**11th grade Weight Training Study Guide:**

**Goal Setting**

-Goals are set to achieve a desired end result

-Objectives are the steps or process of reaching a goal

-Both should be specific, reasonable and measurable

**Muscle Cells**

-Muscle>Muscle Fiber Bundle>Myofibril>Sarcomere

-Myofibrils are elongated strands of single contractile units

-Sarcomeres are individual contractile units in the myofibril

-There are two filaments in the sarcomere that come together for contraction: Myosin and Actin

-Calcium is the fuel which causes the muscle cell to contract

**Dietary Supplements**

-Purpose: To help meet the body’s nutrient requirements, NOT to prevent, diagnose, treat or cure diseases

-The FDA does not check the safety or effectiveness of supplements before they hit the open market

-Claims like “Natural” and “Herbal” do not necessarily mean they’re safe because ingredients can adversely react to other medications

-Athletes must be careful they’re not taking banned substances within these supplements

**Nutrition**

-Basic weight control comes down to calories in vs. calories out

-Nutrients with calories: Fat (9 cal/gm), Protein (4 cal/gm), Carbohydrates (4 cal/gm)

-Nutrients without calories: Vitamins, Minerals, Water