

PORTLAND BEAVERTON

IN-SCHOOL BOWLING Teacher's Edition Curriculum Guide

Brought to you by the



Bowling Proprietors' Association of America

We gratefully acknowledge the Young American Bowling Alliance Junior Olympic Coaching and Port-A-Bowl U.S.A. for their contribution to the BOWLER'S *ed*/In-School Bowling program and for their commitment to the development and education of future bowlers nationwide. We also wish to recognize the American Bowling Congress and the Women's International Bowling Congress for their support of this and other youth programs that promote the sport of bowling.

SECTION 1

INTRODUCTION TO BOWLING

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SECTION 1

Section 1 - INTRODUCTION TO BOWLING

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Introduction to BOWLER'S ed./

In-School Bowling

Congratulations! You have taken the first step toward launching a successful and *FUN* bowling program for your students. BOWLER'S *ed*/In-School Bowling will not only teach youth the skills necessary to compete in bowling but will also enhance their coordination, promote self-esteem, and introduce them to a lifelong sport that everyone can enjoy.

The goal of physical education is to teach youth the importance of building and maintaining healthy minds and bodies through athletics and to create awareness of the contribution an active lifestyle makes to achieving that goal. Developing a student's interest in sports and leisure activities reinforces this teaching and introduces them to a lifetime of competitive fun and enjoyment.

For educators, recreation directors and youth organizers the BOWLER'S *ed/*In-School Bowling program will illustrate that the skill requirements for bowling are no different than that of any other sport. Bowling requires individual coordination, timing, and concentration yet allows a number of students to participate. And because strength, speed, and size are not essential components in the sport, students who may be unable to compete on another playing field can find athletic success in bowling.

Students will discover the fun and excitement bowling has to offer. As their skills improve, they will experience a sense of accomplishment and enjoy the satisfaction of increased confidence for having mastered a new game.

BOWLER'S *ed*/In-School Bowling includes video and classroom instruction. There are lesson plans to follow that include worksheets, quizzes, and hands-on instruction with drills for rapid skill improvement. Teachers who have been teaching bowling for several years will find the teaching format easy to follow and will especially enjoy our section on

FUN and FITNESS. Best wishes for a great bowling unit!

The History of Bowling

The earliest form of bowling can be traced back more than seven thousand years. A professor of Egyptology discovered a complete set of bowling equipment at a child's gravesite in about 5200 B.C. The items included small stone balls; several pieces of marble were believed to have been used to form an archway through which the balls were rolled at the pins.



Often we hear bowlers referred to as "keglers". This term originated from a German game in the fourteenth century. People rolled round stones in the church cloisters, hoping to knock over the 'kegel' (a club like weapon) which represented evil.

Abraham Lincoln was the first prominent American to spend time at the bowling lanes. As the Germans settled in America, bowling became a major part of their festivals and picnic gatherings. Chicago and New York were the first cities where the sport took root, and at this point it was primarily an outdoor sport. The first indoor lanes were built in the 1840's in Manhattan, and soon the sport became a New York fad.

Bowling has retained its popularity in the twenty-first century with out making major changes in rules or equipment. What have changed are the bowling centers. Years ago, bowling centers were off limits to children and many women. No longer is this the case, and today's bowling establishments are well lighted, clean and encourage FAMILY PARTICIPATION.

Program Description

The new BOWLER'S *ed*/In-School Bowling program is a comprehensive physical education guide that can be implemented in any gymnasium, recreation facility, or multipurpose room. The ideal program will begin within the confines of a school or youth group facility with an instructor introducing students to bowling through the use of portable equipment and the classroom materials provided here. Once the students have completed their bowling unit, lessons will come to life as many will be awarded complimentary 'free game' passes by their local bowling center. Often, field trips can be scheduled which allow the students an opportunity to try out the 'real thing' under the supervision of their PE teachers, parents and bowling center staff.

Vocabulary Words

Approach: The area that begins with the front edge of a lane, and ends at the foul line

Ball return: A portion of the lane designed to return a player's ball from the pins, back to

the ball rack at the front of the lane

Bowling center: Public location where bowling takes place

Channels: 'U' shaped tracks, also know as gutters that run down both sides of the lane

used for catching a ball that rolls off the lane before hitting the pins

Control desk: The area of a bowling center where you make arrangements to bowl and

receive shoes, lane assignment and scoring information

Concourse: Area behind the lane where spectators sit to watch

Foul: When a part of the bowler's body goes beyond the foul line and touches any

part of the lane, equipment or building during or after a ball has been rolled

Foul line: A line that designates the end of the approach and the beginning of the

bowling portion of the lane (bowlers are required to stay behind the foul line)

Frame: One tenth of a game; each square on a score sheet indicates one frame; a

bowler receives up to two deliveries to complete a single frame

Locator dots: Three sets of dots located behind the foul line that are used to properly align

the feet for a delivery

Open: If the bowler leaves pins standing after both balls have been delivered in a

frame

Pin Deck: The place at the end of the bowling lane where the pins stand in a triangle

formation

Settee: Seating area behind the bowling area where bowlers wait their turn

Spare: When all ten pins are knocked down in two deliveries

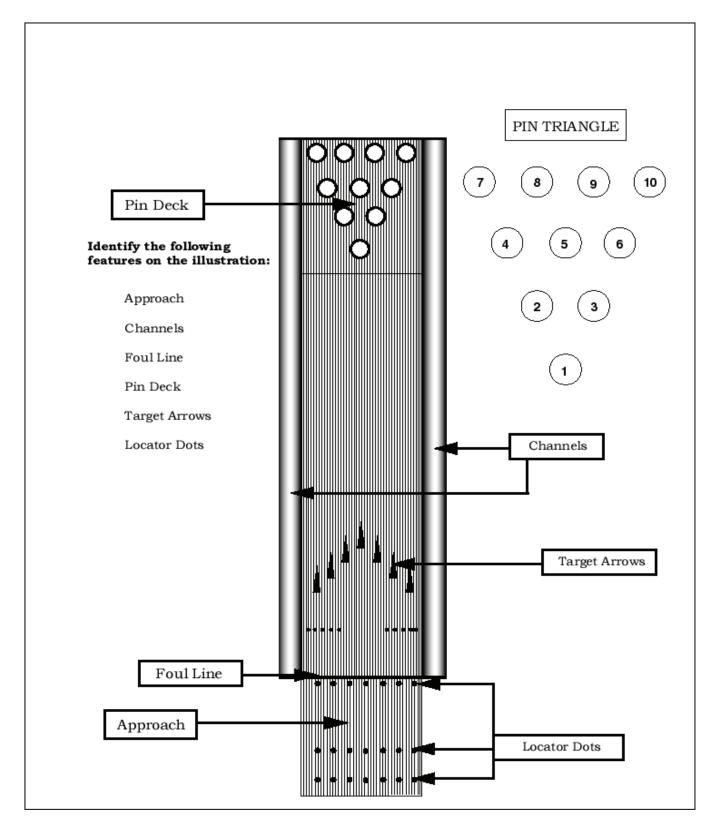
Strike: When all ten pins are knocked down on the bowler's first roll of the ball in

any frame

Target arrows: Seven arrows located 15-17 feet from the foul line used for lining up an

accurate delivery

Lane Information



ACTIVITY: Pass out bowling lane 'worksheet' that can be found in Section 3 and on the Educator CD.

Have students write in the appropriate words to define the marked areas.

Bowling Basics

The American game of tenpin bowling is played on wooden or synthetic lanes measuring sixty (60) feet in length and forty-two (42) inches in width. The game is divided into ten segments or frames. The object of the game is for a player to knock down ten pins set in a triangular pattern at one end of the lane by rolling a ball at them from the opposite end of the pin placement area. A player rolls two balls in each of the first nine frames unless a strike is scored. In the tenth frame, a player rolls three balls if a strike or spare is scored. Each player, bowling in a regular order, must complete every frame.

Except when a strike is scored, the number of pins knocked down by a player's first roll of the ball within a frame is to be marked inside the first small square in the upper left hand corner of the score sheet frame. The number of pins knocked down by the player's second roll of the ball is to be marked inside the small square in the upper right hand corner of the score sheet frame. If none of the standing pins are knocked down by the second roll in a frame, the score sheet shall be marked with a (-). The count for the two balls rolled in the frame shall be recorded immediately.

A strike is made when the full compliment of ten pins is knocked down with the first ball rolled in a frame. It is marked by an (x) inside the small upper right hand square of the frame where it is made. The count for one strike is ten (10) **plus** the number of pins knocked down on the player's next two balls rolled.

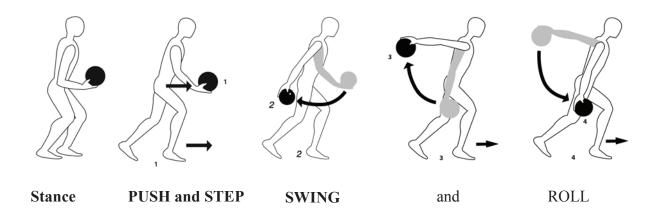
A spare is scored when pins left standing after the first ball rolled are knocked down with the second ball rolled in that frame. It is marked by a (/) inside the small upper right hand square of the frame where it is made. The count for a spare is ten (10) **plus** the number of pins knocked down by the player's next ball rolled.

A ball delivery is made when the ball leaves the player's possession and crosses the foul line into playing territory. The foul line is a line that separates the approach from the actual bowling portion of the lane.

A foul occurs when a part of the player's body encroaches on or goes beyond the foul line and touches any part of the land, equipment or building during or after a ball being rolled. A ball is in play after it is rolled until the same or another player is on the approach in position to make a succeeding ball roll. When a foul is recorded the roll counts but the player is not credited with any pins knocked down by that roll. Pins knocked down by the ball when the foul occurred must be re-spotted if the player who fouled is entitled to additional deliveries in the frame, as with a strike in the tenth frame.

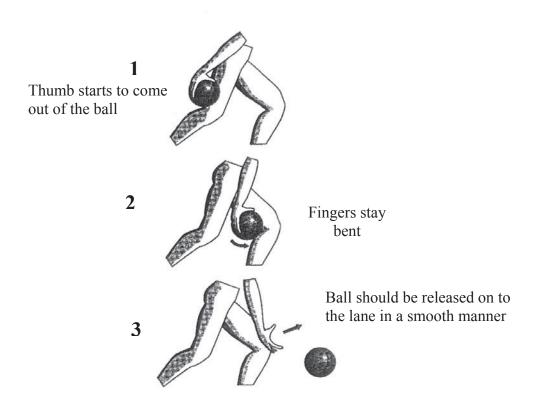
Four-Step Approach

This system of ball delivery begins with the bowler in the stance position, holding the ball with the correct grip and supporting it with the opposite hand. During the first step, the bowler pushes the ball out while traveling forward with the right foot. Make sure that your arms and legs move at the same time and that the ball is actually pushed away from the body as it moves. On the second step, the left foot moves forward and the ball begins to arc down as the supporting hand releases. The third step brings the right foot forward and the arm is behind the body at its highest point. On the fourth step, the bowler takes the last step forward as the ball moves from behind the body, in a half circle, down to the floor, and is released down the lane. The arm should continue upward in a follow-through motion. More experienced bowlers may be instructed to slide their right foot behind their left as they release the ball for improved balance.

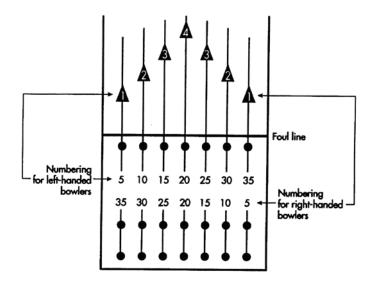


Release

When using a four-step approach, release and follow through should commence after completion of the fourth step, during the slide, and should be done without hesitation. If you are holding the ball correctly, your thumb should drop out of the ball naturally just after the fourth step. The fingers, which are still in the holes, should continue to lift out and up. Fingers should release smoothly from the ball as your hand and swing continues arcing out and up in the follow through.



Target Arrows & Locator Dots



Every lane in the American game of tenpin bowling is the same length and width. Each board that makes up a lane is approximately 1" wide and the locator dots and target arrows appear in the same place on every lane.

There are three sets of locator dots on the approach. Each one is numbered and spaced five boards from the next and all three sets are aligned with one another as illustrated above.

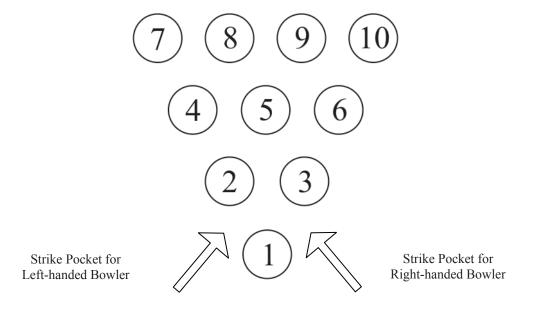
There are seven target arrows on the lane, fifteen (15) feet from the foul line. The arrows to the right side are numbered for right-handed bowlers, the arrows to the left side for left-handed bowlers.

The target arrows are aligned with the locator dots. The center locator dot corresponds with the center target arrow, etc. Bowlers often use the second and third target arrows to aim their shot.

Strike Pocket

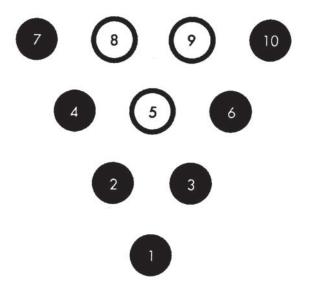
Since the object of bowling is to knock down as many pins as possible it stands to reason that the goal for each game should be to make as many strikes as possible. The easiest way to achieve this goal is for a bowler to aim for the strike pocket. The strike pocket is an area in the pin triangle between the #1 and #3 pins for right-handed bowlers and between the #1 and #2 pins for left-handers. A ball delivery entering through the strike pocket of the pin triangle at the proper angle and speed will create a domino effect called pin action, causing pins to bounce off each other as they fall, making more pins fall. The bowler should try to roll a hook ball on their strike shot since a hook creates maximum pin action.

Call the pins by their numbers.



Spare shooting

One method of spare conversion is the use of 'key' pins. The ten pins in the pin triangle are numbered as illustrated below. The outside pins, the seven pins forming the "V" that points toward the bowler, are the key pins. Any spare can be made by simply aiming at one of the seven key pin positions. While the angle of a shot may change, the line of the ball remains the same, as does the ball speed and method of ball delivery. In converting spares it is important to identify the key pin for each spare shot. The first movement should be to the left or right on the approach to realign your starting position with the locator dots. The target area for any spare will be either the second arrow from the right hand side or the third arrow from the right hand side. Slight adjustments may be made to suit the particular delivery of an individual bowler. However, changes should not be made until a bowler is rolling a consistent ball that goes in the same place each time.

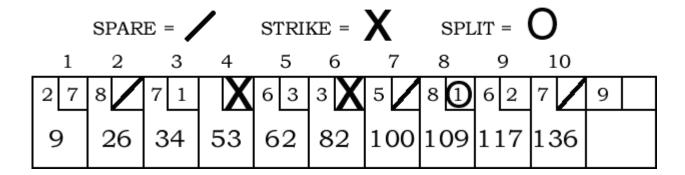


Scoring

Keeping score for a game of bowling is a matter of simple addition with a few performance incentives that add to a bowler's total pin count.

- There are ten frames in one game of bowling. There are three fundamentals of scoring that must be completely understood in order to keep score properly:
- a. How to score a STRIKE a strike is achieved by knocking down all ten pins with the first ball rolled in any frame. A strike equals ten (10) pins *plus* a bonus of the total pins knocked down on the next two (2) balls rolled.
- b. How to score a SPARE A spare is achieved by knocking down all ten pins in any frame using the two rolls allowed. A spare equals ten (10) pins *plus* a bonus of the pins knocked down with the first ball in the next frame.
- c. If no strike or spare is recorded; merely add the number of pins knocked down to the score of the previous frame.

SYMBOLS USED IN SCORING



YOUNGER STUDENTS – For students too young to do the math, simply have them record what they knock down on each ball. If they can, have them record the strike symbol if they get a strike and the spare symbol when they get a spare. Later, an adult (parent or teacher) or older student can help with the final score total.

Etiquette

When students are bowling in class or at a bowling center they should be aware of some basic rules of proper etiquette.

- 1. Stay off the approach area unless it is your turn to bowl.
- 2. Wait for the bowler(s) on the neighboring lanes to bowl if they are up before you.
- 3. Be quiet when someone is getting ready to bowl.
- 4. Be a good sport when you bowl well (and when you do not bowl well).
- 5. Use only your ball.
- 6. Be ready when it is your turn to bowl.
- 7. Wait for your ball back by the scoring unit...off of the approach.
- 8. When you are finished bowling, return your shoes to the front counter and put your ball back on the ball rack.

Safety

- 1. Keep hands away from the ball return opening. The belts, wheels and pulleys stop for no one.
- 2. No food or drink is allowed in the bowling area. The approach becomes sticky and bowlers who intend to slide might stick and fall.
- 3. Be alert to balls coming back to the ball return. A pinched finger hurts!
- 4. Finish your delivery behind the foul line. There is oil on the lane and it is very slippery.

SECTION 2

CURRICULUM GUIDE

Teacher's Manual



PORTLAND BEAVERTON

IN-SCHOOL BOWLING

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SECTION 2

Section 2 - CURRICULUM GUIDE - TEACHER'S MANUAL

Equipment Use

Teaching Progression for the Sport of Bowling

- 1. Free Pendulum Swing
- 2. Release
- 3. Follow Through
- 4. Accuracy
- 5. Balance
- 6. Rotation
- 7. Balance w/Rotation
- 8. Balance "Plus"
- 9. Balance "Plus" w/Rotation
- 10. Arm Swing
- 11. Tempo Steps
- 12. Four-Step Delivery w/o Ball
- 13. Four-Step Delivery w/Ball

EQUIPMENT USE

For **BEST PERFORMANCE AND SAFETY OF STUDENTS**, Please follow these simple guidelines.

CLASS SAFETY

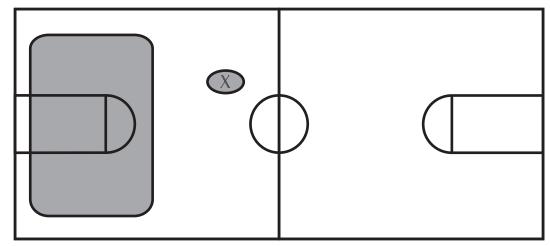
- Students should not kneel or sit at the end of the lane where the pins are; they should remain on their feet.
- The bowler should stay behind the foul line. This is indicated by the leading edge of the of the carpet line
- Nylon storage bags should not be left lying around the floor.
- Remind students when they begin taking full approaches; their gym shoes are not designed for 'sliding' . . . so, in gym class make sure that last step is a step, don't try to slide.
 Assure the students that at bowling centers, they will be provided with bowling shoes that are meant for you to slide.

CARE OF THE EQUIPMENT

- The bowling balls are hollow and may split if bounced . . . please emphasize that they should be rolled only.
- Roll carpets up loosely WITH THE CARPET SIDE OUT.
- Carpets should be stored in boxes provided. It is best to store carpets lying down. See directions on box.
- Store pins and balls in nylon bags; pulling the 'security tie' tight will keep pins and balls from falling out.

1. FREE PENDULUM SWING

Setting: Full or half gym



Teaching time: 3 minutes

Equipment: No special equipment needed.

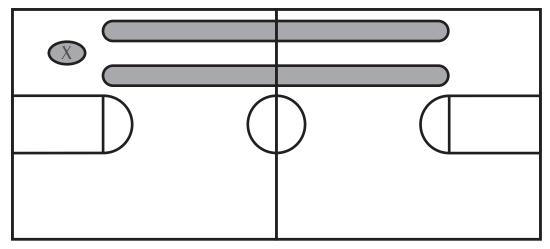
- Students should be assembled where they have room to swing their arms freely without disturbing classmates.
- The 'Free Pendulum' swing will be taught from the staggered position (feet slightly apart, one foot ahead of the other).



- A. Raise the hand that you will bowl with.
- B. On that same side of your body there is a leg...at the end of that leg is a foot.
- C. Move that foot back 6 to 8 inches and then relax your bowling arm at your side.
- D. Show free swing as demonstrated by the Push-Relax drill. (bowling arm relaxed and at side: non bowling hand pushes wrist backward and arm swings forward totally relaxed.)
- E. Saying the words "push-relax" while practicing this drill will bring the feeling to the students quickly.

2. RELEASE

Setting: Full or half gym



Teaching time: 7 minutes

Equipment: Clocks for each student, and one softball (or similar sized ball) for each team of 2 students. Clocks should be approx. 7" in diameter (see clock provided in manual/CD).

Instruction:

- Students pair up and form two lines so that partners face each other about 10 to 15 feet apart.
- Release will be taught from the Kneel-Down position.

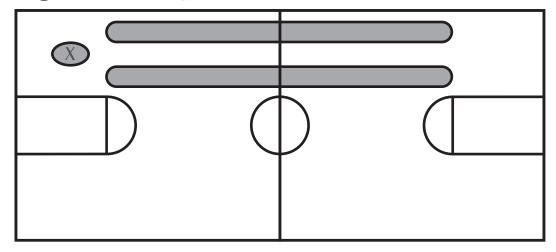
From the kneel-down position students follow this routine:



- A. Place ball in center of clock.
- B. Place bowling fingers on the clock...use middle and ring fingers. (4 & 5 o'clock for right handed bowlers, and 7 & 8 o'clock for left handed bowlers).
- C. Slide fingers under the ball; grip top of ball with thumb; and raise ball off the ground keeping arm straight.
- D. Student takes two swings and releases ball on the second swing...like 'landing an airplane' smoothly onto a runway.

3. FOLLOW THROUGH

Setting: Full or half gym



Teaching time: 5 minutes

Equipment: Clocks for each student, and one softball (or similar sized ball) for each team of 2 students.

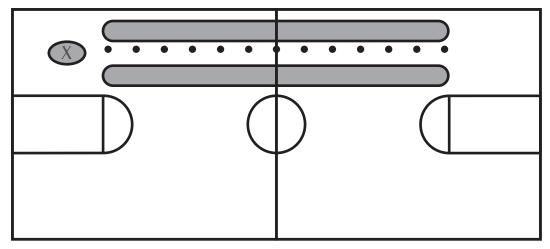
- Students pair up and form two lines so that partners face each other about 10 to 15 feet apart.
- The Follow-Through will be taught from the Kneel-Down position.



- A. Bowler raises the ball from the center of the clock as taught in the release lesson.
- B. Student takes two free Pendulum Swings.
- C. After releasing the ball on the second swing, continue the arm swing forward for a Follow Through. Pretend you are 'answering the phone' to get the correct motion and feeling of the Follow Through.

4. ACCURACY

Setting: Full or half gym



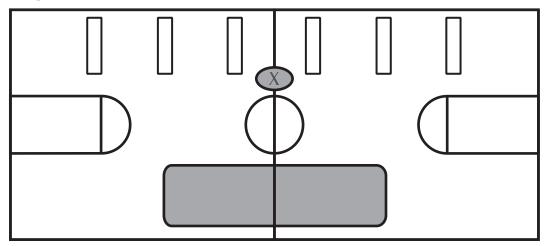
Teaching time: 5 minutes

Equipment: Clocks for each student, and one softball (or similar sized ball) for each team of 2 students. Each team should have one bowling pin.

- Students pair up and form two lines so that partners face each other about 10 to 15 feet apart.
- Place a bowling pin in front of the students nearest the wall.
- Accuracy will be taught from the Kneel-Down position.
- A. Bowler raises the ball from the center of the clock as taught in the release lesson.
- B. Bowler takes two Free Pendulum swings.
- C. Bowler releases the ball toward the partner's bowling pin on second swing.
- D. Bowlers Follow Through...don't forget to 'answer the phone'
- E. Bowlers will each receive five consecutive rolls at the pin.
- F. Bowlers change position for second bowler's turn.

5. BALANCE

Setting: Full or half gym



Teaching time: 3 minutes

Equipment: Have 6 lanes with bowling balls and pins set up. We will only use 4 pins per lane (the 1,2,3 and 5 pins).

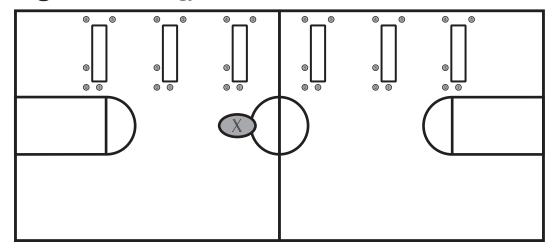
- Students begin in staggered position (about a 12" stride) with most of their weight on the forward foot.
- A. Knee of forward leg should be deeply bent.
- B. Lean forward and extend both arms out to side.
- C. Lift back toe off the floor...'can you hold your balance?'.
- D. Rest back toe on the floor.
- E. Relax bowling arm at side, and hold balance position. Let bowling arm swing in a free pendulum motion.





6. ROTATION

Setting: Full or half gym

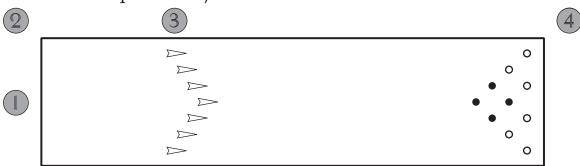


Teaching time: 7 minutes

Equipment: 6 lanes with bowling balls and pins set up and ready for use. We will only use 4 pins per lane (the 1,2,3 and 5 pins).

Instruction:

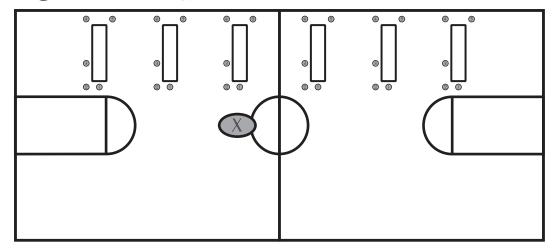
• Students form teams-assign one team per lane (approx. 5 students per team).



- 1. Bowler
- 2. Spotter; watches for fouls, helps with form, assists scorer.
- 3. Scorer
- 4. Pin setter
- 5. Ball returner
- A. Rotation is in a clockwise direction: Bowler to Spotter; Spotter to Scorer: Scorer to Pin Setter; Pin Setter to Ball Returner; Ball Returner to Bowler.

7. BALANCE WITH ROTATION

Setting: Full or half gym



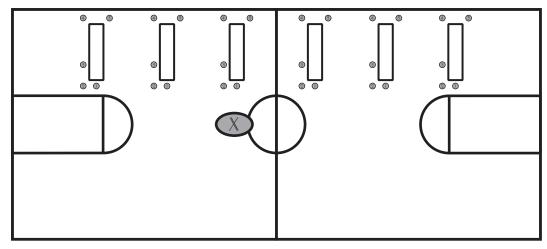
Teaching time: 5 minutes

Equipment: 6 lanes with bowling balls and pins set up. We will only use 4 pins per lane (the 1,2,3 and 5 pins).

- Students form teams...assign one team per lane.
- Each bowler will get two (2) releases from the Balance position.
- Option: score will be determined by adding up the number of pins knocked over in one full rotation by the team.
- A. Bowler assumes Balance position at the foul line.
- B. Bowler takes two (2) free swings and releases ball on second swing.
- C. After release, check balance by keeping back toe on floor.
- D. Students rotate until each have taken their turn.

8. BALANCE "PLUS"

Setting: Full or half gym



Teaching time: 6 minutes

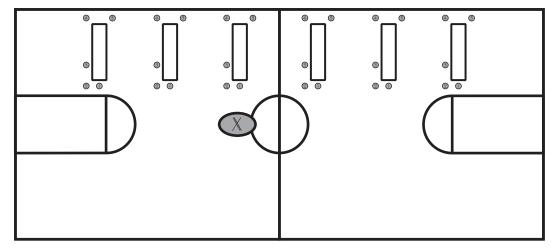
Equipment: 6 lanes with bowling balls and pins set up. We will only use 4 pins per lane (the 1,2,3 and 5 pins).

- The words used in rhythm are 'Back and Boooowl'.
- The Balance 'Plus' motion is first taught without the ball.
- A. Bowler starts with feet together, straight across at the toes.
- B. Knees flexed, and bowling arm relaxed at side.
- C. Non bowling arm out to side and heel up. (as arm goes out to the side, pretend it is pulling a *'magic string'* that raises the heel of the foot).
- D. Bowler takes two swings. The first swing begins with a backward movement of the bowling arm.
- E. When the word 'Boooowl' is said, transfer is made to the balance position where the ball is then released.
- F. After release, check balance by keeping back toe on floor.



9. BALANCE "PLUS" WITH ROTATION

Setting: Full or half gym



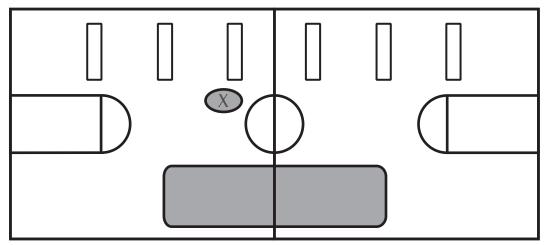
Teaching time: 5 minutes

Equipment: 6 lanes with bowling balls and pins set up. We will only use 4 pins per lane (the 1,2,3 and 5 pins).

- Students form teams. Assign one team per lane.
- Each bowler will get two (2) releases from the Balance 'Plus' position.
- Option: score will be determined by adding up the number of pins knocked over in one full rotation by the team.
- A. Bowler assumes Balance 'Plus' position.
- B. Using the words (in rhythm) 'Back-and-Boooowl', student takes two swings, transfers to balance position, and releases ball.
- C. After release, check balance by keeping back toe on floor.
- D. Students rotate until each student has taken their turn.

10. ARM SWING

Setting: Full or half gym



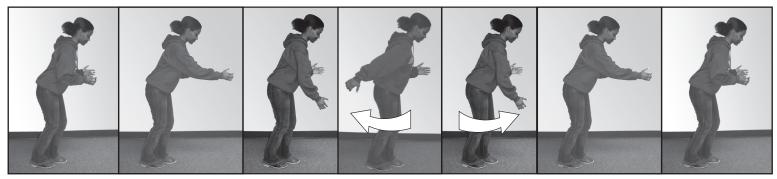
Teaching time: 4 minutes

Equipment: 6 lanes with bowling balls and all ten pins set up.

Instruction:

- Students begin in staggered stance with most of their weight on forward foot.
- In teaching the arm swing it is not necessary to use an actual ball, nor to take steps.
- Elbow of bowling arm at side...imaginary ball held between waist and shoulders with both hands (smaller children may have more success holding ball well below the waist).
- A. Words and movement are, 'out' 'down' 'swing' 'relax'.

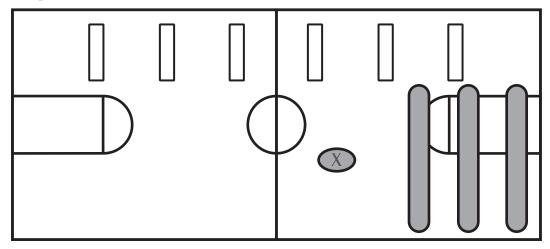
 Motion is smooth and natural, not controlled.
- B. Repeat movements and words to develop rhythm and timing.



STANCE out down swing and relax

11. TEMPO STEPS

Setting: Full or half gym



Teaching time: 8 minutes

Equipment: 6 lanes with bowling balls and all ten pin set up.

Instruction:

- Students begin in staggered stance with most of weight on forward foot and HANDS ON HIPS.
- The words used will be, 'short' 'short' 'short' . . . 'booowl'.
- A. Students should begin in staggered stance, hands on hips and eyes looking down at feet.
- B All four steps will be in a rhythmic, shuffling style. The first two steps will be the shortest.
- C. By saying the words 'short' 'short' 'short' . . . 'booowl', students will quickly develop a smooth step pattern for bowling.











START Short

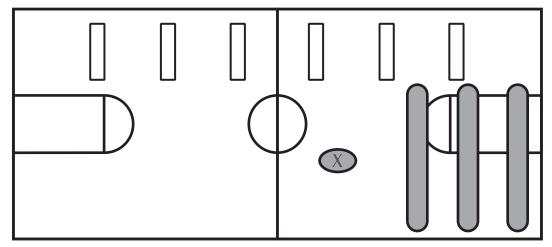
Short

Short

Booowl

12. 4-STEP DELIVERY without BALL

Setting: Full or half gym



Teaching time: 8 minutes

Equipment: 6 lanes with bowling balls and all ten pins set up.

- Students begin in staggered stance, holding an imaginary ball with both hands near waist (smaller students should begin with ball well below waist).
- A. As ball is moved slowly forward in a push-away motion, bowler should take the first *tempo-step*.
- B. As the second step is taken, bowler lets ball swing freely and continues with the remaining steps in a rhythmic, free-flowing pattern.
- C. When finished with the four step delivery and release of ball, remember to hold the proper balance position.





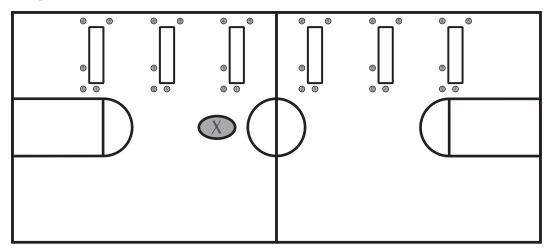






13. 4-STEP DELIVERY WITH BALL

Setting: Full or half gym



Teaching time: At this point teaching will involve ongoing reinforcement of this and previous lessons.

Equipment: 6 lanes with bowling balls and all ten pins set up.

- Students will be in teams of 4 or 5, per lane.
- To find starting position for the approach; students go to the foul line and turn, facing away from the pins. They count 'one, two, three, four' AND A LITTLE BIT MORE as they take a simulated 4-step delivery approach. 'A little bit more' allows for the extra length of the final step (which will be a slide when they bowl in bowling shoes).
- A. Bowler will begin in staggered stance with ball ready for push away.
- B. Bowlers take a full approach and bowl. Each takes two deliveries.
- C. **Teacher's Tip:** Sometimes having the students take a practice swing just before they bowl, helps with the coordination of the arm swing and the steps.
- D. Team makes one complete rotation for practice, then bowl for score.

SECTION 3

'FITNESS' AND FUN ACTIVITIES



PORTLAND BEAVERTON

IN-SCHOOL BOWLING

Brought to you by the



SECTION 3

'Fitness' and Fun Activities

'Bingo' Bowling

'Bingo' Bowling - class cards

Cardio-Bowling

Circuit Bowling

Clock for Release

Jump Rope Bowling

Lane Information Worksheet

Make that Spare

Relay Bowling

Scoring Worksheet

Score Sheet (Sample)

Spare Me

Speed Bowling

Spelling BEE Bowling

Warm-Up

Word Search

Activities listed in *Italics* are *Fitness* related



"BINGO" BOWLING

Rules:

- down 6 pins; ball #2 knocks down 2 pins. 2. Bowler may mark off a '6' and a '2'; or total the two 1. Bowler rolls first and second ball. Ball #1 knocks
 - deliveries and mark off an '8'.
- 3. To score a '0', bowler must roll ball on lane and miss all remaining pins.

NAME

	4	3	7	2
0	8	10	8	5
10	7		9	6
6	5	10	3	10
7	-	4	0	9



"BINGO" BOWLING

PORTLAND BEAVERTON IN-SCHOOL BOWLING

Rules:

- 1. Bowler rolls first and second ball. Ball #1 knocks down 6 pins; ball #2 knocks down 2 pins.
- 2. Bowler may mark off a '6' and a '2'; or total the two deliveries and mark off an '8'.
- 3. To score a '0', bowler must roll ball on lane and miss all remaining pins.

NAME

\vdash	4	3	7	7
0	∞	10	∞	5
10	7		9	6
6	Ŋ	10	3	10
2	—	4	0	9

Name					Name					_	Name					
7	9	10	0	1		7	9	10	0	1		7	9	10	0	1
1	5	2	8	4		1	5	2	8	4		1	5	2	8	4
4	10		10	3		4	10		10	3		4	10		10	3
0	3	6	8	7		0	3	6	8	7		0	3	6	8	7
6	10	9	5	2		6	10	9	5	2		6	10	9	5	2
Name Name Name																
7	9	10	0	1		7	9	10	0	1		7	9	10	0	1
1	5	2	8	4		1	5	2	8	4		1	5	2	8	4
4	10		10	3		4	10		10	3		4	10		10	3
0	3	6	8	7		0	3	6	8	7		0	3	6	8	7
6	10	9	5	2		6	10	9	5	2		6	10	9	5	2
Name Name Name																
7	9	10	0	1		7	9	10	0	1		7	9	10	0	1
1	5	2	8	4		1	5	2	8	4		1	5	2	8	4
4	10		10	3		4	10		10	3		4	10		10	3
0	3	6	8	7		0	3	6	8	7		0	3	6	8	7
6	10	9	5	2		6	10	9	5	2		6	10	9	5	2

Bowler

CARDIO - BOWL



This is a TIMED activity. Total pins knocked down in the allotted time determines the daily 'pro team.

A great WARM UP!

In this activity each bowler receives ONE delivery and then *SPRINTS* to the next position.

Place a cone or marker at a point well beyond the beginning of the lane. This is where the bowler must begin the approach for each delivery.

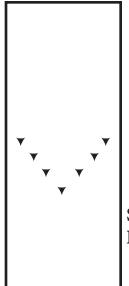
The further from the lane...the longer the sprint and the more 'cardio' involved.

ROTATION: Bowler to Scorekeeper; Score Keeper to Pin Setter; Pin Setter to Ball Returner; Ball Returner to Bowler.



PORTLAND BEAVERTON

IN-SCHOOL BOWLING



Score Keeper

Ball Returner

Pin Setter



'CIRCUIT' BOWLING

This bowling activity incorporates circuit training with the bowling program. This is a great program for the upper grades...5th and higher, or any large class.

Each of the bowlers takes their normal position on the lane, with one student bowling. The teacher adds another position for each team and that position is directly behind the person rolling the ball, on the other side of the gym or multi-purpose room.

Here, the teacher denotes what 'activity' will make up the CIRCUIT. The station can be for any skill building activity. *Examples:*

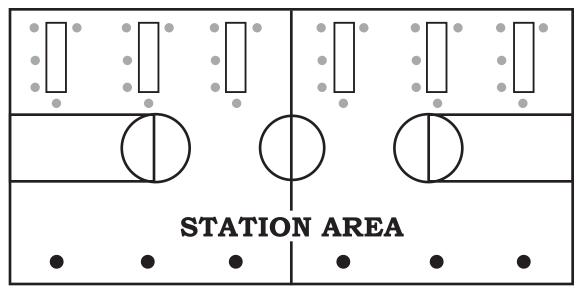
Juggling
Weight Training
Circus Arts
Balancing
Ball handling Skills

Rope Skipping Skills
Dance Moves
Aerobic Movement
Conditioning Activity
Volleyball Skills

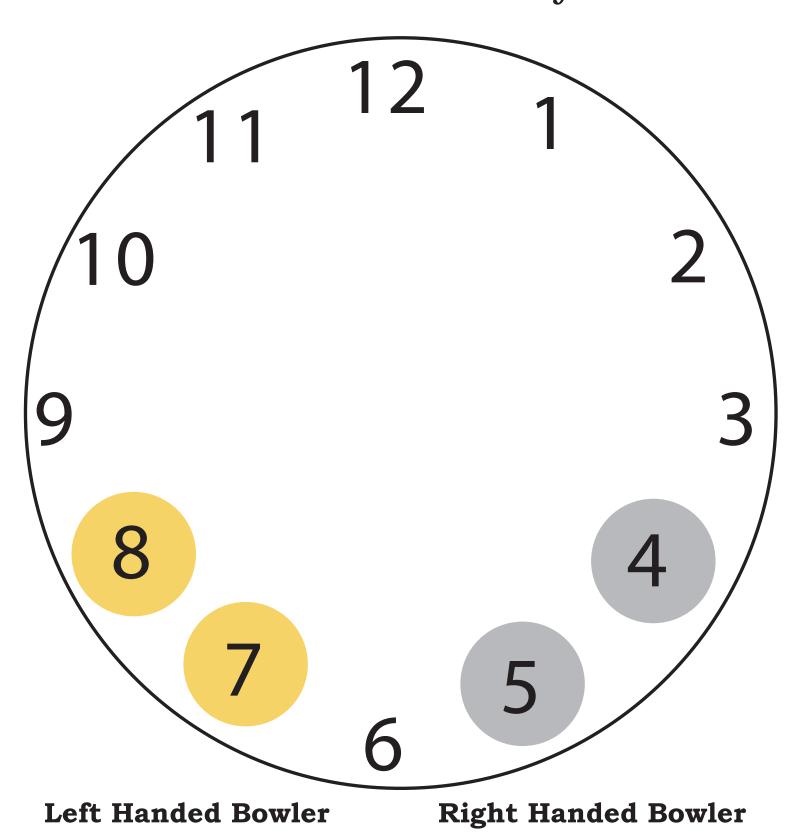
Students rotate to the 'circuit' station after they have been the ball returner and the student at the 'circuit' station rotates to the BOWLING POSITION to take his/her turn bowling.

ROTATION:

Bowler to Spotter...then to Scorer...then to Pin Setter... then to Ball Returner...then to 'Circuit Station'...then to Bowler



CLOCK RELEASE POSITION for 'hook' delivery



JUMP ROPE BOWLING



PORTLAND BEAVERTON

IN-SCHOOL BOWLING

RULES:

- 1. Each student has his or her own rope.
- 2. After each complete frame, the entire team on that lane will do the designated *jump rope skill* before rotating to their next position.
 - 3. The number of jumps required is dependent upon the number of pins the bowler knocks down. **EXAMPLE:** The bowler knocks down 8 pins for the frame. Each person on that lane would do 12 jumps...the base, which is 10...plus the number of pins left standing (2) = 12 jumps.
 - 4. Each frame is a different rope jumping skill.

FRAME #1 = Basic Bounce

FRAME #2 = Right leg only

FRAME #3 = Left leg only

FRAME #4 = Straddle

FRAME #5 = Stride

FRAME #6 = Backwards

FRAME #7 = CHOICE (student or teacher)

FRAME #8 = Wounded Duck

FRAME #9 = Double Unders

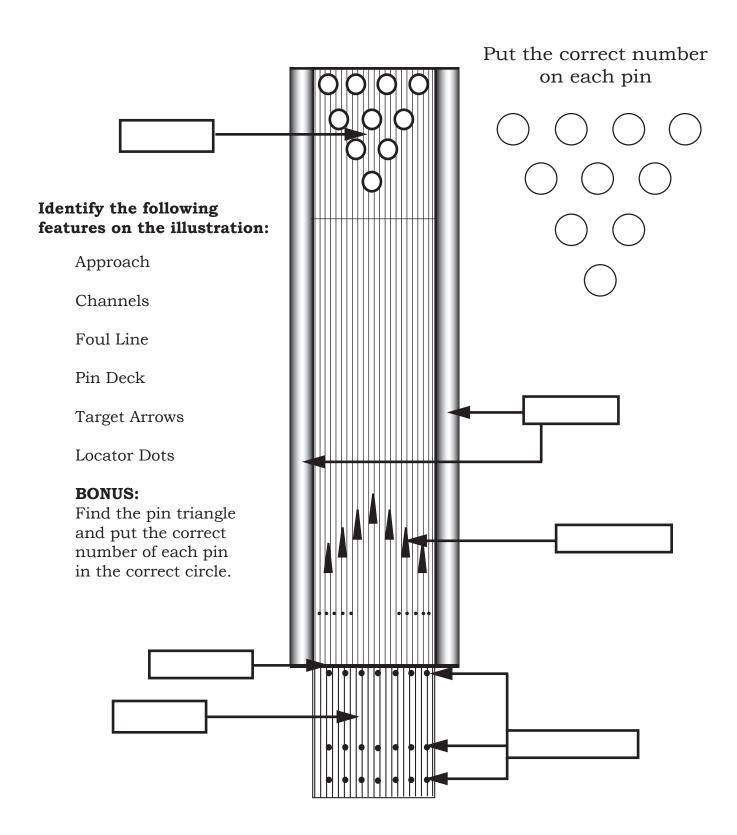
FRAME #10 = Basic @ Double Speed

Each rotation presents a new 'challenge' or rope jumping skill.

SUGGESTION: When not in use, ropes may be tied around the student's waist.

LANE INFORMATION

Work Sheet...fill in the blanks





MAKE THAT 'SPARE'

EQUIPMENT NEEDED: Lanes, pins, bowling balls and *TWO* **FOAM DICE** (regular plastic dice will do)

HOW TO PLAY: This can be done on each individual lane OR it can be done as a class activity.

- A. Designated player rolls both of the dice. To determine which 'spare' the class will be bowling for, look to the dice. Let's say the roll is a 5 and a 2. Set up the FIVE pin, the TWO pin and then total the two dice and set up the SEVEN pin. That is the 'spare' that needs to be converted.
- B. The bowler receives two deliveries maximum. If the spare is not made on the first attempt, re-set the same '*spare*' and the bowler takes a second turn. If not made after two tries, the students on that lane rotate and the next student has their turn at that same spare.
- C. The first team to *Make That 'Spare'* in one delivery gets a point.
- D. Another roll of the dice determines what the next 'spare' combination will be.

NOTE: Any time the total of the two dice is ELEVEN (a 6 and a 5), only those two pins are set up as the 'spare'.

NOTE: A roll that produces **DOUBLES** means that ALL TEN PINS ARE SET UP and the bowler must roll a strike!

SUGGESTION: If the 'spare' is a very difficult one to make, give the class three or four chances to make it and then re-roll the dice for a new 'spare' combination. For example: the 4-6-10 spare

'RELAY' BOWLING



Class begins with lanes set up but **ONLY** the **NUMBER ONE PIN STANDING**.

EACH BOWLER RECEIVES ONE DELIVERY and then ROTATES.

The first bowler receives one delivery to knock over the number one pin. If that delivery is successful...students rotate and the next bowler gets a chance to knock over the number 1 pin **AND...pin NUMBER TWO.**

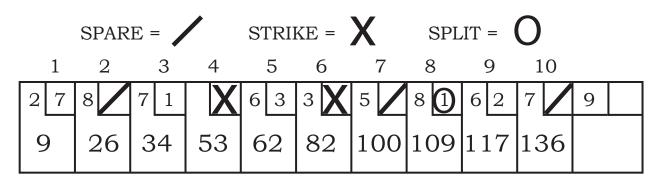
If that deliver is successful...students rotate and the next bowler gets a chance to knock over the number 1 pin; the number 2 pin; **AND...** pin NUMBER THREE.

With every successful delivery, the team gets to add ONE MORE PIN.

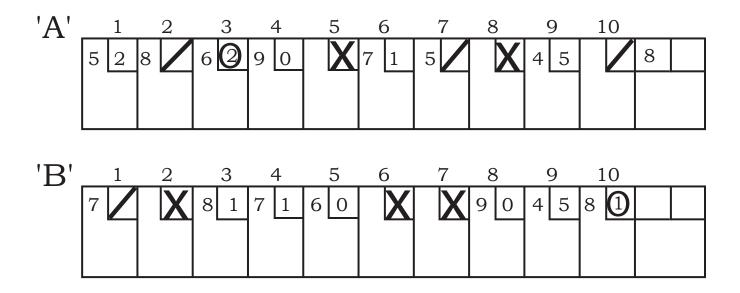
If, on any delivery, the bowler misses the pins that are standing... the team still rotates but the next bowler must try to knock down the same combination of pins that were just missed.

This continues until one team gets all **TEN PINS set up AND KNOCKED OVER IN ONE DELIVERY.**

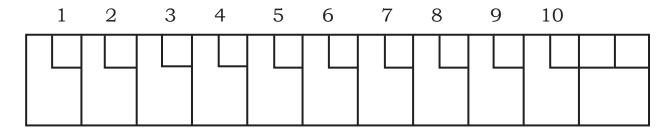
SCORING WORKSHEET



Below are two games of bowling that have not been scored. See if you can come up with the correct scores for each. Answers are found below.



Fill in your own bowling score AND TEST A CLASSMATE!



Score Sheet

Bowler							Lane	number	
1	2	3	4	5	6	7	8	9	10
/ =	spare							X = stri	ike
Bowler							Lane	number	
1	2	3	4	5	6	7	8	9	10
/ =	spare							X = stri	ike
Bowler							Lane	number	
Bowler	2	3	4	5	6	7	Lane	number	10
1									10
1	2 spare	3					8	9 X = stri	10
1	2 spare	3					8	9 X = stri	10
1	2 spare	3	4	5	6	7	Lane	9 X = stri	10
1	2 spare	3	4	5	6	7	Lane	9 X = stri	10



SPARE ME

IN-SCHOOL BOWLING

As in any sport or game, BOWLING has some special 'terminology'. Certain groups of pins that are left standing after the first ball are described by the following terms:

Washout = 1-2-4-10 or 1-3-6-7

Bucket = 2-4-5-8 or 3-5-6-9

Bedposts = 7-10

Granny's Teeth = 4-6-7-9-10 or 4-6-7-8-10

Sleeper = 2-8, 3-9 or 1-5

Baby Split = 3-10 or 2-7

Picket Fence = 1-2-4-7 or 1-3-6-10

King Pin = 5 pin

PIN NUMBERS

7 8 9 10
456(2)(3)
1

In the sets of pins below, shade in the correct pins, or pin, that the 'term' describes.

Bucket	Baby Split	Washout	Sleeper
000	$\circ \circ \circ$	$\circ \circ \circ$	$\circ \circ \circ$
\circ	\bigcirc	\bigcirc	\circ
\bigcirc	\bigcirc	\bigcirc	\bigcirc
King Pin	Bedposts O	Granny's Teeth	Picket Fence
$\circ \circ \circ$	$\circ \circ \circ$	$\circ \circ \circ$	$\circ \circ \circ$
\circ	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	00
0) ()	and name of your own	
O		\bigcirc	\bigcirc
))



SPEED BOWLING

This activity is designed to give students a 'workout' while still having fun, and working in a co-operative environment.

- 1. You may have 3 or more bowlers at each lane.
- 2. Set a time limit of 5-7 minutes for 'speed' bowling.
- 3. The bowler gets two deliveries.
- 4. All bowlers are directed to use the same number of steps... 4-steps, 1-step, or no steps (bowl from the balance position).
- 5. Pins are RESET after each delivery.
- 6. The ball returner must *sprint out* to the bowler and HAND THE BALL OFF for the next delivery. The bowler may not begin the approach until all the pins are reset and the ball returner *sprints back* and gives the pin setter a HIGH FIVE.
- 7. The ball returner may assist in setting up the pins.
- 8. When the bowler has taken two deliveries, the entire team rotates to their new position (a clockwise direction on the lane).
- 9. The Speed Bowling Champion for the day is the team that knocks the most pins down in the time allotted.

HINT:	For a simplified scoring method, have the scorekeepers write
	down the the number of pins knocked down on each delivery
	at the end of the time limit, the team can add them up.

SPELLING 'BEE' BOWLING



MATERIALS: Six (6) sets of cards with letters of the alphabet; or one set for each bowling lane. You should include 3 of each commonly used letters ('E' for example). You will use your bowling lanes, pins and balls.

Spelling Bee 'bowling' is a fun way to incorporate spelling into your bowling lesson. Use bowling vocabulary words, names of muscles and bones, spelling words from classroom, etc.

EXAMPLE: Using the word 'quadriceps'			
	* Each lane has cards with the letters in 'quadriceps'.		
	* For every strike the team may lay down two (2) letters in the word.		
	* For every spare the team may lay down on letter in the word.		
	* No scoring is necessary.		
	* The first team to spell the word wins that round.		
	* A great way to teach SPELLING and SPARES and STRIKES!		

WARM-UP

Bowling uses 134 different muscles, which makes warming up an important part of the bowling class.

Stretching exercises

- a. whole body
- b. legs
- c. arm circles

Endurance activities

- a. sit ups
- b. running in place
- c. squats

Strength activities

- a. squeeze a tennis ball
- b. swing a bowling ball
- c. push ups

Safety factors

- a. students will remain on their feet during bowling activity
- b. finish approach well behind the foul line
- c. 'roll' the ball, do not throw it

Teacher may use other warm-up exercises that include back, arms or legs.

WORD SEARCH

HOW TO PLAY: All the words listed below appear in the puzzle – horizontally, vertically, diagonally, even backward. Find them and **CIRCLE THE WORD**. See example using the word "Aim".

Get Ahead With BOWLER'S ed

Ν Α Ν Y В Ν S S S S Ν R W P N Ε Τ R Ε C S R D Α 0 S Τ S Α S Ν Ε Ε 0 S S Ε C C Α Ε Α Τ S Ε Т G M S Η R Н R Ν Ν S Т 0 O 0 Α 0 Η O Ε G D R R L В C R S Ε Ν F Ν K OD G R R U Ν Ε Ε G Т S 0 0 D R O Α W В K Ν Н N Т

Aim, Approach, Ball Return, Bowler, Bowling Center, Channels, Concourse, Control Desk, Easy, Fit, Foul Line, Frame, Fun, Game, Grip, Gutters, Heads, Lane, Learn, Locator Dots, Pines, Pin Triangle, Roll, Safety, School, Scoring, Settees, Shoes, Spare, Sport, Strike, Swing, Target Arrows.

SECTION 4

QUIZZES / SOLUTIONS AND SPECIAL FORMS



Brought to you by the



SECTION 4

Quizzes & Solutions

Bowling Basics

Intermediate

Advanced

Special Forms

Certificate of Achievement

BOWLER'S *ed* **Quiz** – **Bowling Basics**

1.	Please complete the following statement: Push and, Swing, and
2.	Studies show that bowling started more than: a. 100 years ago b. 1,000 years ago c. more than 7,000 years ago d. five decades ago
3.	Fill in the following score card: 3 - X 3 4 3
4.	The seating area behind the bowling lanes is known as the: a. settee b. bench c. paddock d. concourse
5.	Which of the items below is NOT a safety concern? a. being careful of the ball return area b. being ready when it is your turn c. staying behind the foul line d. eating and drinking in the bowling area
6.	There are frames in the American game of tenpin bowling.
7.	The word used to describe the motion a bowler should use when swinging the ball is: a. controlled b. slow c. compact d. pendulum

8.	A spare is marked on the score sheet with the symbol: a. X b c. / d. >
9.	Locator dots: a. are used to properly align the feet b. appear behind the foul line c. are spaced in groups of 5 boards d. all of the above
10	Bowling in a center requires participants to wear special that allow a bowler to slide and are designed expressly for bowling.
11	 Which line should your feet never cross? a. foul line b. approach line c. settee line d. channel line
12	a. the number of pins knocked down by your opponent's next ball b. a bonus of five (5) extra pins c. the number of pins knocked down on your next two (2) balls d. none of the above
13	The area behind the lane where spectators sit to watch is called the: a. lane b. concourse c. throughway d. approach
Bo	 Question: When selecting the right ball all of the following should be considered except: a. finger hole size b. color c. ball weight d. span

BOWLER'S *ed* Quiz – Bowling Basics SOLUTION

1.	Please complete the following statement		DOL I
	Push, and STEP	, Swing, and	ROLL .
2.	Studies show that bowling started more to a. 100 years b. 1,000 years c. more than 7,000 years d. five decades ago	than:	
3.	Fill in the following score card:		
	3	X 3 4	
	3	20 27	
4.	The seating area behind the bowling land a. settee b. bench c. paddock d. concourse	es is known as the:	
5.	Which of the items below is NOT a safet a. being careful of the ball return area b. being ready when it is your turn c. staying behind the foul line d. eating and drinking in the bowling ar		
5.	There are frames in the Am	nerican game of tenpin	powling.
7.	The word used to describe the motion a la. controlled b. slow c. compact d. pendulum	bowler should use whe	n swinging the ball is:

8.	A spare is marked on the score sheet with the symbol: a. X b c. / d. >
9.	Locator dots: a. are used to properly align the feet b. appear behind the foul line c. are spaced in groups of 5 boards d. all of the above
10.	Bowling in a center requires participants to wear special that allow a bowler to slide and are designed expressly for bowling.
11.	Which line should your feet never cross? a. foul line b. approach line c. settee line d. channel line
12.	The count for one strike is ten (10) plus: a. the number of pins knocked down by your opponent's next ball b. a bonus of five (5) extra pins c. the number of pins knocked down on your next two (2) balls d. none of the above
13.	The area behind the lane where spectators sit to watch is called the: a. lane b. concourse c. throughway d. approach
Во	nus Question: When selecting the right ball all of the following should be considered except: a. finger hole size b. color c. ball weight d. span

BOWLER'S *ed* Quiz - Intermediate

1.	Define the following bowling terms.
	Strike:
	Spare:
	Settee:
	Locator Dots:
2.	What are the four steps in a four-step approach? 1 2 3 4
3.	In Germany, bowlers are known as
4.	Why should you always stretch/warm up before bowling?
5.	Where should your feet be when you release the ball?
6.	Which target arrow should you attempt to cross over with your first ball thrown?
7.	Hitting the pins in what location will most likely result in a strike?
8.	Target arrows correspond with what other markings?
9.	Why is it necessary to wear special bowling shoes when bowling in a center on real lanes?
10.	Explain how a frame is scored on a roll when a foul occurs.

Bonus Question: How long is a bowling lane?

BOWLER'S *ed* Quiz - Intermediate SOLUTION

1.	Define the following bowling terms.
	Strike: Bowling down all ten pins with the first ball rolled in any frame.
	Spare: Bowling down the pins remaining after the first roll with the second ball rolled in any frame.
	Settee: Seating area behind the bowling lanes where bowlers wait their turn.
	Locator Dots: Three rows of dots located on all bowling lanes that assist a bowler with foot positioning and aim.
2.	What are the four steps in a four-step approach? 1. PUSH 2. STEP 3. SWING 4. ROLL
3.	In Germany, a bowler is known as a 'kegler'.
4.	Why should you always stretch/warm up before bowling? There are so many muscles (134) used in bowling that there is risk of injury without warming up.
5.	Where should your feet be when you release the ball? Behind the foul line.
6.	Which target arrow should you attempt to cross over with your first ball thrown? Either the second or third arrow.
7.	Hitting the pins in what location will most likely result in a strike? The strike pocket.
8.	Target arrows correspond with what other markings? Locator dots.
9.	Why is it necessary to wear special bowling shoes when bowling on real lanes? Bowling shoes are required so that dirt and other abrasive particles are not brought onto the lanes. The shoes are also designed with soles that allow a bowler to slide.
10.	Explain how a frame is scored on a roll when a foul occurs. When a foul is recorded the roll counts but the player is not credited with any pins knocked down by that ba Pins knocked down by the ball when the foul occurred must be respotted if the player who fouled is entitled additional deliveries in the frame, as with a strike in the tenth frame.

Bonus Question: How long is a bowling lane? Sixty (60) feet long.

BOWLER'S ed Quiz - Advanced

1.	How many key pin positions are there? 1. 5 b.7 c.10 d.3
2.	What should drop out of your ball first on the release? a. your thumb b. your second finger c. your index finger d. everything should drop out at the same time
3.	Which two target arrows are used for spare shooting? a. 1 & 2 b. 1 & 3 c. 2 & 3 d. 2 & 4
4.	Arrange the following check list items in order of performance. a. square shoulders with the target b. line up your feet c. determine if the ball is hitting to the left or right of the strike pocket d. take aim at the target arrow e. walk straight
5.	What is the strike pocket?
6.	The domino effect created when a ball strikes the pin triangle, causing pins to bounce off each other as they fall, is known as
7.	When using a four-step approach, release and follow through should commence: a. at the highest point of your arm swing b. after completion of the fourth step c. before the slide d. at the foul line
8.	Define "key pins".
9.	The fluid motion of the bowling arm as the ball is carried through to the point of delivery is known as the
10.	The number one pin that forms the "V" pointing toward the bowler is also called the: a. strike pocket pin b. lead pin c. frame pin d. head pin
11.	Which of the following contributes to a higher level of bowling proficiency? a. correct ball grip c. a four-step approach b. proper alignment d. all of the above
Bo	nus Question: If your hall is hitting the pins too far left, you should move your hody to the

BOWLER'S *ed Quiz* - Advanced SOLUTION

1.	How many key pin positions are there? a. 5 b. 7 c. 10 d. 3	
2.	What should drop out of your ball first on the release? a. your thumb b. your second finger c. your index finger d. everything should drop out at the same time	
3.	Which two target arrows are used for spare shooting? b. 1 & 2 c. 1 & 3 d. 2 & 3 e. 2 & 4	
4.	Arrange the following check list steps in order of performance. a. square shoulders with the target b. line up your feet c. determine if the ball is hitting to the left or right of the strike pocket d. take aim at the target arrow e. walk straight c	
5.	5. What is the strike pocket? An area in the pin triangle between the #1 and #3 pins for right-handed bowlers and between the #1 and #2 pins for left-handers.	
6.	The domino effect created when a ball strikes the pin triangle, causing pins to bounce off each other as the fall, is known asPIN	
7.	When using a four-step approach, release and follow through should commence: a. at the highest point of your arm swing b. after completion of the fourth step c. before the slide d. at the foul line	
8.	Define "key pins". The seven outside pins of the pin triangle that form the "V" that points toward the bowler.	

9.	The fluid motion of the bowling arm as the ball is carried through to the point of delivery is known as the PENDULUM . SWING .
10.	The number one pin that forms the "V" pointing toward the bowler is also called the: a. strike pocket pin b. lead pin c. frame pin d. head pin
11.	Which of the following contributes to a higher level of bowling proficiency? a. correct ball grip b. a four-step approach c. proper alignment d. all of the above
Bo	nus Question: If your ball is hitting the pins too far right, you should move your body to the RIGHT to correct it.







Certificate of Achievement

Awarded to:

	(Name)	
	On:	
	(Date)	
For successfully of	completing the In-School	Bowling program

(Educator)

(Date)

