

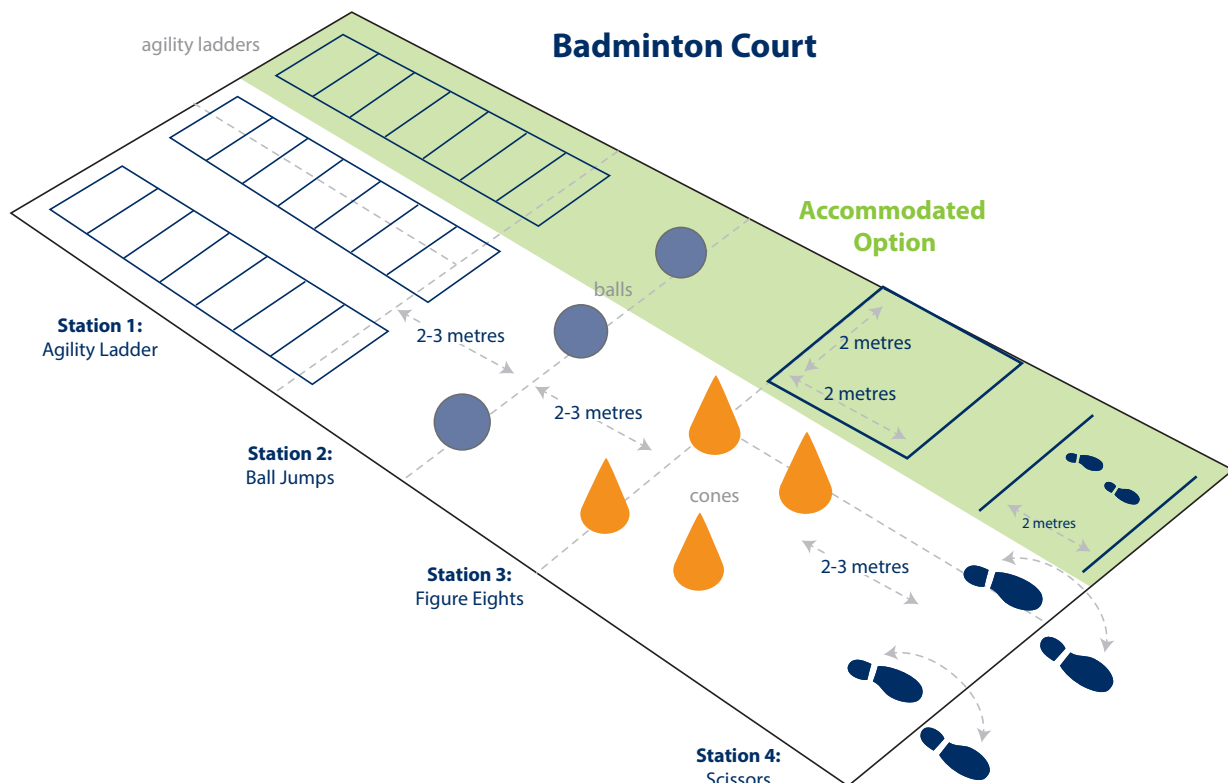
Fitness Skills: Aerobic/Cardiovascular Endurance

Objective: To assess the ability to exercise at a vigorous intensity continuously for the allotted time without showing indications of fatigue.

EQUIPMENT: You will need the following equipment for each circuit.

<input type="checkbox"/> 1 agility ladder	<input type="checkbox"/> 1 assessment recording form
<input type="checkbox"/> 1 ball (e.g., soccer, basketball, volleyball)	<input type="checkbox"/> 1 stopwatch
<input type="checkbox"/> 1 upside-down flying disc for ball placement	<input type="checkbox"/> 1 clipboard
<input type="checkbox"/> 2 cones	<input type="checkbox"/> 1 pencil

Set-Up: Set up three circuits on a badminton court (see the diagram). Allow 2–3 metres between each station. Place one student at each station to a maximum of four students per circuit. Place the students in alphabetical order (as listed on your recording form). This order will make it easier for you to scan the room and record the students' results. With this set-up, all students start and finish at the same time regardless of their fitness level.



Note: Initially, it is recommended to assess only eight students at the same time. This would correspond to setting up two lanes of circuits with four students per lane. Progressing to three full lanes requires experience in conducting the assessment.

Instructions:

Following these instructions there are various accommodations provided for the assessment. Providing students with a disability the opportunity to choose how they complete the assessment allows for a safe environment that increases participation levels for these students.

On your start signal, students perform the activity at their station for 30 seconds. When you prompt “Change,” the students run to the next station and continue at that station for 30 seconds. Remind the students to begin immediately when they arrive at the next station.

During transitions between stations, observers should note whether the students walk or pause briefly to rest before starting their next station - these are indicators of fatigue. All students complete the **9 minutes** in the circuit.

If desired, students can work in partners to provide encouragement, physical support (if requested) and visual cues to move to the next station (i.e., a tap on the shoulder can work as a tactile cue for a hearing impaired student to move to the next station).

Instructional Tips:

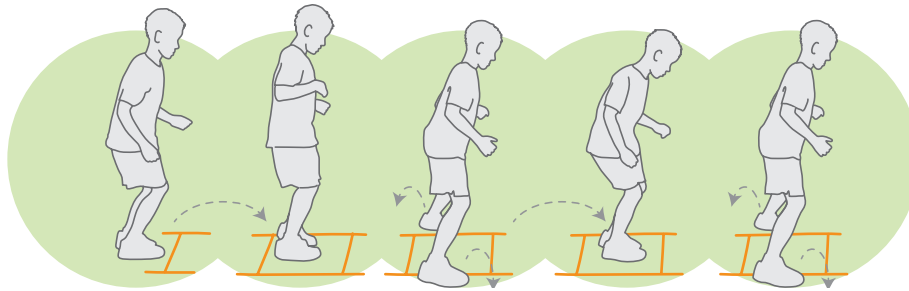
1. Model each activity for and with students.
2. Build in a scale for students to self-assess their moderate to vigorous activity (such as the Borg Scale of Physical Exertion).

Note: The students must maintain motion at each circuit and between each station change. Encourage students to move from station to station quickly this will keep the students heart rate up and help assess continuous cardiovascular activity

Station 1: Agility Ladder

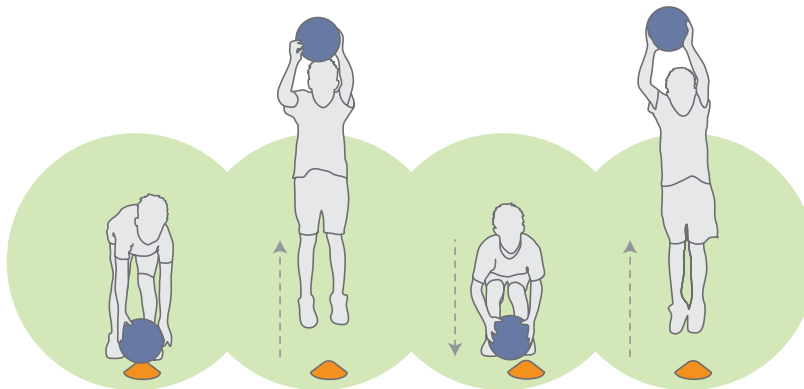
Students move in a hopscotch pattern (two-foot hop in first square, two feet straddling the ladder, two-foot hop into the second square, two feet straddling the ladder, etc.) up and then back through the ladder. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest or lose their technique by stumbling in the ladder - indicators of fatigue.

Note: If your school does not have access to an agility ladder, students can use the same footwork pattern along the sideline of a badminton court or a 4.5 metre line (e.g., two feet straddling the line, to two feet on the line).



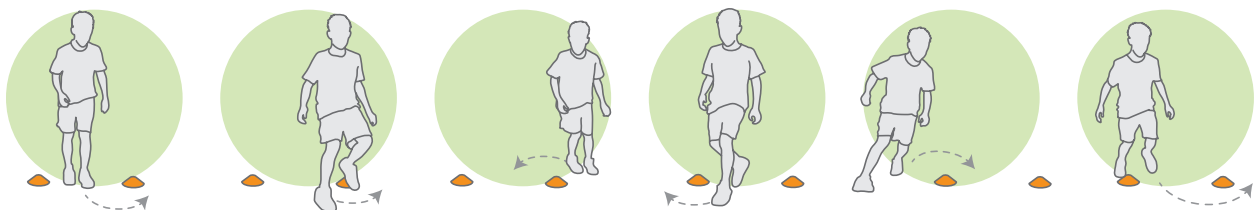
Station 2: Ball Jumps

Students start in a squat position to pick up the ball and jump, raising the ball over their heads (similar to a “burpee” jump). When the students land, they squat down to touch the floor with the ball and then jump up again. Remind students to land softly on both feet with both knees flexed to absorb the force. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest, do not jump or do not touch the floor with the ball - indicators of fatigue.



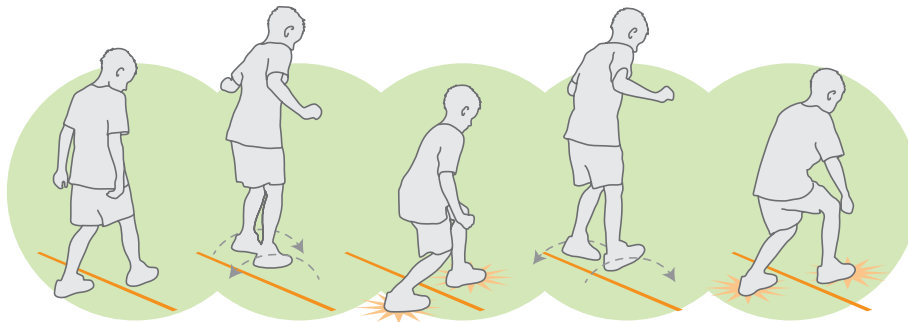
Station 3: Figure Eights

Students stand between the two cones facing one side/alley of the badminton court. Students will know if they are doing this correctly if their hips and shoulders are always facing the **same** side/alley of the badminton court. Students move their feet forward and then backwards to take them in a figure-eight pattern around the cones. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest or constantly run into the cones - indicators of fatigue.



Station 4: Scissors

Students face forward with one foot on each side of the badminton end line and switch their feet back and forth **continuously**. Students should be using a contra-lateral (opposite) arm/leg movement with their feet contacting the ground at the same time and their body weight over the line. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace or pause to rest - indicators of fatigue.



Accommodation Options for Students with a Disability:

SUGGESTED EQUIPMENT

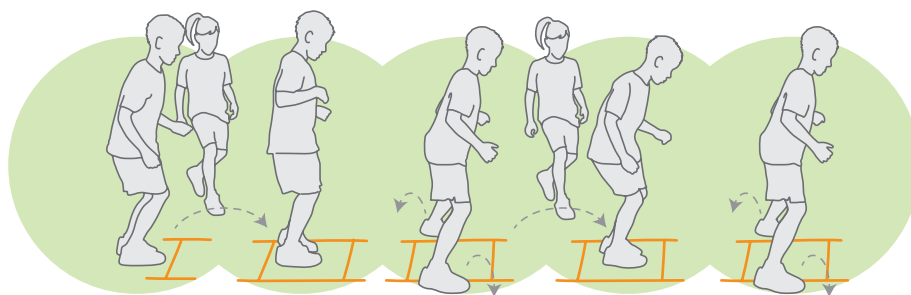
<input type="checkbox"/> 1 agility ladder	<input type="checkbox"/> 2 cones
<input type="checkbox"/> 1 ball (e.g., soccer, basketball, volleyball)	<input type="checkbox"/> gym-friendly tape
<input type="checkbox"/> 1 upside-down flying disc for ball placement	<input type="checkbox"/> two skipping ropes (to create tactile lines)

Set-up: Place *tactile lines on the floor for station 1 to represent the agility ladder. Place tactile lines in the shape of a square in one alley of the badminton court for station 3. Place tactile lines over the badminton end lines for station 4.

**Tactile lines are created by taping a rope along the line that students use as boundaries. This allows students with a visual impairment to be able to feel the raised line if they cannot see it. It is important to tape the rope securely for safety (i.e., tape should run along top of the rope the entire length).*

Station 1: Agility Ladder

Students work in partners. Student B moves beside Student A down the length of the ladder as indicated in the diagram above. Student B is there for encouragement and/or for balance support. (i.e., Student A may wish to hold Student B's elbow or shoulder). Student A moves in a hopscotch pattern (i.e., two-foot hop in first square, two feet straddling the ladder, two-foot hop into the second square, two feet straddling the ladder, etc.) up and then back through the ladder. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest or lose their technique by stumbling in the ladder - indicators of fatigue.



Additional Accommodation Options:

Motor

- Set up 4 pylons 1 m apart. Students must weave (or wheel) in and out of the pylons, back and forth for 30 seconds.

Sensory

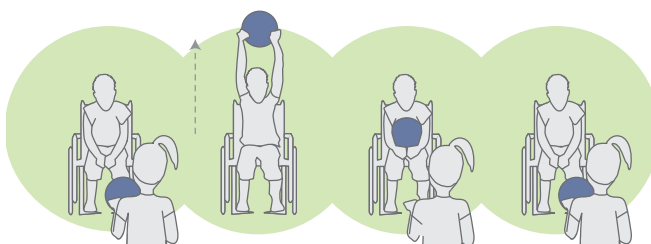
- Tape the agility ladder to the floor and allow students to feel it under their feet

Behavioural and/or Intellectual

- Partners can give verbal cues such as “in...out...” to help the student keep pace
- Have students practice in slow motion before trying it at a fast pace
- Stay within one section of the agility ladder and jump in and out of the same section

Station 2: Ball Jumps

Students work in partners. Student B provides verbal feedback and encouragement to Student A, providing an audible reference point. Student A starts with their partner handing them the ball, lifts the ball as high as they can (standing or sitting) and then passes it back down to their partner as quick as possible. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest, do not jump or do not touch the floor with the ball - all indicators of fatigue.



Additional Accommodation Options:

Motor

- Student A can throw a weighted ball back and forth with Student B from a standing, lying or sitting position
- Student A can use Student B to perform a leg press
- Students can raise or lower an object using their arms or legs as quickly as possible

Sensory

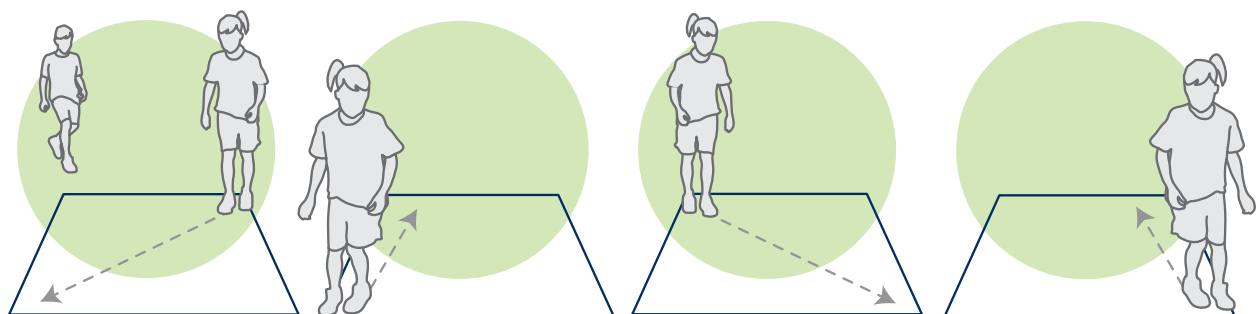
- Student B can provide more feedback to let Student A know where they are spatially
- Use a tactile marker to help Student A stay in place

Behavioural and/or Intellectual

- Use another object instead of a ball
- Students can provide verbal cues for to help with the timing of the movements
- Use a BOSU ball (rounded side up) for Student A to stand on while they raise and lower the ball to touch the BOSU (no jumping)

Station 3: Figure Eights

Tape a square on the floor in one area of the badminton alley. Students work in partners. Student B stands nearby to provide feedback, encouragement, and physical support (if requested). Student A stands at the back left corner of the square. Student A will always face in the same direction as they move around the square. Student A moves (or wheels) forward diagonally to the front right corner, back to the back right corner, diagonally left to the front left corner and back to the back right corner (in a figure 8 pattern). Students continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace, pause to rest or unable to touch each corner – indicators of fatigue.



Additional Accommodation Options:

Motor

- Set up the square near a wall for support
- Have Student B face Student A holding arms for support
- Move around the square a scooting or crawling position

Sensory

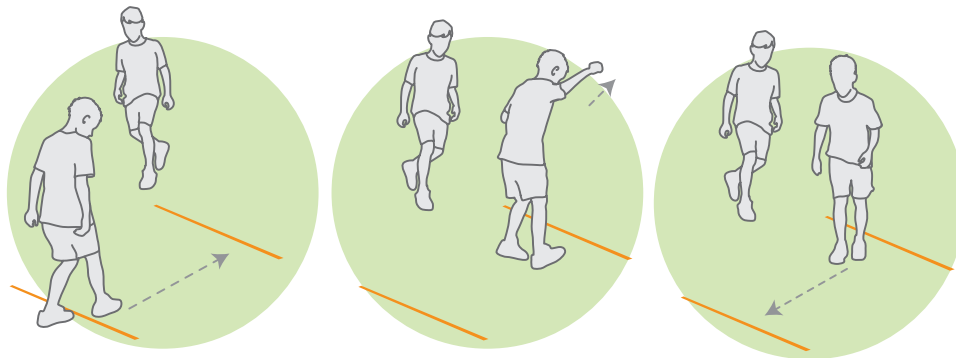
- Student B provides verbal cues such as “forward, left, back” to provide support
- Student B places a tether (a short rope or piece of towel) between themselves and Student A and guides Student A around the square.

Behavioural and/or Intellectual

- Student B can move to each next corner as a visual cue
- Student B can use verbal cues to support Student A

Station 4: Scissors

Tape tactile lines over the badminton end lines. Student B stands beside Student A to offer encouragement and physical support. Student A may choose to hold the elbow or shoulder of Student B for support. Student A begins at one tactile line and must move (or wheel) forward to the next line and then back again. After reaching each line, Student A punches the air or swings their arms. Continue for 30 seconds. The observer is looking to see if students are unable to maintain their pace or pause to rest - indicators of fatigue.



Additional Accommodation Options:

All accommodation options are listed in the option above. If you have a student that requires an additional accommodation and need support, please contact us at passportforlife@phecanada.ca.

Assessment:

Observers should scan their group by circulating between the station lines. Observers are **looking for indicators of fatigue**. For example:

- walking when changing stations
- slowing the pace at any station
- pausing for a rest
- stopping
- running into cones (figure eights)
- not jumping or not touching the floor with the ball (ball jumps)
- stumbling in the agility ladder

Record observed indicators of fatigue on the assessment recording form **every 30 seconds**. Mark every observed indicator of fatigue **with an X** in the column. Use the teacher rubric to determine the level the student achieves and record this information in the rating column.

TEACHER RUBRIC

Grades 4-6	EMERGING	DEVELOPING	ACQUIRED	ACCOMPLISHED
Aerobic/ Cardiovascular Endurance	Demonstrates more than 3 indicators of fatigue , to engage in moderate-to-vigorous physical activity for less than 7 minutes	Demonstrates 2-3 indicators of fatigue , to engage in moderate-to-vigorous physical activity for 7 minutes	Engages in vigorous physical activity continuously (no indicators of fatigue) for 7 minutes	Engages in vigorous physical activity continuously for 9 minutes