

5-Pin Bowling



Learn to Train



Special Olympics
Olympiques spéciaux
Canada



Learn to Train 5-Pin Bowling

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The Special Olympics Canada *Learn to Train: 5-pin Bowling* resource has been adapted from the "*Learn to Bowl*" Program produced by Bowl Canada



INTRODUCTION

The “*Learn to Train*” Bowling resource provides sport specific training for athletes with an intellectual disability. The Learn to Train program has been created to be the next step in the athlete development pathway and is designed to act as a continuation for those athletes aged 13-18 who have graduated from the *FUNDamentals* program and/or are new to Special Olympics programming.

This program focuses on developing sport-specific skills that will help transition your athletes into community programs while introducing sport specific techniques, and skills. Learning to Train is considered to be a transition point in LTAD. Athletes may choose to stay at this stage for an extended period of time before progressing to the next stage, which could be *Active for Life* or *Training to Train*. If the choice is Training to Train, an increased commitment will be necessary. Should participants choose to move to *Active for Life*, they have all the necessary fundamental motor skills to be able enjoy a variety of activities.

Although the following lesson plans were developed to be turn-key, they are designed as an introduction to the sport of 5-pin bowling. If you as a coach are looking to gain the skills and confidence to run a full-time bowling program, the Canadian 5-Pin Bowlers Association has a number of coaching programs that will provide you with the necessary coaching tools, resources and knowledge. For more information on coaching courses please visit Canadian 5-Pin Bowlers Association website (<http://www.c5pba.ca>) and look under the “Coaching” tab.

Objective:

The goal of the *Learn to Train* 5-pin Bowling program is to introduce youth across Canada to a sport which can be played throughout their lifetime. Bowling assists in the development of great hand-eye coordination, engages youth in an active lifestyle and offers moderate exercise. Participation in bowling also teaches youngsters about the values of team playing and sportsmanship. Most importantly bowling is FUN and can be played by everyone regardless of an individual's age, gender, size or strength.

Success in most sports favours the biggest, fastest and strongest athletes. Although these physical qualities play a role in any sport, the attributes that make a good bowler are coordination, balance, concentration and mental discipline. Bowling is easy to learn but difficult to master, so it will challenge all of your athletes.

After receiving approval from your local Special Olympics program or the Provincial/Territorial office, getting this program started is as easy as picking up the phone. Your local bowling centre specializes in group bookings and can support, in full or in part, your visits.

A certain amount of the program can be completed in a school gymnasium. Many resources are available in this guide to make *Learn to Train* bowling a turn-key part of your practices or training and many more resources are available online.

LEARN TO BOWL- HOW IT WORKS

The program can be run as either a 3-visit program or a 6-visit program as follows:

3 Visit Program	6 Visit Program
Visit 1 Review of Safety Rules & Instruction of a 3 Step Approach & Delivery, followed by time to practice the above concepts & have fun.	The 6 Visit Program covers all the topics of the 3 Visit program but allows the coach to go into more detail and cover more content. The added time also allows for more time for athletes to bowl and gives coaches more opportunity to help athletes who may need assistance with their game.
Visit 2 Coaching/Instruction continues, and bowling time while coach(es) help refine athlete's deliveries.	The Fun Tournament which wraps up the program is conducted over the last 2 visits, allowing for more time to put their lessons to work and experience more fully the sport of bowling as opposed to the recreation.
Visit 3 Explanation by coach of various tournament formats followed by Wrap up and Fun Tournament.	

It is suggested that you start the first training with a discussion around Safety, and how to deliver a bowling ball. If time and facilities permit watch a Video (<https://www.youtube.com/user/C5PBA>) of how to deliver a bowling ball, and basic terminology of bowling.

Materials are available in the Resources section at the back of the guide to provide support as you discuss bowling with your program.

The cost of the program will vary by bowling centre so please check with your local bowling centre proprietor to see what he can offer your group.

Athlete Pathway in Bowling

Learn to Bowl directly builds on the *Active Start* and *FUNDamentals* phases of bowling's Long Term Athlete Development (LTAD) plan. Further phases of the LTAD plan are accessed through Youth Bowling Canada (YBC), a national program for those who wish to advance their participation in the sport or the Special Olympics community program in your area. Both options can offer experienced coaches, many of whom are certified by the Canadian 5-Pin Bowlers Association and the Coaching Association of Canada.

Your Local Bowling Centre

Bowling centres can be found in nearly every community across Canada. For a list of bowling centres near you visit <http://www.bowlcanada.ca/bpacmap>. Unlike most sports, bowling can be enjoyed any time of year and regardless of the weather forecast. Most centres offer computerized scoring and bumpers to keep even the youngest or least experienced bowlers out of the gutters.

PREPARATION AND ATTIRE

Preparing to go Bowling

Basic knowledge of bowling prior to a visit to the bowling centre will be beneficial for all and will make the trip even more enjoyable. This section covers an introduction of bowling so that the athletes come prepared with a basic knowledge of the sport.

Athletes and any volunteers who accompany the program should be aware of the following:

Recommended Attire

Comfortable clothing that allows for freedom of movement (i.e. short sleeves, non restrictive). Socks are a must.

Required Footwear

Bowling Shoes are shoes that have been designed specifically for participation in the sport of bowling. Bowling shoes can be inexpensively rented at every bowling centre. Check the soles of your bowling shoes prior to play to ensure they are clean and dry.

SAFETY FIRST

One of the things to be covered on your first visit to the bowling centre will be how to pick up a bowling ball safely. While this may seem unnecessary, anyone can easily get caught up in the fun of bowling and get their fingers caught between a ball on the ball return and a returning ball. This can be avoided by reviewing the safe way to pick up a ball both beforehand, and reinforcing the safety rule at the bowling centre. Please read through this section and cover it with your athletes prior to your first visit (pg 10).

Athletes should also be warned about straying from their lane after delivering a ball so that they don't cross into the next lane and collide with another athlete in the process of delivering his or her own ball.

Bowling centres are controlled environments. Bowling shoes are special shoes which allow participants a certain amount of slide during their delivery. Should bowlers wander about and step in a spill (pop, water, etc.) this will affect their slide drastically to the point of their feet stopping while their upper body momentum carries them through to a fall during delivery. It is safest and best for all to stay in their designated areas and be aware of the conditions around them as to avoid any unfortunate occurrences.

THE BASICS OF BOWLING

TERMINOLOGY

Game	A game of bowling is defined as 10 consecutive frames of bowling completed by a bowler.
Frame	A frame is a bowler's turn at attempting to bowl down all 5 pins using up to 3 ball deliveries.
Strike	The act of bowling down all 5 pins on the first delivery of a frame. If a strike has been made no further deliveries shall be made in the frame. A strike shall count the full value of all 5 pins (15 pts) PLUS the value of the next two balls thrown by the bowler in the next frame(s).
Spare	The act of bowling down all 5 pins on the first two deliveries of a frame. If a spare has been made no further delivery shall be made in the frame. A spare shall count the full value of all 5 pins (15 pts) PLUS the value of the next ball thrown by the bowler in the next frame.
Rack	The pin set up prior to the first delivery of a frame being thrown.
Headpin	The centre pin of the rack, the headpin is the most valuable earning the bowler 5 points.
3-Pin	There are two 3-Pins in a rack of pins, located to either side of the headpin. They have a value of 3 points each. From the bowler's point of view, the Right 3-Pin is immediately to the right of the headpin, and the Left 3-Pin is immediately to the headpin's left.
Corner Pin	There are two corner pins in a rack of pins. They are the outside pins in the rack. Each has a value of 2 points. The Right Corner Pin is on the far right of the rack (bowler's perspective) and the Left Corner Pin is to the far left.
Split	A split is the result of bowling down the headpin and one of the 3-Pins on a bowler's first delivery in a frame. It is called a split because the remaining pins seem to have been "split" apart by the resulting first delivery.
Foul	A foul is committed when a bowler crosses the foul line during or following delivery of a ball. A bowler's personal item can also cause a foul, such as an item of clothing, a pen falling out of a pocket, etc.
Turkey	A Turkey is the nick name for achieving 3 consecutive strikes.
Perfect Game	A perfect game is when a bowler manages to throw only strikes throughout a game (a strike in each of the first 9 frames and 3 strikes in the tenth frame). A perfect game's score is 450 points.

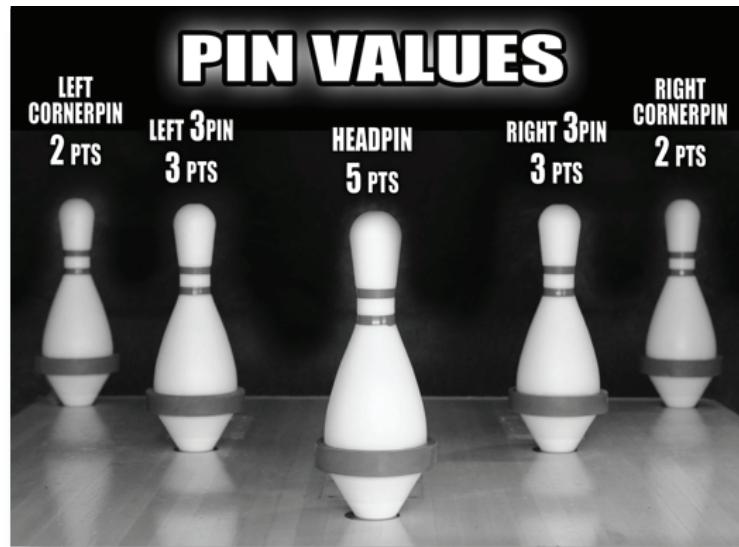
PIN VALUES & HOW TO SCORE WELL

Most bowling centres today often include automatic (computerized) scoring systems. While you don't necessarily need to know how to keep score when you begin bowling, it is certainly helpful to understand the basics of how the game is scored so as to maximize performance. Following is a brief introduction which should help.

Five pin bowling uses, of course, five pins. The picture to the right illustrates a full rack of pins as well as their designation and point value.

The aim of the sport is to knock down all the pins but how you knock them down is also important. Bowlers are allowed up to 3 balls in each frame to bowl (knock) down the 5 pins. The best outcome of a frame is a STRIKE, followed by a SPARE and lastly, if both Strike and Spare were unattainable, bowling all the pins down by the 3rd delivery.

To explain:



Should a bowler get all 5 pins down on his first ball of a frame the bowler is credited with a STRIKE (marked as an "X" on the scoreboard). This gives the bowler the full value for the 5 pins knocked down (15 points) but also adds into that frame the value of the points earned on the next two balls thrown. A strike, therefore, allows you to potentially triple the value of a rack of pins. It is the most valuable shot a bowler can make.

Should a bowler not be able to bowl down all 5 pins on the first shot, the bowler will attempt to SPARE the frame. A spare is when there were pins still standing after the first delivery but these pins were all bowled down by the second delivery. Spares are marked on the scoreboard as a "/". A Spare means all the pins were knocked down in the frame earning 15 points for the bowler, but because they were bowled down with only 2 balls, the bowler also adds into that frame the value of the pins knocked down by the next delivery, potentially allowing the bowler to double the value of the rack of pins.

When a bowler is unable to Strike or Spare in a frame there is still considerable benefit in making sure that any pins left standing after the first two deliveries are knocked down with the third ball, allowing the bowler to count 15 points in the frame. With each pin being worth 2, 3 or 5 points, missing as much as one pin can mean defeat when entering the competitive levels of the sport. If the remaining pins (after two deliveries) are set up in a manner which may be difficult to knock down, bowlers should consider the point value of each remaining pin so as to capitalize as best as possible on the final shot of the frame.

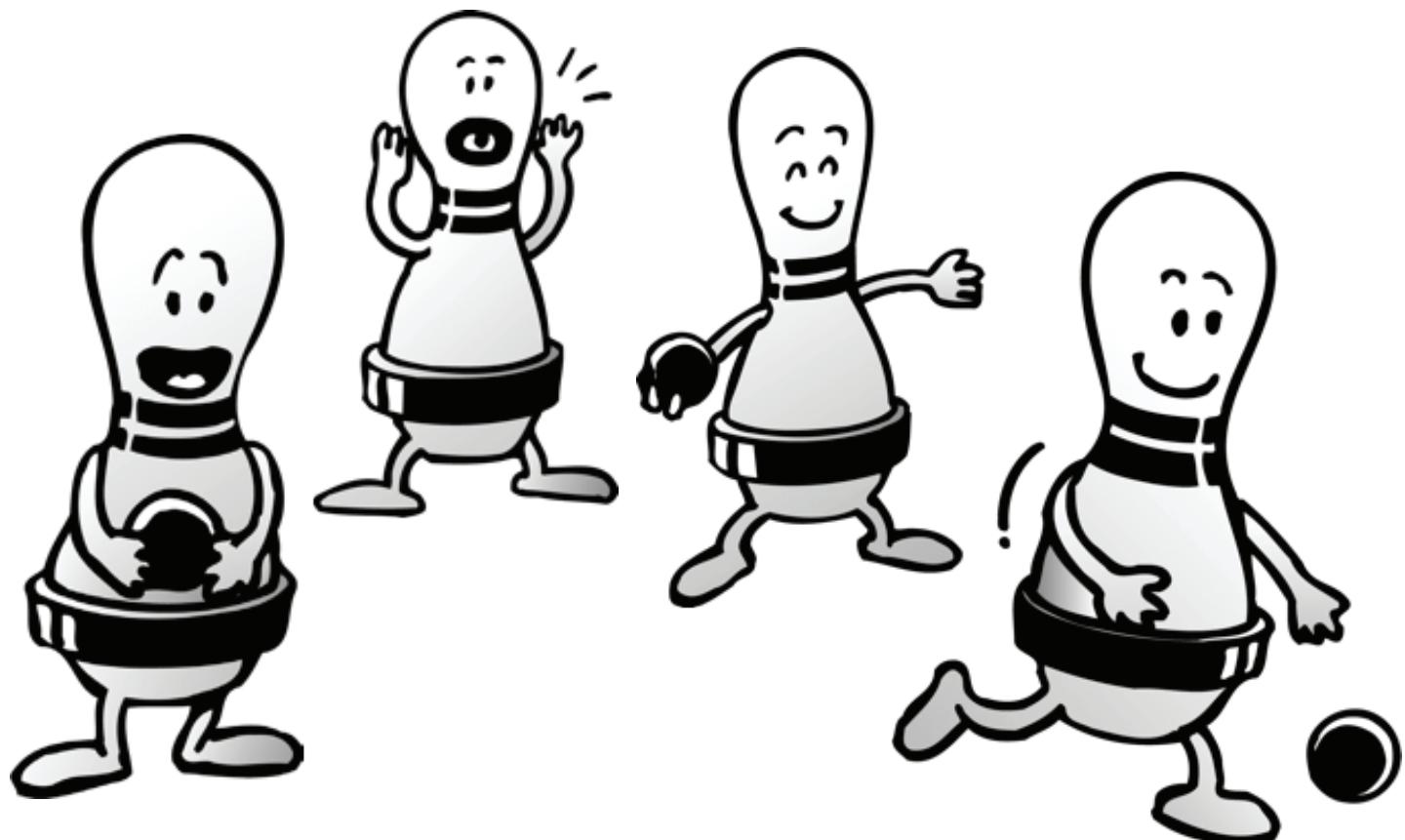
In Appendix A you'll find a complete lesson on "Keeping Score" should you wish to utilize this within your program.

SETTING UP TEAMS FOR YOUR GROUP

On the following page is a Team Roster Form which can be used to break your athletes into Teams for your visits to the bowling centre. The purpose of defining teams is to allow a smoother assignment of your group to specific lanes each trip. The following should be considered when defining your teams:

- Any athletes who regularly participate in bowling should be spread out over the many teams to ensure make-up of teams is fair and that these bowlers can be used as examples by the coach to illustrate proper delivery, etc.

Keep in mind that use of this form can greatly reduce the amount of time your athletes will wait for their shoes and lanes upon arrival at the bowling centre.



LEARN TO BOWL- TEAM ROSTER

Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____	Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____
Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____	Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____
Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____	Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____
Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____	Team Name: _____ 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ Athlete _____ Shoe Size _____

If you are able to provide the bowling centre with this TEAM ROSTER FORM a few days before your first visit it will enable the bowling centre to have your teams/bowlers pre-programmed into the computerized scoring system and be prepared for your required shoe sizes prior to your group's arrival.

PRACTICE PLAN OUTLINE

Below is an outline for coaches to use as they introduce bowling. Coaches should feel comfortable adapting as needed and based on experience and skill-set of athletes involved.

PRACTICE PLAN GUIDE		
Practice	Beginner/Intermediate	Intermediate/Advanced
1	Introduction & Welcome Introduce them to the proprietor Tour bowling centre Warm Up Safety Bowl a game for FUN Cool Down	Warm Up Core lesson Safety - how to properly pick up the ball - wearing of bowling shoes Etiquette Bowl a game for FUN Cool Down
2	Warm Up Review safety Core lesson 2 basic deliveries - grip - two handed - one handed Etiquette Bowl a game for FUN Cool Down	Warm Up Review safety Core lesson One handed delivery -review of grip -one handed delivery Bowl 2 games Cool Down
3	Warm Up Review 2 basic deliveries Core lesson backswing and approach Introduce foul line and deadwood Bowl a game for FUN Cool Down	Warm Up Approach and lane markings Core lesson backswing & slide Introduce foul line & deadwood Bowl 2 games Cool Down
4	Warm Up Review backswing lesson Core lesson Spot Bowling Bowl 1 game Cool Down	Warm Up Core lesson stance & approach Core lesson 3 step approach Bowl 2 games Cool Down
5	Warm Up Review Spot Bowling Core lesson plan 3 step approach Bowl 2 game for FUN Cool Down	Warm Up Spot Bowling Refining skills and making adjustments Bowl 2 games Cool Down
6	Warm Up Overall review Mini Tournament Cool Down	Warm Up Overall review Mini Tournament Cool Down

WARM UP AND STAYING SAFE

This section will take you through the lesson content of the first visit to the bowling centre, allowing you to know in advance what you will cover with your athletes. The program begins with the basics of bowling. But first, we look into preparing the body for the sport and ensuring everyone understands proper procedure to ensure a safe and fun time bowling.

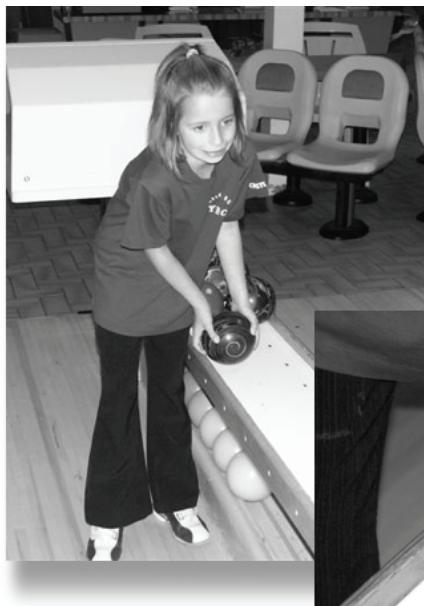
Proper Warm Up

To prepare the body for the variety and sequence of motions used in the sport athletes should do light stretching prior to participating.

Focus on the major muscles to be used; the hamstrings, back and shoulders.



Safety First



Picking up the ball from the ball rack can be dangerous. If done improperly a returning ball may make contact and result in injuries to fingers and hands, especially little ones. To avoid painful accidents a bowler should always use the correct method of picking up a ball.

To retrieve a ball safely from the rack the bowler should be facing the pins and should place a hand on each side of the ball, avoiding the front and back where returning balls would make contact. Once grasped correctly the bowler can then lift the ball straight up off the rack.

Reference: Bowl Canada – Learn to Bowl Program

Now that they have safely picked up the ball, they are ready to get set for delivery and throw their first ball. Delivery of the ball can be accomplished in one of two basic ways, dependent on the age and/or biological age (maturation level) of the bowler. Following are explanations of both the two handed and one handed methods of delivering a bowling ball.

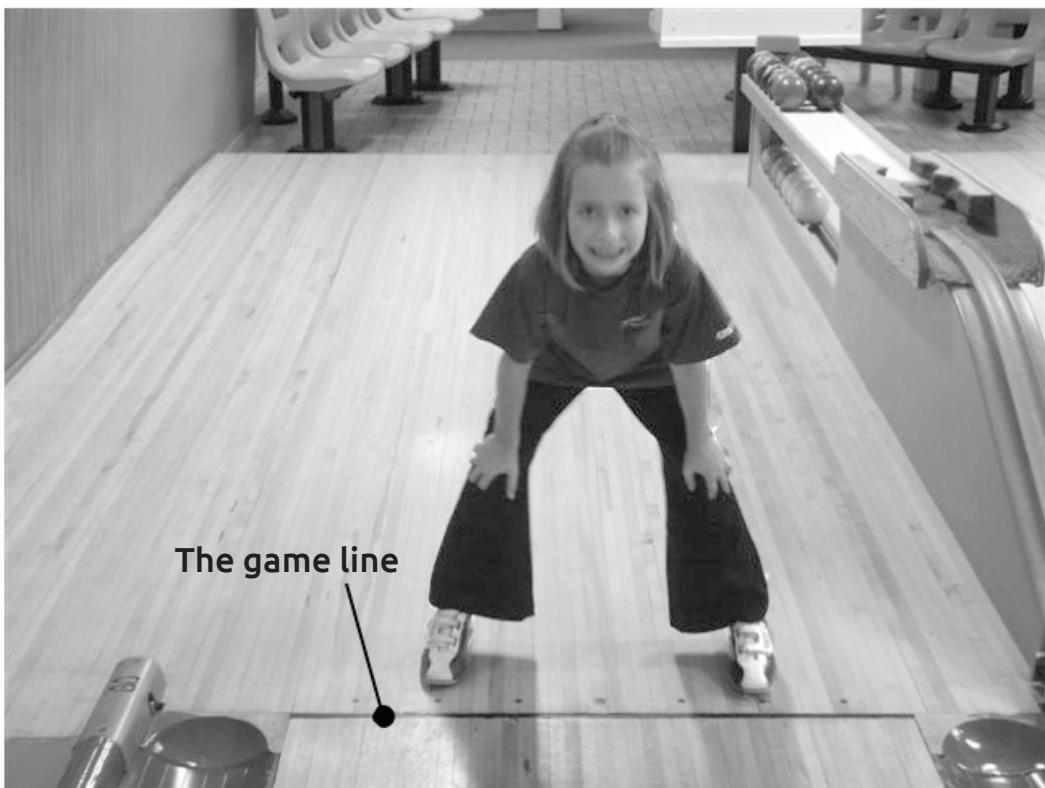
TWO HANDED DELIVERY

For younger bowlers, or those who are of similar stature, the best method of delivering a ball may be the TWO HANDED DELIVERY.

Position of the Feet

Explain to the athletes that the foul line is the line which denotes the end of the bowling approach (where a bowler delivers a ball) and the start of the actual lane (where the ball rolls on its way to knocking over the pins on the far end). Also explain that bowlers are not allowed to cross over this line with their feet.

If you have the chance to practice in a gym or classroom setting, ask them to select a line on the gym floor (or use masking tape on a classroom floor) and imagine it is the foul line at the bowling centre. Have the bowler walk up to the imaginary foul line and stop 8-10 cm's (3-4") from the line, place their feet about roughly 50 cm (20") apart. Make sure the feet are far enough apart that the bowler's arms can swing freely between the legs.



Reference: Bowl Canada – Learn to Bowl Program

These practice steps should be rehearsed at the start of the first visit to the bowling centre before any balls are actually used.

Holding the Ball

Once the bowler has assumed the correct stance at the line make sure they have the ball held firmly in their fingertips with the 3rd and 4th fingers on each hand touching each other and the thumbs as high on the ball as possible.



Reference: Bowl Canada – Learn to Bowl Program

SPOT BOWLING

Now that you have the bowler to the “point of delivery” they should have a target to shoot at. We are going to use the spots on the lane.

When a bowler is spot bowling they are aiming at a target that is only 4.5 m (15') away (the spots) rather than the pins that are over 18 m (60') away.

Have them look at their target, swing their arms back and forth a couple of times, release the ball from both hands at the same time past the foul line and keep both arms moving towards their target.

If a bowler is standing correctly, has a good grip on the ball and keeps their arms reaching for the target after delivery, they should be very successful.

Now that the bowlers have the basics of throwing the ball it just takes practice and occasional pointers and reminders from you, the coach.

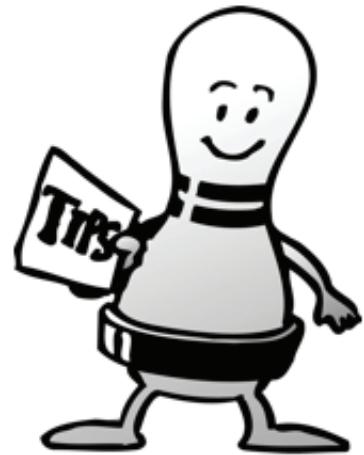


Reference: Bowl Canada – Learn to Bowl Program

COMMON MISTAKES

for two handed bowlers

- Not letting the ball go with both hands at the same time
- Bobbing their heads up and down
(this makes it hard to keep an eye on their target)
- Throwing the ball too hard
- Not following through with their hands and arms after releasing the ball
- Not keeping their thumbs up on the ball
- Not lining up straight at the foul line
- Leaning backwards after the delivery



ONE HANDED DELIVERY

This section will deal with older athletes who are big enough and strong enough to use the one-handed method.

The first thing you have to do to see if a bowler is ready to start one handed bowling is to ensure they are able and strong enough to hold the ball properly. To do this, ask the bowler to pick up a ball with their bowling hand and hold it on their finger tips. Then ask the bowler to turn the ball upside down as illustrated in these pictures. If they do not drop the ball they are ready to try bowling one handed.

IMPORTANT: someone should be prepared to catch the ball should the bowler not be able to hold on to it. Bowling balls are heavy enough to do damage to someone's foot or even the floor if dropped in this manner.



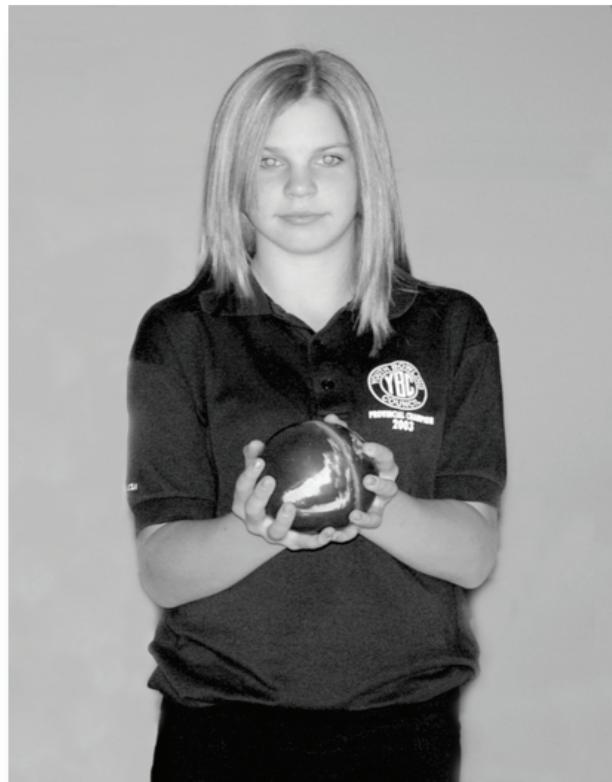
Reference: Bowl Canada – Learn to Bowl Program

For those who are ready to continue bowling with one hand, get the bowler to set up one step from the foul line, without a ball in their hand, and have them practice the following:

First, put all their weight on their right leg (left leg for a left handed person), feet together, shoulders square to the foul line, hands close to the chest. Remember, they don't have a ball in their hands yet.

Now have the bowler push their hands away from their body until the bowling arm is straight in front of them and let the arm drop down and come back in a pendulum-like swing with the shoulder as the centre point. When the hand is ready to come frontwards again, have the bowler take one step forward (with the foot opposite of the bowling hand), bend at the waist and release the imaginary ball onto the lane.

After a couple of practice runs without the ball the bowler is ready to try it with a ball. Get them to pick up a ball, set up in position as above, with a good grip on the ball, and tell them not to try and throw too hard. After a couple of frames remind them about their target and to keep their arm following through to their target as described previously (see Two Handed Approach).



Reference: Bowl Canada – Learn to Bowl Program

COMMON MISTAKES for one handed bowlers

- Trying to throw the ball too hard
- Not having a proper grip on the ball
- Too high a back swing (arm swing should be approximately parallel with shoulder height)
- Ball too far away from the bowlers side (on the way back and the way forward)
- Not watching the target

THE 3 STEP APPROACH

For those who can manage bowling one handed, the most common and most successful way of delivering the ball is the THREE STEP APPROACH. Once a bowler has become familiar with the one step approach (see previous) all you have to do is get them to add two more steps that will greatly smooth out their bowling technique. The mechanics behind the three step approach are:

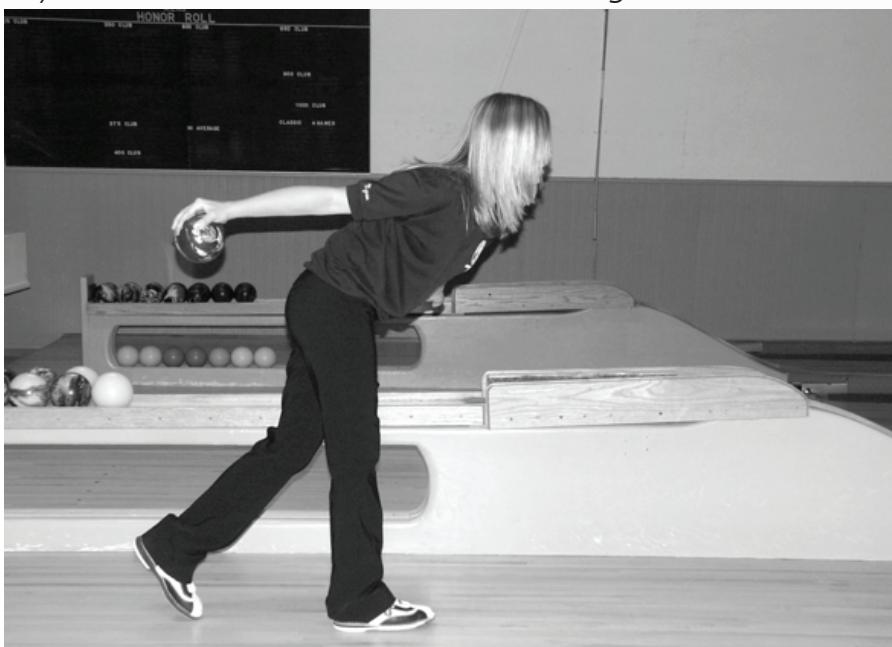
NOTE: All Steps described are for right handed bowlers- reverse for left handed



Step One:

All your weight on your right leg, slide your left leg forward while you push the ball away from your body.

Reference: Bowl Canada – Learn to Bowl Program



Step Two:

All your weight on your right leg, slide your left leg forward while you push the ball away from your body.

Reference: Bowl Canada – Learn to Bowl Program



Step Three:

Now bring your arm through while you step forward with your left foot and release the ball in front of you onto the lane.

This is the proper execution of the three step approach.

Reference: Bowl Canada – Learn to Bowl Program

Now get the bowlers ready. First determine where they are going to begin their approach. To do this, have the bowler stand on the approach, back to the foul line and heels 15 cm (6") from the foul line. Then, without a ball, have them go through a three step approach AWAY from the foul line. Where their left foot stops after the three steps will be the spot they should begin their approach.

Have the bowlers note where they stopped on the approach and have them go through the three steps once again, still without a ball, but this time towards the pins. If their test approach was accurate they should end up 7 to 15 cm (3 to 6") from the foul line. Have the bowlers run through the three steps a few times before using a ball.

This is how easy it is:

On 1: Push away and take the FIRST step with the left foot

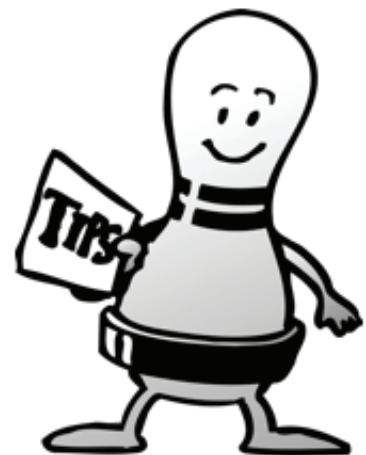
On 2: Back swing while taking the SECOND step with the right foot

On 3: Arm swing forward to make delivery as slide is taken with the left foot, to deliver the ball in front of you onto the lane.

TIPS TO KEEP IN MIND

As a bowler becomes more comfortable with the three step approach you can help them along by reminding them of the following:

- Use proper grip
- Concentrate on their target
- Approach in a straight line
- Keep their shoulders square to the target
- Use a smooth delivery
- Keep their arm close to their body
- Release the ball past the foul line
- Follow through to their target
- Don't try and throw too hard
- Don't approach too fast



The subsequent pages discuss advanced topics which are optional.



REFINING SKILLS AND MAKING ADJUSTMENTS

(Noted for right handed athletes- reverse for left handed)

Now that the basic concepts of safety in a bowling centre and the general mechanics of delivering a bowling ball have been covered, this section works on refining the delivery and improving performance through adjustments. While this section is not required for a 3-Visit program, it is great content for athletes who are advancing quickly, or if you are focusing on a 6- Visit program. The following tips will teach your athletes the fundamentals of how to refine their game and improve their scores.

Adjusting Your Starting Position

One of the significant advantages of spot bowling is the target (centre arrow) remains the same, regardless of which pins the bowler is trying to knock down. Moving the starting position left and right on the approach is used for hitting pins other than the headpin as well as for adjusting for the lateral movement of the ball. This lesson focuses on moving on the approach in order to convert spares. The starting positions are approximate and should be refined for each bowler.

Making That Spare

Even the best bowlers only get strikes approximately half the time they hit the headpin. Therefore, the ability to convert your second shot is a skill that distinguishes good players from everyone else. If you miss the middle (headpin) on your first ball, use the same starting position for your spare and focus on throwing the ball over the centre arrow.

Right Corner Spares

To hit the right corner pin, adjust your starting position to the left, using the centre arrow as a pivot. Your starting position, the centre arrow, and the right corner pin should be in a straight line. It will be necessary to move approximately 10 boards to the left to establish a straight line between these reference points. The exact distance depends on how far from the foul line the bowler starts. The dots on the approach can be used as a guide to remember your starting position. To create a straight line, it will also be necessary to point your feet towards the right corner pin. Do not change any of the mechanics to throw the ball. Follow through over the centre arrow.

Left Corner Spares

To hit the left corner pin, adjust your starting position to the right. Again using the center arrow as a pivot, create a straight line between your starting position and the left corner pin. Remember to point your feet towards the left corner pin.

This method has three major advantages. The bowler is using the same target and the same delivery for each shot. Moving across the lane also increases the angle to the pin allowing for a greater margin of error in case the bowler does not make a perfect shot.

By moving the starting position on the approach and pointing your feet at the pin, you can use the center arrow to hit any pin.

Chop Off Spares

If moving 10 boards from the center position for the bowler to hit a corner pin, then hitting the 3 pin would require a less extreme adjustment. Moving about 5 boards to the opposite side of the 3 pin you are aiming at will put the bowler in a straight line with their starting position, the center arrow and the 3 pin.

A common mistake with new bowlers is to walk straight towards the foul line, instead of walking towards the center arrow. They will wind up in the wrong position at the foul line and have to throw the ball across their body to hit the center arrow. Make sure your athletes turn their feet slightly to face the center arrow and walk in that direction.

The Follow Through

An extremely important part of bowling is the follow through, or ability to carry out the proper motions of delivery even after the ball has left the bowler's hand. An incorrect follow-through often leads to incorrect delivery and lessened performance. Bowlers may end up off-balance, release the ball too low or too high, release the ball with a veer-left or veer right trajectory, etc. Ensuring a bowler's follow-through will allow the bowler to achieve a more consistent delivery with a bowling ball and ultimately perform all the mechanics of the sport better.

COMMON MISTAKES on the FOLLOW THROUGH

- Not getting down low enough when sliding.... at the time of releasing the ball the bowler's arm should be approximately 5-10 cm (2-4") from the lane surface.
- Standing upright with the follow through (over extending)- this is often caused by going too fast.
- Turning sideways with body - often caused by going too fast.

TYPES OF BALL DELIVERY

(Noted for right handed athletes- reverse for left handed)

Hook Ball

A ball that rolls down the lane and moves to the left is called a hook. A hook is caused by a counter-clockwise rotation of the hand when releasing the ball.

In the previous section, you learned to move left when you want the ball to hit right. The proper adjustment to compensate for missing to the left when hitting the center arrow is to move the starting position one or two boards to the left of the center dot. This concept will seem counter-intuitive to many of your athletes, but remember you are using the center arrow as a pivot so moving left will actually send the ball more to the right.

If you are hitting the center arrow and you are missing the pin that you are trying to hit, move in the direction that you are missing....

Miss Left, Move Left... Miss Right, Move Right

While a counter-clockwise movement of the hand is natural for most people, it is difficult to be consistent throwing a hook ball because of the range of rotation of your hand at release. Athletes should focus on having their hand in the same position during each follow through.

Back Up Ball

A ball that makes a movement to the right as it rolls down the lane is called a back-up. It is caused by a clockwise rotation of the hand when releasing the ball. As your hand can only rotate a limited distance clockwise, the back-up ball, while more difficult to learn, provides the greatest consistency. To throw a back-up ball, athletes should focus on having their palm facing up in the follow through position.

The Release

Unfortunately the release happens so quickly it is virtually invisible to the naked eye. You can determine what is happening at the release by observing how the ball moves down the lane and what happens when the ball hits the pins.

A hook ball will move to the left. It will also deflect more to the left when it hits a pin. A back up ball will move to the right and deflect more to the right when it hits a pin.

The direction the ball moves and deflects is determined by the rotation at release. Remind your athletes that a straighter ball is easier to control. Focus on releasing the ball off your fingertips, and reduce the amount of rotation in your wrist.

THE DYNAMICS OF LEAGUE & TOURNAMENT PLAY

For those who may wish to get more in depth on the subject of bowling, the following are some basic principles which bowlers learn quickly once introduced to a bowling league, community program and/or tournament. Depending on your program you may wish to explain these items to the athletes for the end of the session tournament or should they wish to continue with bowling after the program has been completed.

Lane Etiquette

There is a pattern to taking your turn so that bowlers who are beside each other are not throwing the ball at exactly the same time. This is called lane etiquette.

If a bowler is standing on the approach on a lane next to you, it is that bowler's turn. Stay off of the approach until the ball has been thrown. If two bowlers are stepping onto the approach at the same time, the bowler on the right gets to throw first. The other bowler stays off the approach until the ball has been thrown.

Lane etiquette is seldom used during public bowling but it is always used during leagues and tournaments.

Lane etiquette is like crossing a street. Look both ways before getting up on the approach.



Handicap or Classified Events

Bowlers of different skill levels can compete on a level playing field through the use of handicaps. However, to establish a handicap it is necessary for each bowler to play enough games to determine their average. Usually a minimum of 25 games is required. Based on the short amount of time in the program coaches can adjust the minimum number of games so that they can use this for the end of session fun tournament. Once an average is established, there are several methods of creating competitions that allow bowlers with different averages to compete against each other.

In handicapped events each bowler's average is compared to a fixed score (usually 250) and they are given a handicap equal to the difference between their score and the fixed score. A bowler with a 125 average would have a handicap of 125, while a 200 average bowler would receive a handicap of 50. The handicaps are added to their scores at the end of a game, thus providing a level playing field for competition.

Special Olympics uses a variation of this is to compete at all major competitions. This variation is based on a "Pins Over Average". The bowler's final score is compared to their established average, and the difference is recorded as their Pins Over Average score. A player with a 125 average that bowls 150 would receive a plus 25 score. A player with a 200 average that bowls 150 would receive a minus 50 score. Again, this levels the playing field and rewards bowlers based on their personal ability.

In a Pins Over Average event, you are bowling against yourself first. How are you doing today compared to what you usually do? Plus? Minus? Even? The majority of tournaments and almost all leagues are based on Pins Over Average or a handicap system which works the same way.



APPENDIX A: KEEPING SCORE IN 5-PIN BOWLING

The following example picks up a bowler's progress in the 5th frame of a game. In frame 5 the bowler got 5 points on her first delivery, 2 points on her second shot and 5 on her third, a total of 12 points in the frame. In frame 6 she got 5 points on the first delivery, 3 on the second and a miss (no pins hit) on the third, adding up to a total of 8 points for the frame. These 8 points are added on to the 47 points in frame 5 and give the bowler a total of 55 points in the 6th frame. In frame 7 she knocked down all the pins on her first shot, bowling a STRIKE (marked as "X"). When a Strike is bowled no further deliveries are made in that frame. Although the value of the 5 pins knocked down in the Strike is 15 points, these points are not added in just yet as the strike entitles the bowler to also add in the point value of her next 2 deliveries. The total points are therefore left unmarked for now.

FRAME 5	FRAME 6	FRAME 7	FRAME 8	FRAME 9	FRAME 10
5 2 5	5 3 -	X			
47	55				

In frame 8 the bowler's first delivery earns her 5 points. Still we do not add in a score in the 7th frame as a Strike includes the next two deliveries. On her second ball in the 8th frame she knocks down all the remaining pins, bowling a SPARE (marked as "/"). Having Spared the frame a 3rd delivery is not required in the 8th frame. The "5" and "/" are marked in the appropriate first and second ball boxes at the top of the frame. Now with 2 deliveries completed after the strike in the 7th frame we can go back and record the points earned in Frame 7. Firstly a strike in frame 7 is worth 15 points (all pins were knocked down). Added to this is the value of the next two balls (15 points recorded in frame 8... the first ball earned 5 and the spare ensured another 10). So, the strike in frame 7 earned 30 points, which we add to the 55 points in frame 6 for a total of 85 points in frame 7.

FRAME 5	FRAME 6	FRAME 7	FRAME 8	FRAME 9	FRAME 10
5 2 5	5 3 -	X	30 5 /		
47	55	85			

Having bowled a Spare in the next frame, frame 8's score cannot be tallied until the next delivery is made. Spares are worth the total points knocked down in their frame (all pins down equals 15 points) PLUS the value of pins knocked down by the bowler's next delivery (in the next frame). In our continuing example, the bowler's first ball in frame 9 only knocks down a 3 Pin. These 3 points are added to the 15 points earned in frame 8 for a total earnings of 18 points on the Spare which, added to the 85 points in frame 7 give the bowler a total of 103 points in frame 8 as illustrated below. Continuing in frame 9 the bowler gets 5 points on her second ball and 2 points on her third, for a total of 10 points which are added to the 103 total in frame 8 for a frame 9 score of 113.

FRAME 5	FRAME 6	FRAME 7	FRAME 8	FRAME 9	FRAME 10
5 2 5 5 3 -	X	30	5 1 18	3 5 2	
47	55	85	103	113	

Frame 10 is slightly different than all the other frames. In all cases 3 balls are to be thrown. This ensures that even if the first ball is a strike the strike will carry the value of 15 plus the next 2 balls thrown. To pick up where we left off, our bowler gets a strike on her first ball in the 10th. The value of the tenth frame can only be tallied once all three balls have been delivered. On her second ball she knocks down a 3 Pin. So far she has 18 points in the 10th. On her third ball (the last of the game) she manages to Spare (knocks down all remaining pins on a second ball after the full rack of pins has been reset). The strike was worth 15 plus the value of the next two balls, which in this case were worth another 15 points. This totals 30 points earned in the 10th frame for a total score of 143. See the following illustration and how the strike and spare are recorded in the 10th frame.

FRAME 5	FRAME 6	FRAME 7	FRAME 8	FRAME 9	FRAME 10
5 2 5 5 3 -	X	30	5 1 18	3 5 2	X 3 1
47	55	85	103	113	143

This example of scoring should clarify how bowling is scored. Keeping score formally is a bit more involved as specific outcomes of deliveries have their own names and symbols used when scoring.

While this is certainly not required at this level of introduction, athletes will, in all likelihood see the following symbols on the automatic scoring systems at the bowling centre.

Here are brief explanations of the specific configuration of pins left standing which carry their own names and are recorded with their own symbols:

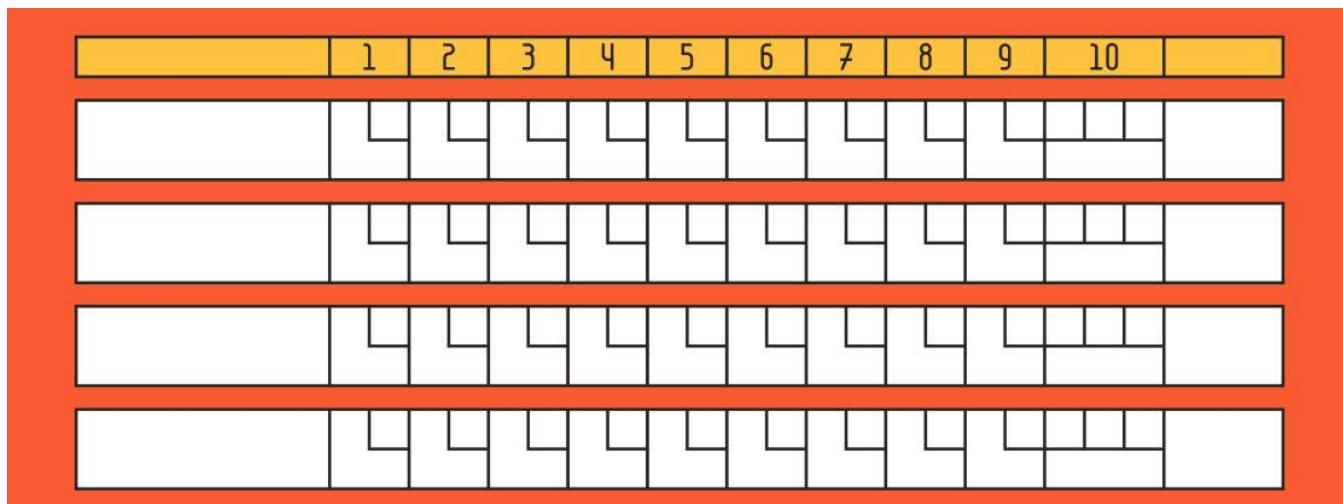
HEADPIN (marked as "H")... If on a first ball of a frame a bowler hits only the headpin and leaves all other pins standing, this is called "punching the headpin" and instead of placing a "5" in the score box to denote the value of the pin knocked down, an "H" is recorded instead to specifically denote that it was a headpin-only hit in the frame.

CORNERPIN (marked as "L" or "R")... A cornerpin leave is recorded when the frame's first delivery takes out all the pins except one of the 2 pins. If the remaining pin is on the bowler's left side it is called a Left Cornerpin and marked as an "L". If the remaining pin is the Right Cornerpin it's marked as an "R". Either one has a value of 13 points.

ACES (marked as "A")... "Aces" are recorded when, on a first delivery of a frame, the Headpin and both 3 Pins are knocked down, leaving only both Corner Pins standing. While only an "A" is noted in the score box, 11 is understood to be its value and is used in calculating points earned.

CHOP OFF (marked as "C")... A Chop Off (or Chop) is the name given to a frame's first delivery when the outcome is the knocking down of the headpin and one of the "sides" (a 3 pin and corner pin combination on the same side of the headpin). A chop off can be either the headpin with the right 3 pin and right cornerpin OR the headpin with the left 3 pin and left cornerpin.

SPLIT (marked as "S")... A Split is recorded when the frame's first delivery takes out the headpin and only one of the 3 Pins. The result is the remaining pins seem to be split up and are therefore harder to spare.



APPENDIX B: RESOURCES

The *Learn to Bowl* program has several materials available online to help make Learn to Bowl an easy, turn-key program for both coaches and athletes. All of these materials can be easily downloaded from the Canada Bowls website. Simply log on to:

<http://www.canadabowls.ca/en/learntobowl/index.html>

Additional Resources:

<http://c5pba.ca>

<http://www.bowlcanada.ca>

<http://www.youthbowling.ca>

<https://www.youtube.com/user/C5PBA>

<http://www.specialolympics.ca/what-we-do/official-sports/>



Athletes name:

Skills Rubric – Learn to Bowl				
Knowledge/skills	Level 1	Level 2	Level 3	Level 4
Understanding of the concepts	Shows understanding of few of the required concepts taught with major errors or omissions	Shows understanding of some of the required concepts taught with several minor errors or omissions	Shows understanding of most of the required concepts taught with a few minor errors or omissions	Shows understanding of all or almost all of the required concepts taught with practically no errors or omissions
Movement skills (locomotion, sliding, manipulation, stability)	Performs few of the required skills as described	Performs some of the required skills as described	Performs most of the required skills as described	Performs all or almost of the required skills as described
Active Participation (level of fairness, fair play, goal setting)	- Participates actively with constant encouragement - Applies few of the required skills	- Participates actively, needing occasional encouragement - Applies some of the required skills	- Requires no encouragement to participate actively - Applies most of the required skills	- Participates actively in a manner that encourages others to participate - Applies all of almost all of the required skills
Safety in participation	Requires constant reminders regarding safety procedures and the safe use of equipment and facilities	Requires occasional reminders regarding safety procedures and the safe use of equipment and facilities	Follows safety procedures and uses equipment and facilities safely	Follows safety procedures and uses equipment and facilities safely and encourages others to do so
Other				



Thank you!

This resource was adapted from the “Learn to Bowl” Program, Bowl Canada

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