By participating in this movement preparation session
Children become better athletes

Children strengthen their bodies through increased participation in physical activity

Children prepare their muscles for immediate activity and develop the skills and confidence to safely participate in unfamiliar activities

Children acquire the skills, confidence and motivation to overcome challenges

... because they’re developing physical literacy
The "Physical Literacy Movement Preparation Session" not only prepares the body for movement, it also improves the way you move, which reduces the risk of injury during physical activity. It also teaches skills that will benefit participation in unfamiliar activities.

Movement preparation that’s geared towards physical literacy – focusing on the techniques that improve and incorporate fundamental movement skills and fundamental sport skills – can also foster a more physically active and healthy lifestyle.

Those who participate in the movement preparation session will increase their aptitude for all activities regardless of environment.
Dynamics:

**Mini-Skip**
- Athlete lifts knee above belly button
- Knee bent at 90 degrees
- Heel under knee, toes up (flexed)
- Extend leg straight out at a 45-degree angle
- At the same time, athlete swings opposite arm forward (left leg, right arm)
- Arm moves from hip to lip moving at the shoulder
- Elbow locked at 90 degrees
- Leg snaps down so foot contact is under hip
- Small skip added in

**Side Shuffle**
- Athlete starts perpendicular to the start line
- Athlete sits down in a squat position
- Toes pointed forward at all times
- Try to keep a steady pace
- Make sure to do twice, changing lead leg
Dynamics:

**Grapevine**
- Athlete lines up sideways to the start line, feet shoulder-width apart
- Athlete crosses trailing foot behind their leading foot
- Side step, returning feet to shoulder-width position
- Cross trailing foot in front of leading foot
- Return feet to shoulder-width position
- Back cross; side step; front cross; side step; repeat
- Hips stay perpendicular to start line
- Ensure athlete does Grapevine facing both ways from the start line

\[\text{Diagram of Grapevine steps}\]

**Backward Mini-Steps: Fast**
- Moving backward take short quick steps
- Make sure athletes look over shoulder for safety

**High Knees**
- In short, quick steps, bring knee as close to chest as possible
- Drive knee upward

**Butt Kicks**
- In short, quick steps, bring heel as close to bum as possible
- Keep toes up (flexed)
- Make sure upper leg stays perpendicular to the floor
Right to Left One-Footed Hops

- Hopping for distance
- Athlete hops three times moving forward (on one foot)
- After the third hop, switch legs and repeat
- Continue over the designated distance

Knee Hug and Lunge (trunk twist optional)

- Athletes lift one knee up to their chest
- Place both hands on the knee and pull it in and up
- With the same leg, take a big step forward into a lunge position
- Knee over toes in the lunge
- Rotate trunk toward leading knee (optional)
- Ensure that trunk remains as vertical as possible
- Stand up, take a couple of normal steps and repeat with opposite leg
- Trailing knee does not touch the ground in lunge position
Accelerations:

**Drop-and-Go Start**
- Drop your body down to the ground in a push-up position
- Stand up as quickly as possible and accelerate forward

**Twistie Start “Two”:**
- Stand sideways to the start line
- Jump up and rotate 180°
- Jump up and rotate back again
- Accelerate forward

**Twistie Start “Three”:**
- Stand sideways to the start line
- Jump up and rotate 180° (opposite foot leading)
- Jump up and rotate 180° (original foot leading)
- Jump up and rotate back again (opposite foot leading)
- Accelerate forward
“5, 5, 5”: Tuck Jump; Push-up; Burpee, then accelerate

- Do 5 tuck jumps (bring both knees to your chest in mid-air)
- Do 5 push-ups
- Do 5 Burpees
  - From standing position, drop down into tucked position
  - Extend legs behind body to end up in push-up position
  - Do one push-up
  - Bring legs back up into tucked position
  - Stand back up (can include a jump in this last step)
- Accelerate forward
**Ladders:**

**In, In, Out, Out:**
- Start with the athlete's feet at hip-width apart at the bottom of the ladder
- Step into the first square with left foot forward, immediately followed by the right foot
- Step outside to the left of the second square (with the left foot), then immediately step outside to the right of the second square (with the right foot)
- Step back into the third square with the left foot first, followed by the right foot
- Repeat for the length of the ladder
- Athletes can repeat “In, In, Out, Out” in their head to help keep the pattern

**Icky Shuffle:**
- Start with athlete standing beside the first square on the left side of the ladder
- Step into the square first with the right foot
- Then step into the square with the left foot
- Step outside the square with right foot (to the side of the first square)
- Athlete's left foot now steps forward into the second square
- Right foot steps into the second square
- Left foot steps outside the second square (to the side)
- Right foot steps forward into the third square
- Repeat for the length of the ladder
Scissors (Right and Left):

- The athlete stands on the right side of the ladder with their hips facing the ladder.
- Right foot starts inside the first square and left foot on the outside.
- The athlete quickly moves their right foot out of the first square and replaces it with their left foot.
- Next, the athlete then moves their right foot into the second square as their left foot comes out of the first square.
- Repeat pattern for length of ladder.
- Make sure athletes do the drill on the left side of the ladder too.

Rapid Through:

- Start with the athlete’s feet at shoulder-width apart at the bottom of the ladder.
- Step into the first square with the left foot.
- Next, step into the second square with the right foot.
- Repeat pattern for length of ladder.
High Knees:

- Athlete drives their left knee up over their belly button with knee bent at 90 degrees, ankle in line with knee
- Athlete then drives their knee down so their left foot is in the first square
- Right knee drives up and down with right foot planting in second square
- Repeat pattern for length of ladder

Twisties:

- Athlete starts with feet spanning the outside right rail, left foot inside the first square, right foot outside the first square
- The athlete will twist at the hips so that their right foot moves into the second square
- Pivoting at the hips on their right foot, the athlete moves their left foot up to the outside-left of the second square and steps down
- Again, pivoting at the hips on their right foot, the next twist brings the athlete's left foot into the third square
- Now, pivoting on the left foot, twist to bring the right foot to the outside-right of the third square and step down
- Repeat for the length of the ladder
Cross Outs:

- Start with both feet outside the ladder straddling the first square
- Have the athlete cross their feet in so the left foot is in the first square and the right foot is directly in front of the left, inside of the second square
- The athlete then crosses their feet out so their feet are again outside the sides of the ladder, this time at the second square
- Next time, the athlete crosses their feet in so their left foot is in the third square and their right foot directly behind it in the second square
- Repeat pattern for length of ladder

Out 5x Then Jump 3:

- Start with both feet outside the ladder straddling the first square
- Jump with both feet to the inside of the ladder
- Jump with both feet to the outside of the ladder
- Repeat five times
- After the fifth jump forward 3 rungs
- Repeat pattern for the length of the ladder
Continuous Hop:
- Start with both feet outside the ladder behind the first square
- Hop into the first square with both feet
- Repeat pattern for length of the ladder

Lateral Crossovers:
- Start with both feet outside the ladder on the side of the first square (right foot closest to the ladder)
  Swing the left leg out and around to the front of the body, while jumping off the right leg
- Land with the left foot only on the other side of the square
  Swing right leg around to the front of the body, while jumping off the left leg
- Land with the right foot only on the other side of the second square
- Repeat pattern for length of ladder
Weave through 10 pylons set 1.2-2 metres apart (depending on the age group); 5 times starting on the right of the first pylon, 5 times starting on the left of the first pylon. Set up one circuit for every 10 athletes.
Plank:
- Athletes start lying on their bellies
- On command “Plank It Up” athletes push off ground resting on their forearms
- Elbows under shoulders
- Hands spaced apart
- Body rigid with shoulders, hips and ankles all in line
- Try to keep hips from sagging or sticking up in the air
- On command “Belly Down” athletes return to lying position

Up, Up, Down, Down Plank
- From lying positions, athletes enter Front Plank (“Plank It Up”)
- Athletes push up off one forearm so that they are resting on their forearm and one palm of their hand. Athletes then lift themselves up to end up in a push-up position (command: “Up, Up”)
- Body stays as rigid as possible
- On Command (“Down, Down”) athletes return one arm then the other arm to front plank position
**Pointer Plank (Right and Left)**

- Athletes first move into a Front Plank position - “Plank It Up”
- From a solid plank, athletes slowly lift one arm straight out
- Hand level with shoulder
- Body remains rigid similar to Front Plank position
- Return to Front Plank position
- Without Bellying Down, now point the other arm

**Superman Plank (Right and Left)**

- Athletes first move into a Front Plank position “Plank It Up”
- From a solid plank, athlete slowly lifts one arm straight out and lifts the opposite foot off the ground (i.e. right arm, left foot)
- Body remains rigid similar to Front Plank position
- Return to Front Plank position
- Next time repeat with opposite arm and foot

**Side Plank (Right and Left)**

- Athletes start this lying on their side
- Elbow under shoulder
- Hand and elbow at 90 degrees
- On command (“Plank It Up”) athletes enter into a side plank, resting on forearm
- Shoulder, hips and ankles are in line
- Make sure to plank on both sides (right and left)
- **With Leg Lift:** While maintaining the plank position, lift either left or right leg up in the air
- **With Rollover:** With free arm, athlete raises arm to the sky, bends elbow at 90 degrees and rolls over to enter side plank on other side

Commands: Plank It Up, Hold, Hand To The Sky, Bend Arm At 90, Rollover, Plank It & Hold
Acknowledgements:

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Content developed by Dean Kriellaars and Sport Manitoba

Content edited by Citius Performance Corp.: Richard Way, Benjamin Robillard, Tyler Laing, Danielle Bell and Thom Brennan

Produced by Canadian Sport for Life (CS4L) under the leadership of the CS4L Management Group: Richard Way, Istvan Balyi, Vicki Harber, Carolyn Trono and Paul Jurbala

Designed by Citius Performance Corp.
### 1. Dynamics - This engages large muscle groups to prepare the body for physical activity

Alternate jogging **20 metres out** and doing activity sequence below on the way back.

<table>
<thead>
<tr>
<th>Activity sequence</th>
</tr>
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<td>1) Mini-skip</td>
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<td>3) Grapevine</td>
</tr>
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<td>4) Backward mini-steps fast</td>
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<tr>
<td>5) High knees</td>
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<td>6) Butt kicks</td>
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<td>7) Knee hug and lunge (trunk twist optional)</td>
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### 2. Accelerations - These drills provide neuromuscular and cardiovascular benefits by maximizing power output

<table>
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<tr>
<th>Activity</th>
<th>Accelerate</th>
<th>Distance</th>
<th>Jog back</th>
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<tbody>
<tr>
<td><strong>a) Drop-and-Go Start:</strong> Standing to drop down to floor, up and accelerate</td>
<td><strong>10 metres</strong></td>
<td><strong>Jog back</strong></td>
<td></td>
</tr>
<tr>
<td><strong>b) Twistie Start “2”:</strong> Stand sideways with right foot forward, jump up and rotate 180°, and back again – then accelerate</td>
<td><strong>10 metres</strong></td>
<td><strong>Jog back</strong></td>
<td></td>
</tr>
<tr>
<td><strong>c) Twistie Start “3”:</strong> Stand sideways with right foot forward, jump up and rotate 180°, back and forth and back again – then accelerate</td>
<td><strong>10 metres</strong></td>
<td><strong>Jog back</strong></td>
<td></td>
</tr>
<tr>
<td><strong>d) “2,2,2” - Do two tuck jumps, two pushups, two burpees – then accelerate</strong></td>
<td><strong>10 metres</strong></td>
<td><strong>Jog back</strong></td>
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</table>

### 3. Ladders - This drill involves quick steps and eye-feet coordination, which will improve agility, reaction, and awareness

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<tr>
<td><strong>e) Rapid through</strong></td>
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<td><strong>f) Twisties</strong></td>
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<td><strong>g) High knees</strong></td>
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<td><strong>h) Cross outs</strong></td>
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### 4. Weaving Pylon Drill - This drill provides repetition-based cutting manoeuvring – neuromuscular activation training

Weave through 10 pylons set 1.2 -1.5 metres apart. Two times starting on the right of the first pylon, two times starting on the left of the first pylon. Set up one circuit for every ten athletes.

**Weave through each pylon**

Jog back

### 5. Mini Core Routine - These activities activate the body’s core stabilizing muscles – particularly the trunk section

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
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<tbody>
<tr>
<td><strong>a) Plank</strong></td>
<td>5 - 10 seconds</td>
</tr>
<tr>
<td><strong>b) Up up down down plank</strong></td>
<td></td>
</tr>
<tr>
<td><strong>c) Pointer plank right</strong></td>
<td></td>
</tr>
<tr>
<td><strong>d) Pointer plank left</strong></td>
<td></td>
</tr>
<tr>
<td><strong>e) Superman plank right</strong></td>
<td></td>
</tr>
<tr>
<td><strong>f) Superman plank left</strong></td>
<td></td>
</tr>
<tr>
<td><strong>g) Side plank right</strong></td>
<td></td>
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<td><strong>h) Side plank left</strong></td>
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<tr>
<td><strong>i) Side plank with snap rollovers</strong></td>
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For more information on the skills and activities above, visit:

physicalliteracy.ca/movement-prep
### 1. Dynamics - This engages large muscle groups to prepare the body for physical activity

Alternate jogging **20 metres out** and doing activity sequence below on the way back.

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<th>Drill Description</th>
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<td><strong>c)</strong> Twistie Start “3”: Stand sideways with right foot forward, jump up and rotate 180°, back and forth and back again – then accelerate</td>
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<td><strong>d)</strong> “3,3,3” - Do three tuck jumps, three pushups, three burpees – then accelerate</td>
<td>15 metres</td>
<td></td>
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</table>

### 3. Ladders - This drill involves quick steps and eye-feet coordination, which will improve agility, reaction, and awareness

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### 4. Weaving Pylon Drill - This drill provides repetition-based cutting manoeuvring – neuromuscular activation training

Weave through 10 pylons set 1.2 - 1.5 metres apart. Five times starting on the right of the first pylon, five times starting on the left of the first pylon. Set up one circuit for every ten athletes.

**Weave through each pylon**

### 5. Mini Core Routine - These activities activate the body’s core stabilizing muscles – particularly the trunk section

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**5 - 10 seconds** each task

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   a) **Drop-and-Go Start**: Standing to drop down to floor, up and accelerate
      - **Accelerate 20 metres**
      - Jog back
   
   b) **Twistie Start “2”**: Stand sideways with right foot forward, jump up and rotate 180°, and back again – then accelerate
      - **Accelerate 20 metres**
      - Jog back
   
   c) **Twistie Start “3”**: Stand sideways with right foot forward, jump up and rotate 180°, back and forth and back again – then accelerate
      - **Accelerate 20 metres**
      - Jog back
   
   d) **“5,5,5”**: Do five tuck jumps, five pushups, five burpees – then accelerate
      - **Accelerate 20 metres**
      - Jog back

3. **Ladders** - This drill involves quick steps and eye-feet coordination, which will improve agility, reaction, and awareness

   a) In in out out
   
   b) Icky shuffle
   
   c) Scissors Right
   
   d) Scissors Left
   
   e) Rapid through
   
   f) Twists
   
   g) High knees
   
   h) Cross outs
   
   i) Out 5x then jump 3
   
   Two passes of each

4. **Weaving Pylon Drill** - This drill provides repetition-based cutting manoeuvring – neuromuscular activation training

   Weave through 10 pylons set 2 metres apart. Five times starting on the right of the first pylon, five times starting on the left of the first pylon. Set up one circuit for every ten athletes.

   - **Weave through each pylon**
   - Jog back

5. **Mini Core Routine** - These activities activate the body’s core stabilizing muscles – particularly the trunk section

   a) Plank
   
   b) Up up down down plank
   
   c) Pointer plank right
   
   d) Pointer plank left
   
   e) Superman plank right
   
   f) Superman plank left
   
   g) Side plank right
   
   h) Side plank left
   
   i) Side plank with snap rollovers

   **5 - 10 seconds** each task

For more information on the skills and activities above, visit: [physicalliteracy.ca/movement-prep](http://physicalliteracy.ca/movement-prep)
Dean Kriellaars, BPE, MSc, PhD, CEP

Dr. Kriellaars is a faculty member of the School of Medical Rehabilitation, Department of Physical Therapy, at the University of Manitoba. He is a member of the Spinal Cord Research Centre and a scientist at the Manitoba Institute of Child Health.

Canadian Sport for Life wishes to thank Dr. Kriellaars, the University of Manitoba and Sport Manitoba for their help in the development of this resource.

Dr. Kriellaars is a CS4L Champion making a difference!