



CONTENTS

Introduction	2
<p>An explanation of the Learn to Bowl Program.</p> <p>Topics include; Goal of Learn to Bowl, Teaching Learn to Bowl is Easy, Why Learn to Bowl, How the Program works, Completion of Program, Youth Bowling, Your Local Bowling Centre, Customize the Program for your class, Designed for Your Curriculum, Government of Canada recognition of the Sport</p>	
CHAPTER 1 - In Class Introduction	6
<p>Background information you can cover in class as an introduction for the students prior to the first visit.</p> <p>Topics include; Preparing to go Bowling, Safety First, Stretching, Basics of Bowling, Terminology, Pin Values and How to Score Well, Setting Up Teams & Team Roster Forms</p>	
CHAPTER 2 - Basics learned during your visits to the Bowling Centre	11
<p>Topics include; Proper Warm Up, Safety First, Two Handed Delivery, One Handed Delivery, Three Step Approach, Tips</p>	
CHAPTER 3 - Advanced Topics	20
<p>Topics include; Refining Skills & Making Adjustments, Types of Ball Delivery, Dynamics of League and Tournament Play</p>	
CHAPTER 4 - Keeping Score in 5-Pin Bowling	25
<p>For advanced classes who would like to use the program to support math class</p>	
CHAPTER 5 - History of Bowling and 5-Pin Bowling	28
<p>For advanced classes who would like to use the program to support Canadian History class</p>	
CHAPTER 6 - Teacher's Resources	30
Acknowledgements	32



INTRODUCTION

The **GOAL** of the **Learn to Bowl** 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.

Each student participating in the Learn to Bowl program will receive an achievement card at the completion of the program which offers them 5 Free Games of Bowling over the course of the summer as well as \$5.00 off the cost of registration in Youth Bowling Canada.

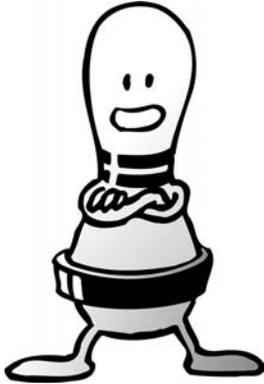
Success in most sports favours the biggest, fastest and strongest students. Although these physical qualities play a role in any sport, the attributes that make a good bowler are coordination, balance, concentration and mental discipline. Bowling is easy to learn but difficult to master, so it will challenge all your students. It provides an opportunity for everyone to experience personal success and has an easy-to-understand handicapping system to provide a level playing field between participants of different skill levels.

TEACHING LEARN TO BOWL IS EASY

Getting this program started in your school 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 class visits. Certified coaching is available at no additional charge.

A certain amount of the program can be completed in class or in your school gymnasium (see Chapter 1). Many resources are available in this booklet to make Learn to Bowl a turn-key part of your class curriculum and many more resources are available online.

Lastly, you do not need to be a bowler to offer this course to your students. A DVD, approved by the Coaching Association of Canada, is included with this guide to visually illustrate proper bowling technique in a simple, quick and effective manner. In approximately 7 minutes it will show your kids all they need to know to get started and **HAVE FUN**.



WHY LEARN TO BOWL?

- Meets prescribed Curriculum expectations common in most provinces, teaching and reinforcing the...

FUNDAMENTAL MOVEMENT SKILLS:

Balance, Motor Skills, Stability, Locomotion, Manipulation, Sliding, etc.

These all help youngsters grow into **Physical Literacy**

- Program can be **cross-curriculum** touching on Phys. Ed., Math, Canadian History, Art
- Students learn a **Lifetime sport** that promotes an active lifestyle
- Nobody warms the Bench and the Handicap system ensures that bowlers of all abilities participate on a level playing field
- No equipment is required
- **Kids LOVE BOWLING**

LEARN TO BOWL - HOW IT WORKS

Learn to Bowl is an opportunity to offer your class outings to your local bowling centre and mix in some FUN with your Physical Education program. The program can be run as either a 3-visit program or a 5-visit program as follows:

In class Portion (common to either program length)

How to Come Prepared, Safety First, Pin Values, the basics of How to Score Well, watch a Video (included with this guide) of how to deliver a bowling ball, basic terminology of bowling, determining your teams.

Materials are also available in the **Resources** chapter at the back of the book to make the class portion of the program more meaningful where desired. Content is available which is suitable to a range of ages. From colouring sheets to word searches to tests on the terminology, history of the Canadian game and the principles of keeping score.

3 Visit Program	5 Visit Program
<p>Visit 1 Review of Safety Rules & Instruction of a 3 Step Approach & Delivery followed by time to practice the above concepts & have fun.</p> <p>Visit 2 Coaching/Instruction continues, and bowling time while coach(es) help refine students' deliveries.</p> <p>Visit 3 Explanation by coach of various tournament formats followed by Wrap up and Fun Tournament.</p>	<p>The 5 Visit Program covers all the topics of the 3 Visit program but allows the coach to go into more detail and cover more content.</p> <p>The added time also allows for more time for students to bowl and gives coaches more opportunity to help students who may need assistance with their game.</p> <p>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.</p>

Each visit to the bowling centre lasts an hour. The cost of the program will vary by bowling centre but is expected to be approximately \$3 to \$4 per student per visit. Check with your local bowling centre proprietor to see what he can offer your group.

COMPLETION of PROGRAM

Upon completion of the Learn To Bowl program, each participant shall receive an Achievement Card where the bowler can list his scoring accomplishments, etc. This card also includes coupons to bowl **5 free games** through the course of the summer at the participating bowling centre (limit one free game per day) as well as a coupon which can be redeemed the following September for \$5 off the cost of registration in Youth Bowling Canada (YBC).

YOUTH BOWLING

Learn to Bowl directly ties in to 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. YBC offers experienced instructors, many of whom are certified by the Canadian 5-Pin Bowlers Association and the Coaching Association of Canada. YBC also offers many tournaments, some of which lead up to Provincial and even National Championships.

YOUR LOCAL BOWLING CENTRE

Bowling centres can be found in nearly every community across Canada. For a list of bowling centres near you visit www.canadabowls.ca/learntobowl. Bowling centres have really changed over the years. No longer the smoke-filled "alleys" of days gone by, bowling centres today are smoke-free family entertainment centres. 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 bowlers out of the gutters. Nearly all centres also offer registration into Youth Bowling Canada leagues and experienced instructors, many of whom are certified by the Canadian 5-Pin Bowlers Association and the Coaching Association of Canada.

CUSTOMIZE THE PROGRAM FOR YOUR CLASS(ES)

Learn to Bowl can be used to reinforce math skills by teaching the students to keep score or by using 5-Pin bowling to teach a little bit of Canadian history (5-Pin is a version of bowling created in Canada and recognized by Heritage Canada as a "Heritage Sport").

Resource materials for these and other topics can be found in the Resources chapter and online as applicable.

DESIGNED FOR YOUR CURRICULUM

The Learn to Bowl program has been designed taking Ministry of Education Curriculum Expectations into account. While each province's requirements may vary, the Ontario Curriculum Expectations was used as a guideline and should suitably suffice in reaching basic curriculum expectations nation-wide.

RECOGNITION FOR 5-PIN BOWLING FROM THE GOVERNMENT of CANADA

Recently, 5-Pin Bowling has been recognized by the Canada Revenue Agency as an eligible sport for the **CHILDREN'S FITNESS TAX CREDIT**. Additionally, 5-Pin Bowling was recognized in 2008 by **HERITAGE CANADA** as a **CANADIAN HERITAGE SPORT**.

Learn to BOWL

CHAPTER 1

In Class Introduction to Bowling

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 chapter covers a planned review/introduction of bowling so that the students come prepared with a basic knowledge of the sport.

Students and any adult volunteers who accompany the class should be aware of the following:

Recommended Dress	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

While bowling centres are safe and friendly facilities it is important to remember that there are inherent dangers in any environment, especially ones filled with youngsters having fun and potentially getting carried away in a good time.

One of the first 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 in class, and reinforcing the safety rule at the bowling centre. Please read through this section in Chapter 2 and cover it with your students in class prior to your first visit.

Children 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 student 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 so as to avoid any unfortunate occurrences.

And lastly, proper conduct will often ensure a good time for everyone.

THE BASICS OF BOWLING

TERMINOLOGY

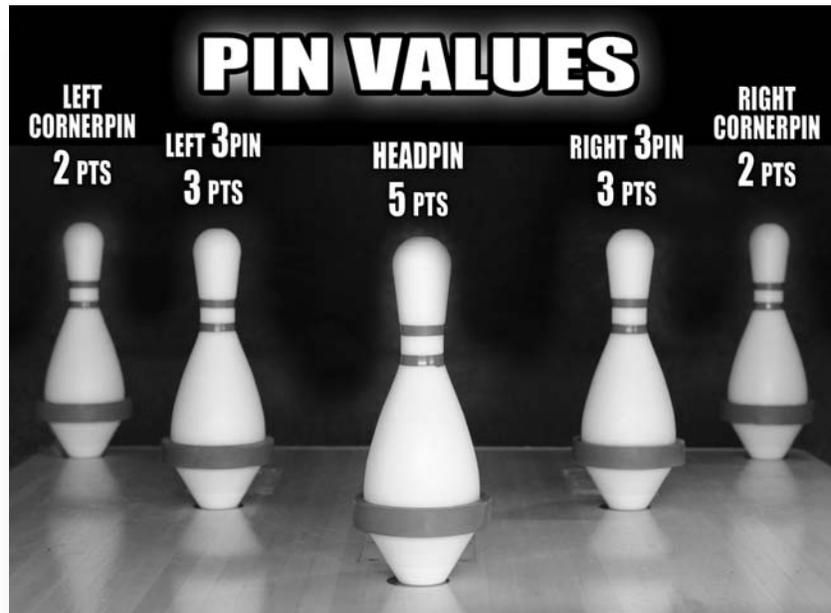
Game	A game of bowling is defined as 10 consecutive frames of bowling completed by a bowler.
Frame	A frame is a bowler's turn at attempting to bowl down all 5 pins using up to 3 ball deliveries.
Strike	The act of bowling down all 5 pins on the first delivery of a frame. If a strike has been made no further 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	Far from "foul"... 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 are modern entertainment facilities and 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.

Fivepin 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. Basically, 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 Chapter 4 you'll find a complete lesson on Keeping Score should you wish to utilize this module of the program for your class. Sample tests are also available (see Resources).

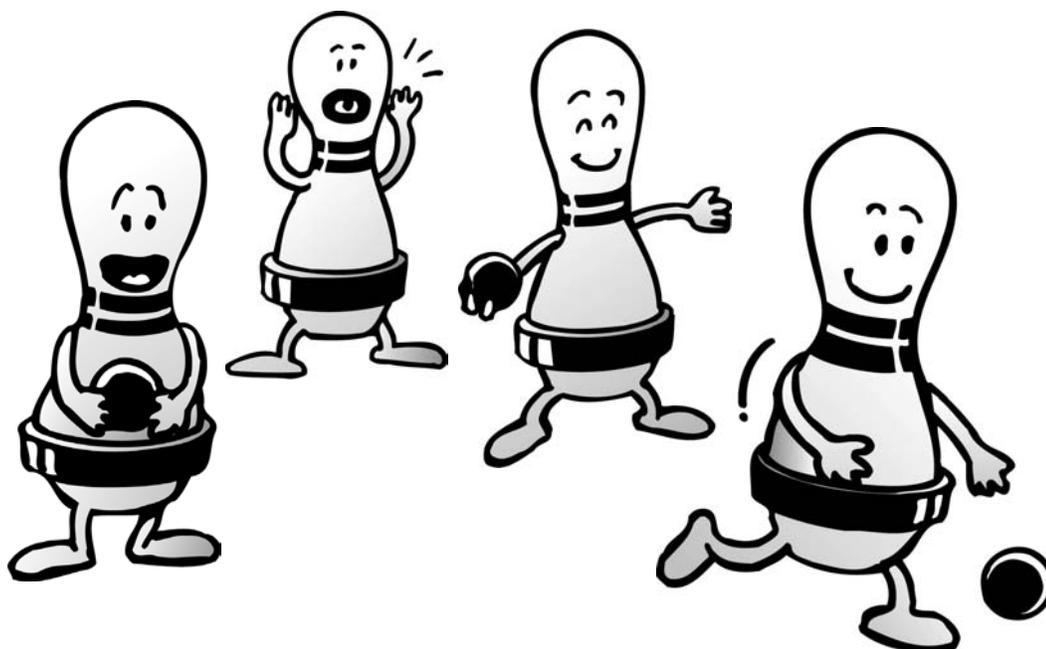


SETTING UP TEAMS for your GROUP

On the following page is a Team Roster Form which can be used to break your classroom 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 students 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.
- You may wish to ensure gender equality on each team
- Alternatively for larger classes you may, if you wish, break the class into two divisions (Boys & Girls)

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



LEARN TO BOWL - TEAM ROSTER FORM

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

Please provide the bowling centre with this TEAM ROSTER FORM a few days before your first visit. This 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. For a clean copy of the form visit www.canadabowls.ca/learntobowl.

Learn to BOWL

CHAPTER 2

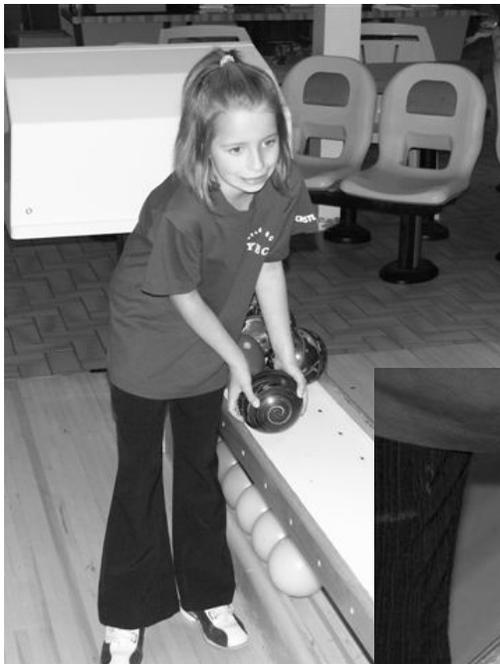
Basics learned during your visits to the Bowling Centre

This chapter will take you through the lesson content of the first visit to the bowling centre, allowing you to know in advance what the coach will be covering with your students. 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 trip bowling.

PROPER WARM UP

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

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



SAFETY FIRST

As silly as it may sound, 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.

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.

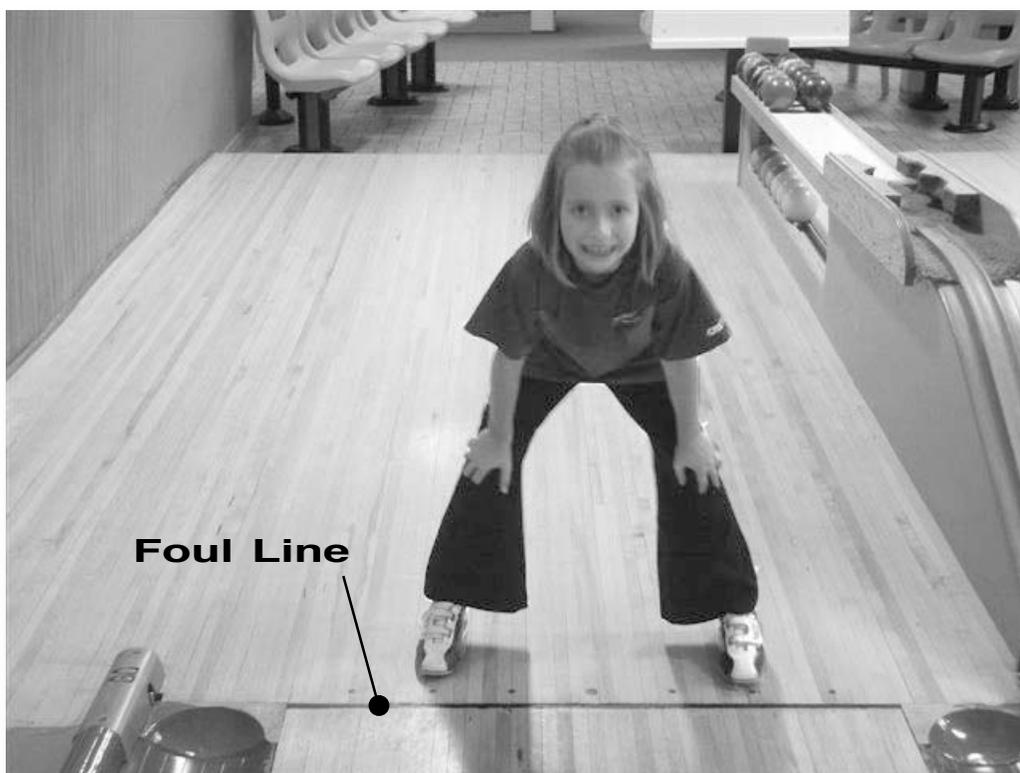
TWO HANDED DELIVERY

For younger bowlers (ages 5 to 9), or those who are of similar stature, the best method of delivering a ball may be the TWO HANDED DELIVERY.

POSITION OF THE FEET

In the classroom setting prior to a bowling centre visit, explain to the students 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 it's 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.

For the purposes of practicing 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.



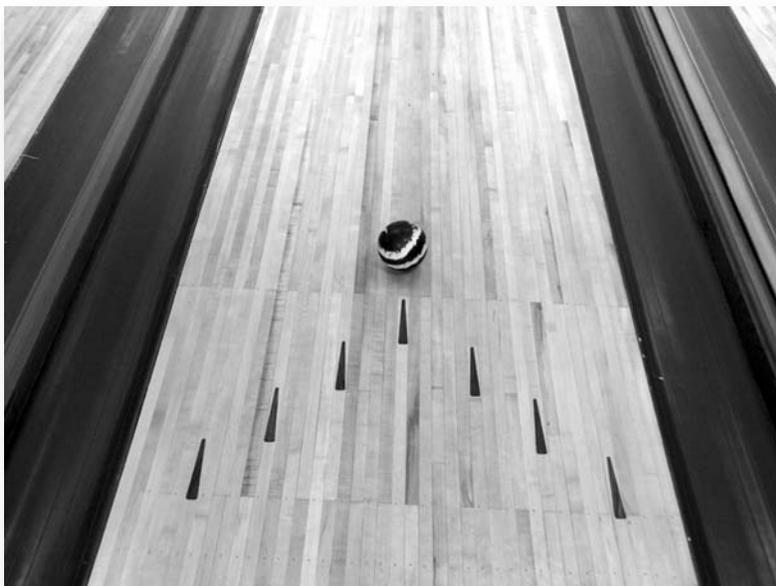
These practice steps should be rehearsed again at the start of the first visit to the bowling centre before any balls are actually used.

HOLDING THE BALL

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



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 instructor.

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 bigger kids 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.

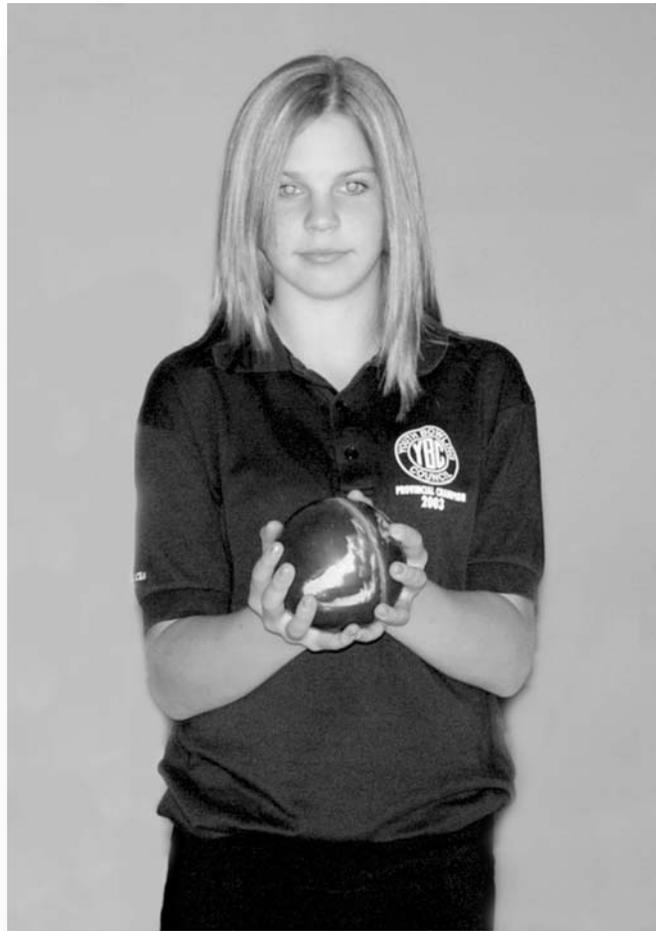


For those who are ready to continue bowling with one hand, get the bowler to set up one step from the foul line, without a ball in their hand, and have them practice the following:

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).



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
- Shoulders not square to the foul line

THE 3 STEP APPROACH

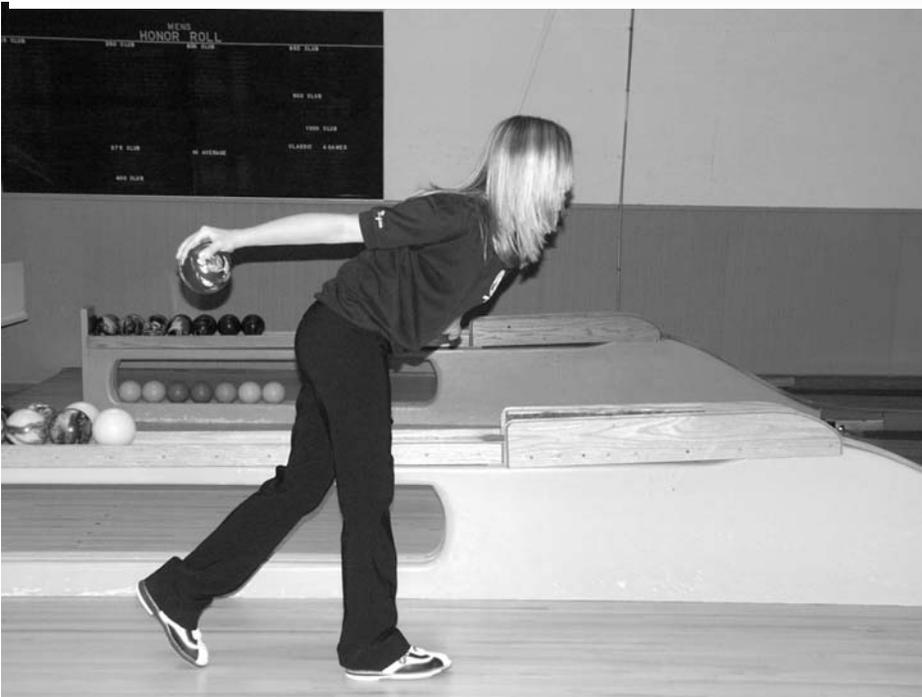
For those who can manage bowling one handed, the most common and most successful way of delivering the ball is the **THREE STEP APPROACH**. Once a bowler has become familiar with the one step approach (see previous) all you have to do is get them to add two more steps that will greatly smooth out their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



STEP TWO:

Bring the ball back behind you while you step forward with your right foot.

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.



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.

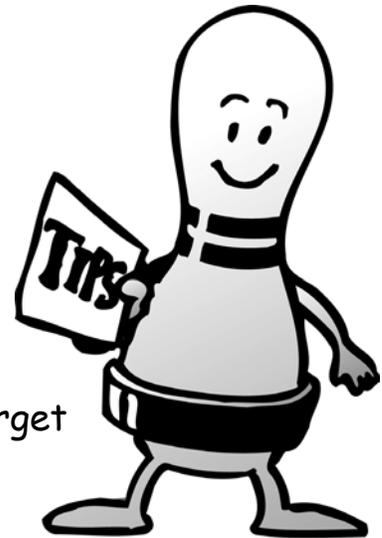
Have the bowlers note where they stopped on the approach and have them go through the three steps once again, still without a ball, but this time towards the pins. If their test approach was accurate they should end up 7 to 15 cm (3 to 6") from the foul line. Have the bowlers run through the three steps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

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



Learn to BOWL

CHAPTER 3

Advanced topics (optional) learned at the Bowling Centre

REFINING SKILLS AND MAKING ADJUSTMENTS

(Noted for right handed students.... 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 chapter 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 students in higher grades, especially where a 5-Visit program has been selected. The following tips will teach your students 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 positions 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 students 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 to fast.
- Turning sideways with body - often caused by going to fast.

TYPES OF BALL DELIVERY

Descriptions relate to right handed bowlers (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 students, 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. Students 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, students 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 students 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 and/or tournament. Teachers may wish to explain these items to the students should they wish to continue with bowling after the class program has been completed. And remember, each student participating in Learn To Bowl will receive an Achievement Card which offers them 5 Free Games of Bowling over the course of the summer, as well as a \$5.00 discount off of registration costs with Youth Bowling Canada (YBC). YBC Leagues typically form in September, so those who are interested in bowling can practice using their Free Game coupons and then take advantage of the \$5.00 savings when they're ready.

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.

ALTERNATING LANES

When you go to the bowling centre with your friends you usually are given one lane and take all of your turns on the same lane. When bowling in a league or a tournament, you alternate lanes. All odd frames of a game are played on one lane and all even frames are played on the other lane.

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 12 games is required. Once an average is established, there are several methods of creating competitions that allow bowlers with different averages to compete against each other.

In handicap events each bowlers 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.

A variation of this is to compete on a Pins Over Average basis. The bowlers 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.

If your students have the necessary math skills please introduce handicaps to them. With the introduction of computer scoring, many bowling centres can add handicaps directly to each bowler's score. For more information on handicaps, contact your local bowling centre or bowlers' association.



Learn to BOWL

CHAPTER 4

Keeping Score in 5-Pin Bowling

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 / 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 / 18	3 5 2	X 3 /
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, students 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 bowlers 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.

Learn to BOWL

CHAPTER 5

History of 5-Pin Bowling

HISTORY of BOWLING

For thousands of years bowling has been a source of enjoyment and a means of staying active and social. Archaeologists discovered relics of a form of bowling in an Egyptian grave dating back to 5200 BC (that's 7,000 years of bowling!). Since then bowling has gone through many variations, using clay, wood, and stone equipment on grass, dirt, ice, and wood floors. In different parts of Europe, a variety of bowling-like games developed. Bocce, lawn bowling and curling are games directly related to bowling.

Throughout history some key historical figures have been known to partake in one form of bowling or another. In fact, King Edward III (circa 1366) had to outlaw the game in order to keep his troops focused on their Archery practice. And literature points to Rip Van Winkle being awakened by the sound of "crashing ninepins", a version of bowling still popular today in Europe.

Most recently, in 1909 Tommy Ryan of Toronto invented a variation of bowling which is uniquely Canadian and is played almost exclusively in our country. Mr. Ryan felt that the American game of Tenpin Bowling took too long to play (especially since pins were set by hand at the time). By reducing the number of pins, he reasoned, a quicker and more exciting game would emerge. Using a lathe he turned down the pins to a smaller size and used 5 pins instead of 10. He also reduced the size of the ball making it easy for men, women and children to participate and have fun. Just like that our national sport of 5-Pin Bowling was invented.

Did you know that:

- Each week nearly 1 million Canadians go bowling
- Fivepin bowling was recently voted the 4th greatest Canadian invention of all time on the CBC Television series *Greatest Canadian Inventions*
- The Canadian government recently recognized 5-Pin Bowling as a Canadian Heritage Sport.

HISTORY OF 5-PIN BOWLING

- 1909 Thomas F. (*Tommy*) Ryan invents 5 Pin Bowling in Toronto, Ontario. Original Pin Count (values) are established as (from left to right) "4-2-1-3-5".
- 1910 First 5 Pin Bowling League was formed at Ryan's Toronto Bowling Club.
- 1912 Rubber band was added to the Pins.
- 1921 First perfect "450" game bowled by Bill Bromfield in Toronto, Ontario.
- 1921 First Ladies' 5 Pin Bowling League started by Marion Dibble in Toronto, Ontario.
- 1927 First 5 Pin Bowling organization "Canadian Bowling Association" (*CBA*) formed in Toronto, Ontario.
- 1928 First "Official 5 Pin Rule Book" printed by the CBA.
- 1952 Pin Count revised to (from left to right) 2-3-5-3-2 (as current)
- 1953 First Canadian Championship (*East vs. West*) conducted in Regina, Saskatchewan.
- 1957 First automatic pinsetting machine introduced.
- 1958 First "Pepsi-Cola High School Championships" held in Alberta.
- 1962 Lane Certification and Tournament Sanctioning introduced.
- 1963 Bowling Proprietors' Association of Canada (*BPAC*) formed.
- 1963 BPAC introduces program for young bowlers named National Youth Bowling Council (*now named Youth Bowling Canada and often referred to as YBC*).
- 1963 First automatic string pin-setter introduced.
- 1965 Bowling pin measurements standardized.
- 1970 Master Bowlers' Association of Canada formed.
- 1971 Tommy Ryan inducted posthumously into Canada's Sports Hall of Fame.
- 1972 BPAC introduces a program for senior citizens named National Golden Age Bowlers' Club (now named Club 55+)
- 1975 Government survey reveals 680,000 bowlers in 20,000 leagues across Canada.
- 1976 National 5 Pin Bowling "Instruction & Coaching" Program introduced by the Master Bowlers' Association of Canada.
- 1978 The Canadian 5 Pin Bowlers' Association (*C5PBA*) is formed to become the new Sport Governing Body for the sport of 5 Pin bowling.
- 1983 5 Pin Bowling participates in Canada Winter Games in Chicoutimi, Quebec.
- 1990 Rules changed to allow the use of personal bowling balls.
- 1995 Government statistics report 521,000 Canadians participate regularly in 5 Pin Bowling
- 2007 CBC Television Series "Greatest Canadian Inventions" lists 5-Pin Bowling as the 4th Greatest Canadian Invention of all time (as voted by the Canadian public).
- 2007 Youth Bowling Canada leagues qualify for the new Children's Fitness Tax Credit
- 2008 Heritage Canada recognizes 5-Pin Bowling as a Canadian "Heritage Sport"
- 2008 To kick off the Centennial Anniversary bowling season, Terry Burns of Yellowknife, Northwest Territories bowls in 100 bowling centres coast to coast over 100 days.
- 2009 5 Pin Bowling celebrates its Centennial Anniversary

Learn to BOWL

CHAPTER 6

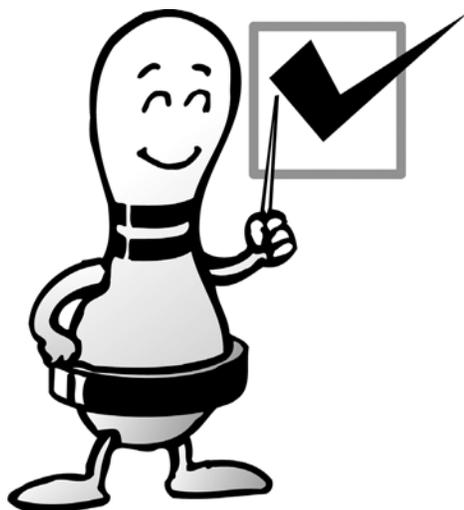
Teacher Resources

The Learn to Bowl program has several materials available online to help make Learn to Bowl an easy, turn-key program for both teachers and students. All of these materials can be easily downloaded from our website, along with materials found in this booklet should you require another copy (or clean copies for photocopying). Simply log on to

www.canadabowls.ca/learntobowl

Some materials are tailored to classes of specific ages (such as colouring sheets for the younger classes and Scoring worksheets for older students) while other materials are generic or even specifically provided for the teacher alone.

Among the materials you will find are.....



- Grading Rubric (as seen on opposite page)
- Team Roster Forms
- History of 5-Pin Bowling and a Sample Test
- Keeping Score worksheets and Sample Test
- Colouring sheets
- Fill in the Blanks fun sheets/tests
- Word Scrambles
- Crossword Puzzles
- Order form to request supplies

We hope these materials make teaching Learn to Bowl an EASY and FUN part of the school year for you and your students.

GRADING RUBRIC - LEARN TO BOWL

KNOWLEDGE/SKILLS	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	SCORE
Understanding of 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/travelling, sliding, manipulation, and 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 all of the required skills as described	
Active Participation; (level of fitness, fair play, safety and living skills including problem solving, goal setting & conflict resolution)	- Participates actively only 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 or 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:					

Student Name:

Score/Grade:

Learn to BOWL

ACKNOWLEDGEMENTS

GOVERNMENT

Heritage Canada, Sport Canada & Coaching Association of Canada

BOWLING ORGANIZATIONS

Bowling Federation of Canada, Youth Bowling Canada, Bowl Canada,
Canadian 5-Pin Bowlers' Association, Master Bowlers' Association of Canada

TEACHER'S ADVISORY COMMITTEE

Tom Paterson, Tracy Anseth, John Jelaca, Jason Currie, Wes DaSousa,
Bob Thomas, Dan Budnaruk

CONTRIBUTING INDIVIDUALS

Brittany DaCosta, Bob Randall, Roland Handley, Paul Oliveira

RESOURCES PROVIDED BY

Bowl Canada, Youth Bowling Canada, Canadian 5 Pin Bowlers' Association,
Coaching Association of Canada, Bowl Alberta, "Technique Bowling" by Tom Paterson

Learn to Bowl is proud to acknowledge the financial support of the Government of Canada through the *Heritage Sport Program*, a program of the Department of Canadian Heritage.

Canada

