**M5 Anatomy Introduction Project**

**Purpose:**

Using your knowledge of the muscular system, the students will work in pairs to design an exercise program that includes specific sport exercises for sport athletes. As part of their program, they should be beneficial to the athletes and include a clarification of muscles involved for each activity. You will create 3 different exercises relevant to the sport chosen.

**Components:**

You will be graded on your ability to combine 3 different exercises related to the sport including the description of the exercises. You are required to create a report (typed) and must include pictures of the equipment used and pictures of the main muscle (agonist) involved. In addition, you must reveal the antagonistic, and synergistic muscles involved as well.

Sports to be chosen:

1. Football
2. Basketball
3. Table tennis
4. Badminton
5. Swimming
6. Boxing
7. Sprinting
8. Tennis
9. Rowing
10. Archery
11. Volleyball
12. Baseball
13. American Football
14. Skiing
15. Climbing

**What you need:**

**Lay out**-

1. Show a picture of the equipment used.
2. Describe the movement (use terms such as concentric isotonic, eccentric isotonic, isometric)
3. Explain the relevant muscles involved (categories: agonist, antagonist, synergistic muscles)
4. Include a picture of the main muscles involved.

**Visual**-

In a group of 2 people, you will write a report and create a trainings program of 3 exercises relevant to the sport chosen. You should include 2 pictures; 1 of equipment used and 1 of agonistic muscle in exercise.

Example:

**Sport: Boxing**

**Exercise 1: Inclined Bench press**

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| C:\Users\Admin\Desktop\T. Rick\M.5 Biology\Semester 1 M.5 Biology\Chapter 45 Skeletal, Muscular, and Integumentary Systems\Chapter 45.3 Muscular System\Pictures muscular system\images (1).jpg | This Isotonic exercise is done lying down on a flat bench and pressing a barbell up and down at chest height. For this exercise to be effective it should have 3-4 repetitions and pushed up and down 8-14 times per rep. The weight should be heavy enough that the last press up is the last one you can possibly do on the last rep. Pushing the barbell up is considered the concentric isotonic movement and the down press is the eccentric isotonic movement for the agonist muscle.  **Agonist muscle**: Pectoralis major.  **Antagonistic muscles**: latissimus dorsi, and biceps brachii  **Synergistic muscles**: Deltoid and Triceps brachii | C:\Users\Admin\Desktop\T. Rick\M.5 Biology\Semester 1 M.5 Biology\Chapter 45 Skeletal, Muscular, and Integumentary Systems\Chapter 45.3 Muscular System\Pictures muscular system\1691.jpg |