complete Exercise 11.3 in your workbook

* + Technological Influences on Sport have provided a wide range of means for enhancing performance (advances in athletic equipment, improved sport surfaces, advanced training techniques).

Complete Exercise 12.2 in your workbook

* + Choose either **Performance Enhancing Substances and Techniques** or **Technological Influences on Sport** as your “topic”.

Your textbook provides you with a number of examples under each general topic.

Choose a specific topic that you want to focus on. For example: you may choose the evolution of the hockey stick from wood to graphite or the use of HGH to increase muscle mass. The specific topic does not have to come from your textbook, many more examples exist.

Create a “presentation” about your specific topic. It must include:

What is your topic?

How has it influenced the sporting world?

Describe/Show the manner in which it “enhances” the sporting world/specific activity

Provide specific examples of its use from the sporting world – who has used/benefited personally?

Controversy surrounding the enhancement – real world examples

The overall influence it has had on the sport/activity (positive and negative)

Include video to support your presentation

Real world examples help bring the presentation/topic to life!