**GRADE 11 CULMINATION ACTIVITY**

**THEME:**

You own and operate a health club. It is your job to design, operate, and manage all the activities associated with the club.

**INFORMATION SOURCES:**

You can use any information from your class notes, and personal research to design your fitness club.

**PART A: DESIGN A CLUB (25 Marks)**

1. Draw a floor plan of your fitness club. The following must be included in the design:
* front desk/ reception area - change rooms
* - warm-up./ cool down area - aerobic room
* cardio/ endurance machines (specify type) - weight machine section
* free weight section - office space
1. Create a club name and logo to advertise your fitness club.
2. Submit a list of employees needed to run the club successfully.

**PART B: NUTRTITIONAL SNACK MACHINE (15 Marks)**

1. Draw a snack machine that will be located in your fitness club.
2. Fill your machine will 12 healthy snack options. Be sure to include snacks from all of the major food groups.

(Note that the food cannot contain fresh produce due to the potential of spoilage)

**PART C: CASE STUDY (50 Marks)**

1. Read each of the case studies on the following page, and selesct ONE client.
2. Answer all of the attached questions for the client that you have selected

DUE DATE:

**PART C: CASE STUDIES**

Choose ONE of the following individuals to be your client.

**1. Jon Dough** Jon is a 50 year old male who regularly overeats, likes to snack a lot. He likes to watch sports, but finds regular exercise boring, and he reaches an exhaustion level quickly. He has recently informed by his doctor that he is a candidate for both diabetes and heart disease. Jon has decided to join the gym to improve his health, lose some additional weight, and improve his personal strength. **Height: 5’10” Weight: 245 lbs Resting Heart Rate: 85 beats/ min Body Fat Percentage: 35% Cardio: Poor Strength: Weak Motivation: Low Flexibility: Poor Max Heart Rate: 170 beats/ min**

**2. Sally Jones** Sally is a 30 year old female who is already a member of a fitness club. Before her pregnancy she regularly participated in aerobic classes, occasionally lifts weights, and swam twice a week. She is now 6 months pregnant, and is now entering her last trimester of her pregnancy. Sally is finding she can no longer exercise the same way as she used to, so she is asking you to redesign her program. Keep in mind her restricted movement that pregnancy creates, and that some exercises may place stress on her joints. She hopes to continue exercising for the duration of her pregnancy, and hopes that being in shape will make her childbirth easier. Also she hopes to get back to regular exercise program after the baby is born.  **Height: 5’6” Weight: 145 lbs Resting Heart Rate: 65 beats/ min Body Fat Percentage: 20% Cardio: Excellent Strength: Strong (before baby) Motivation: High Flexibility: Good Max Heart Rate: 190 beats/ min**

**3. Nick Kick** Nick is a 25 year old elite soccer player who would like to maintain his fitness over the winter months. His soccer coach has suggested that his cardiovascular endurance, upper body strength, and explosive power for the upcoming soccer season. Nick is asking you to design a program that will not only maintain his high fitness level, but also improve his fitness in the areas he is hoping to improve.  **Height: 6’2” Weight: 185 lbs Resting Heart Rate: 55 beats/ min Body Fat Percentage: 12% Cardio: High Strength: High Motivation: High Flexibility: Average Max Heart Rate: 195 beats/ min**

**4. Frank Lee** Frank is a 17 year old high school student. Frank has been involved in recreational intramurals at his school, and has enjoyed taking his physical education classes. He eats a normal adolescent diet of fast foods and cafeteria lunches. His overall fitness level is average. He became more interested in improving his fitness this past semester, though he has never specifically trained for it before. He wants to improve his muscular strength, and improve his overall body appearance. He wants to get “ripped” through increasing his muscle mass, and decreasing his body fat percentage. Frank is coming with high expectations after reading his “MEGA MASS 2000” supplement, which claims it can put on 40 pounds of muscle in the next 2 months. **Height: 5’11” Weight: 170 lbs Resting Heart Rate: 5 beats/ min Body Fat Percentage: 23% Cardio: Average Strength: Average Motivation: High Flexibility: Average Max Heart Rate: 203 beats/ min**

**PART C: CASE STUDIES**

Your Task: You are to choose one of the following 4 clients. This person is attending your fitness club, and you are their personal trainer. You are to assess the individual’s initial fitness level, and then create the appropriate fitness program for your client’s goals.

1. The client you have chosen is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. List 3 benefits that regular exercise provides to your client’s physical health **(3)**

a)

b)

c)

1. Describe your client’s initial fitness level. **(2)**
2. List your clients personal goals that they would like to achieve through their fitness program. **(3)**
3.
4. The five components of physical fitness are listed below. Write a definition for each component. **(2 marks/ Definition – 10 Marks)**

Body Composition

Flexibility

Muscular Strength

Muscular Endurance

Cardiovascular Endurance

1. You must determine your client’s initial fitness level. Explain 2 different tests that can be used to determine your client’s starting fitness level for each component of fitness. **(2 marks/ Fitness Assessment – 10 Marks)**

Body Composition

Flexibility

Muscular Strength

Muscular Endurance

Cardiovascular Endurance

1. Using the BMI assessment as a guide, assess whether your client is within a healthy body composition range. **(1)**
2. Describe an appropriate warm-up exercise for your client. Explain how the warm-up should be performed, and how long the warm-up should take. The warm-up should include a cardiovascular exercise, as well as 5 flexibility exercises. **(6)**
3. Name 8 exercises that your client could complete be used to improve your client’s muscular strength. Explain what the number of reps that your client should be aiming to fatigue at for their specific goals. **(8)**
4. Name 3 possible activities that your client could complete to improve their cardiovascular endurance. **(3)**

a)

b)

c)

1. How many days a week do you suggest that your client preforms their exercise routine? **(2)**
2. When doing a cardiovascular activity that you have prescribes, what should your client’s target heart rate be? **(2)**