

Strength and Conditioning Study Guide

1. Concentric- Shortening under contraction
2. Eccentric- lengthening under contraction
3. Isometric- Force is applied, but neither shortening nor lengthening occur
4. Which phase of lifting causes the most muscle damage? Eccentric. The least? Isometric
5. Recovery tools after training. Sleep, protein, exercise, ice.
6. What is a compound movement? Any movement (exercise) that requires more than one joint angle decrease/increase. Multiple muscle groups being used. (squat, bench, delt press, etc...)
7. A superset is 2 exercises performed one after the other with no rest between exercises
8. Does warming up always decrease strength? No, the opposite is true if warmed up properly.
9. Why is rest important for muscle development? Muscles grow recover and regenerate during rest.
10. Rep range for:
 - a. Power 1-6
 - b. Hypertrophy 8-12
 - c. Muscular endurance 15+
11. Lifting does what to muscles? Causes micro tears
12. Aerobic and anaerobic. With and without oxygen, mile- with, bench max, without.
13. The hamstring muscle group is located where on the body? Back of the upper leg
14. What's the difference between a rep and a set? Set- group of reps.
15. Should you hold your breath while lifting? No

16. The hang clean movement is very important for athletes, why? It's used to increase speed and power (quickness, force, etc...).
17. Know the form for powerlifting during a bench press movement.
18. Resistance- the force that muscle work against while training.
19. Know the difference between a static and dynamic stretch.
20. When does metabolic stress occur? When muscles are worked to a certain threshold.
21. What are important variables during a workout routine? Rest time, volume, rep speed, rep range, amount of resistance. How can these variables alter a workout?