

## Fitness Focus Muscular Strength and Muscular Endurance

**Repetition (reps)**

**Set**

**Muscular Endurance**

**Muscular Strength**

**Isometric Exercise**

**Isotonic Exercise**

- one complete movement of an exercise
- a given number of repetitions
- Ability to use your muscles for long periods of time without getting tired (low weight w/many reps)
- The ability of muscles to exert force (heavier weight w/ fewer reps)
- Exercise in which muscle contracts when pressed against object that prevents it from moving
- Exercise in which muscles shorten or lengthen as they move

### **Fitness Principles for Strength**

**Principle of Overload** – a muscle must work more than normal if it is to become stronger. In other words, the muscle must lift more than normal. If a muscle is worked less than normal, it will become weaker.

**Principle of Progression** – you should overload gradually to get the best improvement in muscle strength. In other words, the muscle must lift more each time, but gradually. If you try to lift too much too soon, you can injure yourself. Also, lifting too much too soon will not increase strength as much as if you began with easier exercises and progressed gradually to more difficult ones.

**Principle of Specificity** – You must exercise the specific muscles you expect to develop. For example, leg exercises develop the legs; arm exercises develop the arms.

### **LESSON REVIEW:**

(Matching) Write on a separate sheet of paper, the word and its appropriate definition. You can find the answers above.

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|--|----------------|
| 1. Increasing exercise gradually                   | a. overload    |
| 2. Exercising more than normal                     | b. specificity |
| 3. Doing specific exercises for a specific purpose | c. progression |

Please answer in complete sentences and on a separate sheet of paper.

4. What is the difference between muscular strength and muscular endurance? Give examples of some activities that involve muscular strength and muscular endurance.
5. What are sets and repetitions?
6. Give some examples of isometric and isotonic exercises.
7. Explain how you would use specificity, overload and progression to improve abdominal (stomach) muscles.