**KIN 250 MID-TERM REVIEW**

1. **Define the following terms (from “Muscle Anatomy 101” and “How Muscle Grows” in the book):**
   1. Isometric:
   2. Concentric:
   3. Eccentric:
   4. Atrophy:
   5. Microtrauma:
   6. Hypertrophy:
   7. Hyperplasia:
   8. Fast-twitch:
   9. Slow-twitch:
2. **What are the three Macronutrients and how many calories do they provide (from “Nutrition” in the book):**
3. **What are two ways to assess Strength and two ways to assess Power (from “Strength Assessment” in the book)?**
4. **Name 2 Exercises you can do for your chest (from “Upper Body Exercises” in the book):**
5. **Name 2 Exercises you can do for your back (from “Upper Body Exercises” in the book):**
6. **Name 2 Exercises you can do for your shoulders (from “Upper Body Exercises” in the book):**
7. **Name 2 Exercises you can do for your triceps (from “Upper Body Exercises” in the book):**
8. **Name 2 Exercises you can do for your biceps (from “Upper Body Exercises” in the book):**
9. **Name 1 Exercise you can do for your gluteus muscles (from “Lower Body Exercises” in the book):**
10. **Name 1 Exercise you can do for your quadriceps (from “Lower Body Exercises” in the book):**
11. **Name 1 Exercise you can do for your hamstrings (from “Lower Body Exercises” in the book):**
12. **Define the terms of Basic Strength Training Terminology (from Weight lifting techniques, KIN 250) :**
    1. **Rep:** short for repetition, a rep is a single cycle of lifting and lowering a weight in a controlled manner, moving through the form of the exercise
    2. **Set:** a set consists of several repetitions performed one after another with no break between them with the number depending on the goal of the individual.
    3. **Tempo:** the speed with which an exercise is performed.
    4. **Intensity:** the amount of force required to achieve the activity, and in strength, refers to the mass of the weights being lifted.
    5. **Volume:** the number of muscles worked, exercises, sets and reps during a single session.
    6. **Muscular Strength:** the greatest amount of force a muscle or muscle group can exert in a single effort.
    7. **Muscular Endurance:** the ability of a muscle or muscle group to do repeated contractions against a less-than-maximum resistance for a given time.
    8. **Overload:** for a muscle to increase in strength, the workload to which it is subjected during exercise must be increased beyond what is normally experienced.
    9. **Specificity:** training needs to be specific to what is being trained.
    10. **Regularity:** exercise must be done regularly to produce a training effect.
    11. **Recovery:** muscles must be allowed sufficient recovery time to adapt.
    12. **Drop Sets:** set does not end at the point of momentary muscular failure, but continue with progressively lighter weights.
    13. **Pyramid Sets:** the weight is first increased, and then decreased over a series of sets. A full one typically includes five sets of approximately 12, 10, 8, 10, and 12 reps.
    14. **Supersets:** combine two or more exercises with similar motions to maximize the amount of work of an individual muscle or group of muscles. The exercises are performed with no rest period between the exercises.
    15. **Negative/Eccentric Reps:** performed with much heavier weight. Assistants lift the weight, and then the weight trainer attempts to resist its downward progress through and eccentric contraction.
13. **Know the following highlighted parts on the table based on your training goals (from Designing a weight training program, general info):**

**VARIABLE**  **TRAINING GOAL**

**Strength Power Hypertrophy Endurance**

Load (% of 1RM) 80-100 70-100 60-80 40-60

Reps per set 1-5 1-5 8-15 25-60

Sets per exercise 4-7 3-5 4-8 2-4

Rest between sets (mins) 2-6 2-6 2-5 1-2

Duration (seconds per set) 5-10 4-8 20-60 80-150

Speed per rep (% of max) 60-100 90-100 60-90 60-80

Training sessions per week 3-6 3-6 5-7 8-14

**Table reproduced from Siff, 2003**