

## Curl BC Fitness Protocols 2019/20

*Curl BC Fitness Protocols will include the following exercises. We encourage all athletes to have a certified trainer test you, if possible, however your coach can do the testing if they feel comfortable doing so.*

	Exercise	Equipment	Component Measured
1	20 meter shuttle run/beep test	Cones, 25 m space, beep test mp4/audio	Aerobic Capacity
2	Push-ups	Stopwatch, counter	Sweeping push stroke
3	Single Leg Leap	Measuring tape	Push from hack
4	Pull-ups/chin ups	Pull up bar	Sweeping pull stroke
5	Plank	Stopwatch, counter	Sweeping simulation/core strength
6	Warrior 3 Balance Test	Stopwatch, counter	Balance

1. The Leger 20m Shuttle Run Test to measure aerobic capacity

**Equipment**

Tape measure, cones, and instructional audio cues  
The audio can be found on youtube or in dropbox

**Protocol**

Measure 20m distance on a flat surface and mark with cones  
Perform a thorough warm up and stretch  
Begin the audio for the shuttle run

This test involves continuous running between two lines 20m apart in time to recorded beeps. The subjects stand behind one of the lines facing the second line, and begin running when instructed by the recording. The subject continues running between the two lines, turning when signalled by the recorded beeps. After about one minute, a sound indicates an increase in speed, and the beeps will be closer together. The initial stage (track 4) begins at 8km per hour and increases by 0.5km per hour every minute. This continues each minute (level). If the line is reached before the beep sounds, the subject must wait until the beep sounds before continuing. If the line is not reached before the beep sounds, the subject is given a warning and must continue to run to the line, then turn and try to catch up with the pace within two more 'beeps'. The test is stopped if the subject fails to reach the line (within 2 meters) for two consecutive ends after a warning.

**Scoring** – the last full line is recorded (in quarters).

2. Paced push ups to measure the muscular endurance of upper body

**Equipment required:** 2 inch foam pad/other object

**Protocol:** The athlete must touch their chest to the push-up tester/object at the beat of the metronome (if available) while maintaining an aligned body position. The time between push-ups should be 2 - 3 seconds.

The athlete begins with the fingers pointing forward and thumbs aligned with the inside of the shoulders. The arms are fully extended. The feet are on the toes and shoulder-width apart. If the athlete is unable to perform a push-up on their toes, they can choose to rest their knees and toes on the ground shoulder-

width apart. The body is positioned to be in a straight line from the shoulders to the rear point of contact with the ground (knees or toes). The athlete performs as many push-ups as possible within the guidelines.

One deviation from neutral posture or missed touching the pad is allowed and the athlete will be told to correct this for the next repetition. If the deviation in posture is not corrected, the test is over. If it is corrected, they can continue. Any subsequent misses in touching the pad, is not counted.

**Scoring** - total number of push-ups recorded

(Athlete must retain posture and pace during test)

### 3. SINGLE LEG LEAP

leg power

**Equipment:** One measuring tape or an alternative to secure measuring tape to the ground

**Protocol:**

- The athlete starts with the toes of the front foot (the foot that is producing the leaping force) at zero of the measuring tape.
- The athlete lunges back with the opposite foot and then leaps forward as far as possible, landing on the foot opposite to the foot that produced the leaping force at the zero mark. (Leap off one foot, land on the other)
- The athlete must land and hold the position of the front foot, but may place the back foot on the ground to maintain balance and foot position.
- The front foot must not be moved until a measurement is taken. If the front foot is moved before a measurement is taken, the athlete must perform the test again.
- 2 jumps per leg
- Repeat the test on the opposite foot.

**Scoring:** The distance is measured from the back of the front foot in centimeters

### 4. Paced Pull Up/Chin Up

to measure upper body strength (pull stroke)

**Equipment:** pull up bar

**Protocol:**

- Start with arms extended
- grip bar with palms facing towards you, with hands placed shoulder width apart
- perform as many pull ups as possible
- chin needs to go as high as bar

One deviation from neutral posture or chin not reaching the bar is allowed and the athlete will be told to correct this for the next repetition. If the deviation is not corrected, the test is over. If it is corrected, they can continue. Any subsequent misses are not counted.

**Scoring** - total number of pull ups recorded

Athlete must retain posture and pace during test

## 5. Plank

core strength (while sweeping)

**Equipment:** mat, stopwatch

### Protocol

- perform the plank on a mat for as long as you can hold it
- hands shoulder width apart, back and legs straight

Scoring: timed, record how long the athlete can do this test while maintaining appropriate body position

## 6. Balance Test (similar to Warrior 3)



**Equipment:**

**stopwatch, counter**

### Protocol:

1. The athlete begins by standing tall with feet shoulder-width apart.
2. The athlete raises one leg (hack leg) off ground and extends it backwards while bending forward at hips and arms extended forward. The other leg (sliding leg) has a slight flex
3. The athlete holds this position for 5 seconds and then returns to vertical position (do not put leg on ground) for 5 seconds
4. Repeat same action, as many times as possible
5. The test is over when the athlete loses balance and foot touches ground, or position not held in control for 5 seconds

### Scoring:

- Time the entire exercise from start to finish and record that number
- Count the number of times the athlete completes the exercise in their time (one complete is when athlete returns to vertical position)