



## **2010/2011 Canada Winter Games Testing Memo**

Testing our athletes prior to the 2011 Canada Winter Games ensures that our athletes will be provided with the guidance and support necessary for higher performances. In accordance with LTPAD principles testing is used primarily to introduce our athletes to testing methods and preparation for testing. Secondly the tests are used to monitor an athlete's training progress, development and effectiveness of their training plans. The following tests will be used in the SASSA CWG Talent Identification process.

### **Dry land Field Tests**

#### **Cooper Test – 12 minute Run**

##### Type

- Measures Max Aerobic Speed over a particular distance and time
- 12 minute VO2 Max running test on a 400m Track

##### Execution

- Athletes are given the following sequenced commands:
  1. Go to the line
  2. Ready
  3. Go
- The Clock starts at the "Go" command
- The athlete will be signaled to stop once the 12 minutes are complete

##### Testing

- The 12 minute Cooper Test, tests the VO2 Max of the athlete
- It is a simple test that measures the distance covered by the athlete rounded up to the next 100m (ie: Athlete finishes at the 2567 meter mark, the recording is rounded up to 2600 meters)

##### Recordings

- Distance covered
- Heart Rate

##### Athlete Responsibility

- Pacing during the test
- Heart Rate recording after the signal to stop

#### **Speed Shuttle Test**

##### Type

- Measures the locomotive speed of an athlete over a particular distance
- Sprint running test over 100m

##### Execution

- Athletes are given the following sequenced commands:
  1. Go to the line

2. Ready

3. Go

- Recordings start at the “Go” command
- Recordings are made at the 10m, 30m, 50m and 100m marks
- Test ends at the 100m mark

#### Testing

- Top speed over a 100 meter distance
- Short speed endurance

#### Recordings

- Times at the 10m, 30m, 50m and 100m markings
- Speed at the 10m, 30m, 50m and 100m markings
- Speed maintenance over 100m

#### Athlete Responsibility

- Hitting top speed

### **Jump Pad or Vertical Jump**

#### Type

- Measures explosive peak power
- Explosive vertical jump test

#### Execution

- Athlete steps onto the jump pad
- Jumps vertically for height

#### Testing

- Explosive peak power
- Vertical jump height

#### Recordings

- Vertical jump height
- Peak Power

#### Athlete Responsibility

- Jump as explosive as possible going for height
- Keep hands on hips during the whole sequence

### **800m Critical Speed Run**

#### Type

- Measures the critical speed of the athlete over a particular distance
- Long speed endurance

#### Execution

- Athletes are given the following sequenced commands:
  1. Go to the line
  2. Ready
  3. Go
- The Clock starts at the “Go” command
- Test ends at the 800m finish line

#### Testing

- Long speed endurance
- Speed and time over 800m

#### Recordings

- 800m time

- 800m speed
- 400m time
- 400m speed

#### Athlete Responsibility

- Maintain top speed

### **Lab Tests**

#### **Peak Height Velocity**

##### Type

- Measuring Standing Height, Arm Span and Sitting height

##### Execution

- Athletes are instructed to stand and hold certain positions for measurement recordings
- Critical importance to the posture and Orbital alignments

##### Testing

- Tests the growth rates of 3 parts of the body: Leg growth, arm growth and torso growth

##### Recordings

- Measurements in centimeters
- Standing Height measurements
- Arm Span measurements
- Sitting height measurements

#### **Weight Recordings**

##### Type

- Measures the weight of the athlete

##### Execution

- Athlete stands on a scale

##### Testing

- Body weight fluctuations of the athlete during growth spurts

##### Recordings

- Body weight in kilograms

### **On Ice Field Tests – Short Track**

#### **Cooper Test – 6 minute skate**

##### Type

- Measures the skaters sport specific endurance

##### Execution

- Skaters line up on the line, no more than 6 at a time for safety
- Skaters take commands
  1. Go to the line
  2. Ready
  3. Go
- 6 minute timer starts on the “Go” command
- Once the 6 minute timer is finished the skaters are asked to stop.

##### Testing

- The skaters max endurance power

- Technical efficiency
- Recordings
  - Total laps skated during the 6 minutes
  - Round up to the nearest half lap if the skater is between the start/finish line or half lap line.
  - Average skating speed
- Athletes Responsibility
  - Equipment is in good form and safe
  - Skates are sharp

### **Speed Shuttle Tests – First Puck, Half Lap, 1 Lap**

#### Type

- Sprint skating test

#### Execution

- Athlete is asked to go to the start line
- Given the following commands:
  1. Go to the Line
  2. Ready
  3. Go
- The athlete sprints one lap

#### Testing

- Max skating speed
- Reaction time

#### Recordings

- Time at the first puck
- Time at the half lap mark
- Time at the 1 lap mark
- Reaction speed
- Top speed
- Speed maintenance

#### Athletes Responsibility

- Equipment is in good form and safe
- Skates are sharp

### **777m Pursuit**

#### Type

- Measures the skaters speed endurance

#### Execution

- 2 skaters on each side of the rink
- Skaters are given the following commands
  1. Go to the Start
  2. Ready
  3. Go
- Starter stands on the rinks centre dot so both skaters have a fair chance of hearing the commands
- Test is complete once the 777m pursuit is complete

#### Testing

- Max speed endurance of the skater
- Lactic tolerance and speed maintenance

#### Recordings

- Skaters finishing time
- Skaters lap times

#### Athletes Responsibility

- Equipment is in good form and safe
- Skates are sharp

### **On Ice Field Tests – Long Track**

#### **Cooper Test – 6 minute (girls)/8 minute (boys)**

##### Type

- Measures the skaters sport specific endurance

##### Execution

- Skaters line up on the line, no more than 6 at a time for safety
- Skaters take commands
  1. Go to the line
  2. Ready
  3. Go
- Timer starts on the “Go” command
- Once the Timer is finished the skaters are asked to stop.

##### Testing

- The skaters max endurance power
- Technical efficiency

##### Recordings

- Total laps skated during the 6 minutes (girls)/ 8 minutes (boys)
- Round up to the nearest 100m (ie: skater achieves 4890 meters, round up to 4900 meters.)
- Average skating speed

##### Athletes Responsibility

- Equipment is in good form and safe
- Skates are sharp

#### **Speed Shuttle Tests – 10m, 30m, 50m, 100m**

##### Type

- Sprint skating test

##### Execution

- Athlete is asked to go to the start line
- Given the following commands:
  1. Go to the Line
  2. Ready
  3. Go
- The athlete sprints 100m

##### Testing

- Max skating speed

- Reaction time
- Recordings
- Time at 10m
  - Time at 30m
  - Time at 50m
  - Time at 100m
  - Reaction speed
  - Top speed
  - Speed maintenance

Athletes Responsibility

- Equipment is in good form and safe
- Skates are sharp

**Tempo – 400m/800m**

Type

- Measures the skaters speed endurance

Execution

- Skaters build to top speed before the start/finish line
- Clock starts at the start line
- Once the 400m or 800m are complete the clock is stopped

Testing

- Max speed endurance of the skater
- Lactic tolerance and speed maintenance

Recordings

- Skaters finishing time
- Skaters lap times

Athletes Responsibility

- Equipment is in good form and safe
- Skates are sharp

**Sport Specific Tests**

**Blade Maintenance**

Type

- Quality blade maintenance evaluation

Execution

- In a dressing room setting, athletes sit ready with their skates on. Sharpening equipment is stored away.
- 20 minute timer is set
- Skaters take the following commands
  1. Ready
  2. Go
- The timer is started on the “Go” command
- On the “Go” command the skaters proceed to untie and remove their skates and prepare sharpening equipment to begin sharpening skates
- Once the 20 minutes are complete, the skaters are asked to stop all activity

## Evaluations

### Efficiency

- 5 points
  - Skater burrs, polishes and de-burrs blades (Blades must meet the 3 point minimum grade on the Polish Test, De-Burr Test and Sharpen Test to receive top efficiency points – deductions will be made at half a point each time the skater fails to meet the minimum standards.)
  - Packs sharpening equipment
  - Puts skates back on
- 4 points
  - Skater burrs, polishes and de-burrs blades (Blades must meet the 3 point minimum grade on the Polish Test, De-Burr Test and Sharpen Test to receive top efficiency points – deductions will be made at half a point each time the skater fails to meet the minimum standards.)
  - Packs sharpening equipment
- 3 points
  - Skater burrs, polishes and de-burrs blades (Blades must meet the 3 point minimum grade on the Polish Test, De-Burr Test and Sharpen Test to receive top efficiency points – deductions will be made at half a point each time the skater fails to meet the minimum standards.)
- 2 points
  - Skater burrs and polishes skates
- 1 point
  - Skater burrs skates

### Polish Test

- 5 points
  - Near mirror quality, very minimal blemishes
- 4 points
  - Minimal blemishes
- 3 points
  - Moderate blemishes
- 2 points
  - Blemishes are Moderate to Heavy
- 1 point
  - Blemishes are Heavy

### Burr Test

- 5 points
  - Blade edge is clean with very minimal to no blemishes
  - Top burr and side burr are effectively removed
- 4 points
  - Blade edge has minimal blemishes
  - Top Burr and side burr are minimal
- 3 points
  - Blade edge has moderate blemishes
  - Top burr and side burr are moderate
  - Top burr and side burr are removed inconsistently

- 2 points
  - Blade edge has moderate to heavy blemishes
  - Top burr and side burr remain
  - Top burr and side burr are inconsistently removed
- 1 point
  - Blade edge has heavy blemishes
  - Top burr and side burr remain

**Sharpen Test**

- 5 points
  - All 4 blade edges are sharp and consistent over the full length of the blade
- 4 points
  - All 4 blade edges are sharp
  - Inconsistencies in sharpness are very minimal but evident
- 3 points
  - All 4 blade edges have inconsistencies in sharpness - moderate
- 2 points
  - All 4 blade edges have inconsistencies in sharpness – moderate to heavy
- 1 point
  - All 4 blade edges are considered dull