Orangeville/Aquin High School Strength and Conditioning



Winter Testing

Testing Procedures

As a **Bronco** you will be held accountable to strength, speed, and power standards that have been established by the hard work and sacrifices of the Broncos that built this program from the very beginning. You need to understand that in order to give yourself every opportunity to be a successful athlete you need to meet certain strength and speed requirements. The only way to know what you are capable of is to test yourself regularly.

The Broncos test twice a year once in the winter and again in the spring. Winter testing serves as a baseline test to get operational numbers. We will test Squat, Bench, Power Clean, and Front Squat. With these numbers the coaches will plan your workouts and progressively build your strength from there. During the spring testing session our goal is to see how far you have come and assess what your summer goals should be. In the spring we will test all of our winter tests again. The rest of this section will serve as an explanation for the procedure on each test.



POWER CLEAN

We use the power clean as a test assessment because of its ability to show off the power of an athlete. Chances are athletes with high power clean numbers are the same athletes are knocking the snot out of every one. Sometimes high numbers in this lift will give an athlete, who hasn't seen to field very much, a chance to prove himself. This is a multi-joint lift and requires many months of practice before becoming proficient enough to do a max test on it. As a young athlete you will perform long hours of practice on the Power clean before we turn you lose to do it on your own.

Equipment

- An Olympic-style barbell with a revolving sleeve, weight plates, and two safety locks; enough total weight to accommodate the maximum load of the strongest athlete.
- A lifting platform or designated area set apart from the rest of the facility for safety.

Personnel

• One tester/ recorder

Procedure

- 1. Instruct the athlete in proper technique for the PC.
 - Should require the athlete to lift the barbell from the floor to the catch position in 1 continuous motion.
- 2. Warm-up sets are performed and load increments are selected as in the 1RM BP protocol.
- 3. Again, the 1RM maximum should be acquired within the first three to five attempts to avoid fatigue.

Testing Protocol

- 1. Light Warm-up with light resistance that easily allows 8-10 reps
- 2. 1 minute rest
- 3. Perform another set with weight that will allow you to complete 3-5 repetitions
- 4. 2 minute rest
- 5. Estimate a conservative load that will allow 2-3 repitions
- 6. 2-4 minute rest
- 7. Make a load increase that will allow for a 1 repetition maximum and repeat until max is found

Bench

We use the bench press as a method for testing maximum upper body strength. As football players you will be required to jam your hands into someone's chest on a regular basis. You must possess a powerful upper body in order to be successful during your one on one competition.

Equipment

• A barbell, weight plates, and two safety locks; enough total weight to accommodate the maximum load of the strongest athlete; and a variety of plate sizes to allow for 5-pound gradations in weight.

Personal

• One spotter, one recorder

- 1. Instruct the athlete in proper technique for the flat barbell bench press.
 - The athlete should lie supine, with hips and shoulder blades in contact with the bench and feet flat on the floor. With a grip slightly wider than shoulder width, the athlete will lower the bar to the chest and then forcefully push the upward until the arms are fully extended again.
- 2. The spotter stands at the head end of the bench throughout the test to help in raising the bar on a failed attempt and to help the athlete place the bar back on the rack.
- 3. The athlete then performs does a specific warm-up of 5 to 10 repetitions with a light to moderate load.
- 4. Usually, at least two more, heavier warm-up sets of two to five repetitions.
- 5. 1RM should be measured within the first three to five attempts to avoid fatigue.

Back Squat/Front Squat

These two tests will tell us just how strong your lower and upper body is. The back and front squat require you to control tremendous loads from the top of your torso all the way down to your toes. If you can squat incredible amounts of weight, through a full range of motion, then you can do incredibly athletic feats on the field.

Equipment

- A barbell, weight plates, and two safety locks; enough total weight to accommodate the maximum load of the strongest athlete; and a variety of plate sizes to allow for 5-pound gradations in weight.
- A sturdy rack with adjustable spotting bars to support the weight of the bar is the athlete is unable to rise.
- A flat solid surface to stand on.

Personal

• Two spotters, one recorder

- 1. Instruct the athlete in proper technique for the back squat/front squat.
 - Grab the bar with hands approximately 6-8 inches outside of your shoulders. Place the bar above the deltoids at the base of the neck. Remove bar from rack, and descend into the lowest squat your body will allow.
- 2. Warm-up sets are performed as in the 1RM bench press test. However, the loads lifted are typically heavier than in the bench press so the load increments will be greater than those of the 1RM Bench.

40 YD Sprint

The forty yard sprint will test your maximum speed, acceleration, and ability to maintain speed through a designated distance. Because football is a sprint and relax sport there are not many times as a player that you will sprint any further than 40 yards.

Equipment

- Stopwatch
- Flat running surface with start and finish lines 40 yards apart, with at least 20 yards after the finish line for deceleration.

Personnel

• One timer/recorder

- 1. Have athlete warm-up and stretch for several minutes.
- 2. Allow at least two practice runs at sub-maximal speed.
- 3. The athlete assumes a starting position using a three- or four-point stance.
- 4. On an auditory signal, the athlete sprints 40 yards at maximal speed.
- 5. The average of two trials is recorded to the nearest .1 second.



Pro-Agility

The pro-agility serves the purpose of testing for the ability to not only change direction quickly, but also to develop maximum speed in a short amount of time. The procedures for completing this test are as follows.

Equipment

- A football field or other field marked with three parallel lines 5 yards apart
- A stop watch

Personnel

• One timer/recorder, one line judge.

- 1. The athlete straddles the centermost of the three parallel lines using a three-point stance.
- 2. On an auditory signal, the athlete sprints 5 yards to the line on the left, the changes direction and sprints 10 yards to the line on the right, then again changes direction and sprints 5 yards to the center line. Foot contact must be made with all indicated lines.
- 3. The best time of two trials is recorded to the nearest .01 second.

Vertical Jump

The VJ is designed to measure maximal lower body power production. The VJ is also listed as the number one indicator of football playing ability in a future prospect. The procedures are as follows.

Equipment

• A commercial device, such as the Vertec device.

Personnel

One tester/recorder

- The tester adjusts the height of the stack of movable color-coded horizontal plastic vanes to be within the athlete's standing reach height. The highest vane that can be reached and pushed forward with the dominant hand while the athlete stands flat-footed determines the standing touch height.
- 2. The vane is then raised by a measured distance so that the athlete will not jump higher or lower that the set of vanes.
- 3. Without a prepatory or stutter step, the athlete performs a countermovement by quickly flexing the knees and hips, moving the trunk forward and downward, and swinging the arms backward. During the jump, the dominant arm reaches upward while the non-dominant arm moves downward relative to the body.
- 4. At the highest point in the jump, the athlete taps the highest possible vane with the fingers of the dominant hand. The score is the vertical distance between the height of the highest vane tapped during the standing vertical reach and the vane tapped at the highest point of the jump.
- 5. The best of three trials is recorded to the nearest .5 inches.

Broad Jump

The broad jump is somewhat related to the VJ, but the purpose of the SLJ is to measure the maximum lower body power in propelling the body in a forward direction. The procedures are as follows.

Equipment

- A flat jumping area at least 20 feet in length.
- A commercial jumping mar pre-marked in half-inch increments.

Personnel

• One distance judge, one recorder

- 1. The athlete stands with the toes just behind the starting line.
- 2. The athlete performs a countermovement and jumps forward as far as possible.
- 3. The athlete must land on the feet for the jump to be scored. Otherwise the trial is repeated.
- 4. The imprinted mat line closest to the back edge of the athlete's rearmost heel indicates the jump distance.
- 5. The best of three trials is recorded to the nearest .5 inch.