

2016

Beginning Bowling PEL-2111



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UCF Beginning Bowling – PEL-2111

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UCF Beginning Bowling

Bowling Etiquette

The true meaning of bowling etiquette is to be respectful of others and the game being played. As with any other game, there are rules as to how it's played. Etiquette is different. It's the sportsmanship shown when practicing and/or competing and it's relatively simple and easily understood.

For example, running and general "horseplay" is dangerous in a bowling center. This type of activity is disruptive and distracting to those who are bowling. Be courteous and respect other bowlers and the bowling facility. Stay on your lane or in the seating area behind your lane unless you've completely left the bowler's area.

Change into your bowling shoes and keep your street shoes and other items out of the walkways. There can be a lot of traffic in the bowling center and cluttering up walkways is a safety hazard.



On the Lanes

When a bowler gets on the approach and there's someone on either side of them, the general rule is that **the first one on the approach bowls first**. If there's any question as to who was up first, the bowler on the right should bowl.

A bowler already lined up in their stance and ready to bowl should not wait, they should just go. Standing on the approach is not the place to talk with friends.



How to Choose the Right Bowling Ball

Bowling with the right ball will dramatically improve your scores and consistency. For beginners, finding the right ball is often a daunting task, so you may want to consult your local pro shop or bowling-center operator for help.



Here's How:

- 1. Find your ideal ball weight.** Some say your ball should be approximately 10% of your body weight, up to the maximum 16 pounds. Most pro bowlers use [16-pound balls](#), although more than you think use 15-pounders. Another method is to add one or two pounds to the weight of the house ball you normally use. A heavier ball drilled specifically to your hand will seem to weigh about the same as a house ball two pounds lighter.

Even with these guidelines, you should never use a ball too heavy just because you feel you should. The real ideal ball weight is the heaviest ball you can comfortably throw.

- 2. Determine your ideal cover stock.** The [cover stock](#) is the material on the outer surface of the ball, and is very important in determining how your ball will react to [the lane conditions](#). There are four types of cover stocks: polyester (more commonly referred to as [plastic](#)), [urethane](#), [reactive resin](#), and particle. To figure out which is best for your game, see the tips below with detailed information on each cover stock.

3. **Choose your ball.** Once you know the weight and cover stock you need, you can find a large number of balls online, or you can ask your local pro shop. There are differences in each category, but a conversation with a pro-shop operator or some online research should be enough to get you the right ball for your game.

You can find a good plastic ball for \$50 or even less. Reactive-resin balls start around \$100 and go up from there, though some, as well as particle balls, may cost several hundred dollars.

4. **Get it drilled to fit your hand.** You can find pre-drilled bowling balls, but if you're going to use one of those, you might as well save your money and use a house ball. A ball drilled specifically to your hand gives you more control and also significantly decreases the risk of injury. Take your ball to a pro shop and have an expert measure your hand and drill your ball. Some stores will include free drilling with the purchase of a ball, but in other cases, you shouldn't expect to pay more than \$30 for drilling—and it's worth it
5. **Be patient.** When you first hold (and release) a ball drilled to your hand, you might be afraid it doesn't fit. This is because the house balls you're used to don't fit. With a little practice, your new ball will prove to be infinitely more comfortable and controllable than a pre-drilled house ball.

A Few Tips about the Bowling Balls.

1. **Plastic** cover stocks are the way to go if you normally throw the ball straight and want to continue to do so. Almost every house ball has a plastic cover stock. This is the least expensive category, but also the least versatile.
2. **Urethane** and **reactive-resin** cover stocks are perfect if you throw a hook or would like to start [throwing a hook](#). [These cover stocks](#) will grip the lane better than a plastic ball, thus hooking into the pins. Urethane balls take a gradual path to the pins, hooking throughout the whole lane. Most bowlers prefer reactive resin to urethane, as the ball will cut through the oil without hooking too much, and will pick up friction at the end of the lane, hooking aggressively into the pins (this is called backend) and creating more strike potential.
3. **Particle** cover stocks are essentially a hybrid of urethane and reactive resin. They have the consistent grip of urethane and the massive backend of reactive resin. Best used on oily lanes, particle balls are mainly used by experienced bowlers who know how to control the ball and react to different lane conditions.

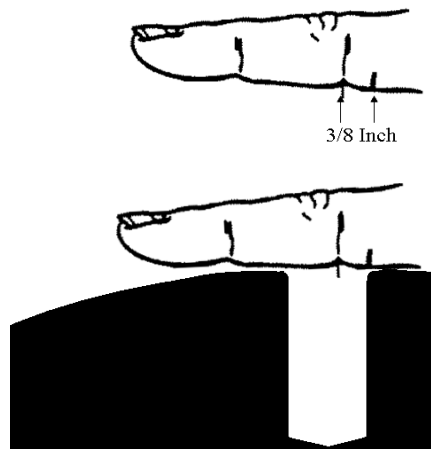
Type of Grips

Conventional Grip

- ❖ Thumb inserted to the base of hand.
- ❖ Ring and middle fingers inserted to the second joint from the tip of fingers

Common uses

- ❖ Primarily used for beginning bowlers.

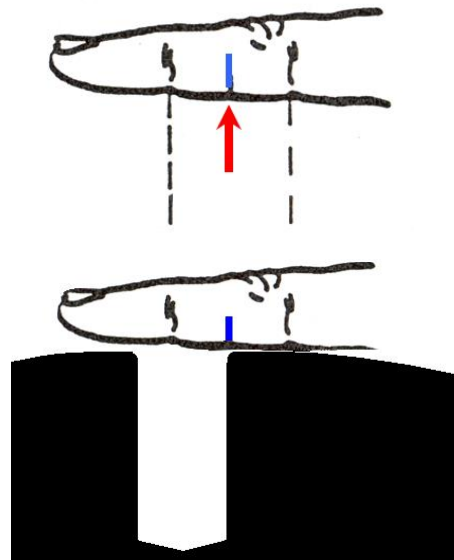


Finger Tip Grip

- ❖ Thumb inserted to the base of hand
- ❖ Ring and middle fingers inserted to the first joint from the tip of finger
- ❖ Best grip for developing a hook release

Common uses

- ❖ Used for intermediate and advanced bowlers



BOWLING STANCE

Taking a proper **bowling stance position** is an important key to making an effective approach and delivery of the bowling ball. The stance position establishes correct body posture, balance, positioning of the ball in your set-up, leg action and overall alignment. Everything works off of a solid stance position. Establishing a “pre-shot routine” whereby the identical set-up procedure is taken every time you step onto the approach will enhance your chances in making an effective delivery.

Here are a few essential elements in taking a **bowling stance position**:

1. Before stepping onto the approach surface, make sure you know precisely where you wish to position your feet. Pay attention to your distance from the foul line and to your positioning relative to the boards on the lane.
2. Place your feet pointing slightly toward your target with the toes in the same direction and spread your shoes perhaps one board apart for balance and stability.
3. Flex the knees forward as to place the front of your knee caps directly over the toes of your shoes. Flexing the knees slightly will bring the big muscles of your legs into play and create automatic leverage during delivery. Maintain knee flex throughout the approach to the foul line.
4. Lean forward about 10–15 degrees as to align your shoulders in a direct line over your knees. Place the bowling ball in your hand immediately in front of your bowling shoulder and as close to your body as is comfortable. The closer the ball is to your body, the more relaxed are the arm muscles. Maintain this relationship of shoulders above the knees throughout the walk to the foul line to ensure good balance and stability while releasing the ball.
5. Keep your head level with the chin up pointing to your target so you would be able to easily balance a book or glass of water on top of your head. Try and maintain this same position of your head throughout the approach to the foul line with your eyes fixed on your target to help you maintain good overall balance.

These five elements will establish a good **bowling stance position**. Consistently good results in bowling occur only by means of a well-planned “pre-shot routine” and most importantly, a good stance position



Diagram #1
Holding the Ball
High in Stance



Diagram #2
Holding the Ball at
Waist Level in Stance

Lining Up to the Pocket

Increase your "strike" potential with a high percentage of pocket hits. Getting aligned to the pocket is your first challenge as a bowler. When you hit the pocket, you leave easy spares to convert. The goal of all bowlers is to deliver the ball into the pocket and get a strike. If you don't strike, the goal is to pick up the spare you leave standing.

The center of the pocket is located on the 17.5 board on the pin deck. Using a right handed bowler as the example, the pocket is on the 17.5 board counting from the right edge of the lane. The center of the "head pin" pin spot on the pin deck is located on the 20 board, the exact center of the bowling lane.

A pocket hit for right handed bowlers is one in which the [bowling ball](#) contacts the head pin on the right side of the pin and next contacts the 3 pin. Ideally, the angle of entry the bowling ball arrives at the pocket is 6 degrees for optimum pin carry. For a right-handed bowler with a good angle of entry, the ball will not deflect too severely to the right upon impact with the head pin and will continue into the heart of the pin formation contacting the 5 pin followed by the 9 pin.

Since most house conditions at bowling centers across the country use a lane oiling procedure which creates the highest volume of oil conditioner located between the 2nd arrow on the right of the lane and the 2nd arrow on the left side of the lane, it is a common practice to seek an initial alignment at the 2nd arrow on the lane as a sighting target and then make a fine tune adjustment according to your delivery style and the [bowling ball](#) you are using.

Adjustments in initial alignment will be needed when a ball is delivered accurately toward the 2nd arrow but does not end up solidly impacting the pocket. In cases where the oil condition is extremely heavy and your ball slides a little too far and misses the pocket to the right or barely contacts the head pin, adjust your initial alignment on the approach and where you sight near the 2nd arrow, to the right.

If you miss the pocket left, move left. These are rule-of-thumb adjustments. There are always exceptions to any rule. The amount of adjustment for missing the pocket from your initial alignment, either to the left or to the right, depends on how far you missed the pocket after rolling your ball over your target. Start with simple adjustments such as moving your feet two boards and your target on the lane one board in the same direction.

When the ball slides too far and barely hits the head pin to the right (for right handed bowlers), move your feet two boards right and your target on the lane one board right. This will close your angle and create a more direct route for your ball to contact the pocket. If your ball still does not make it to the pocket solidly after adjusting this 2:1 ratio to the right, adjust another 2:1 boards to the right. Continue making 2:1 ratio adjustments until your angle matches to the oil conditions and your ball finally contacts the pocket solidly at the 17.5 board.

Adjusting 2:1 boards to the left in the opposite direction from your initial alignment position will work for lanes with less than heavy oil that are causing your ball to hook too early and miss the pocket to the left (in the case of right handed bowlers).

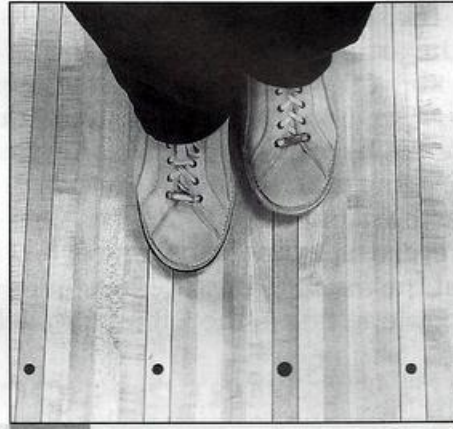
Multiple adjustments of 2:1 boards, either left or right, will either close your angle to the pocket on oily lanes or open your angle to the break point down the lane on dry lanes. Lane conditions may cause you to adjust several times before getting proper alignment to the pocket, depending on how heavy the oil is that you encounter or how dry the lanes become. Do not fear making these adjustments and targeting areas of the lane away from your original alignment positioning.

Remember, your feet are not nailed to the floor. Moving your position on the approach and your sighting target on the lane will help you re-establish good alignment when the lane conditions change. Don't fear making adjustments. Trust what you see and use common sense in adjusting any number of boards to use the lane pattern to your advantage.

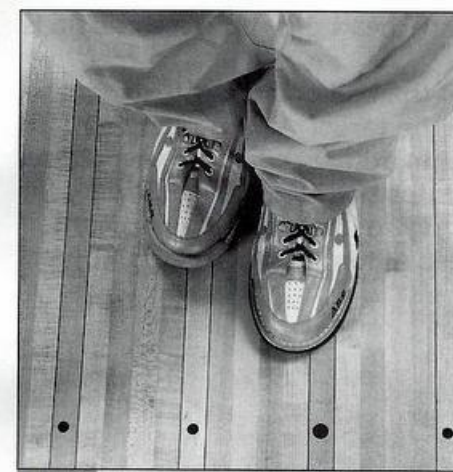
Once you learn a system of making lane adjustments to line up to the bowling pocket, you can count on your scores improving.



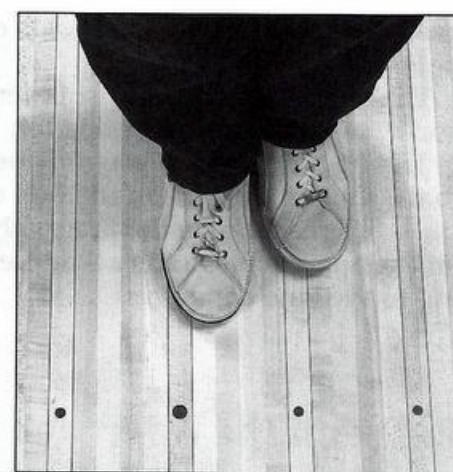
Right Handed Straight Ball



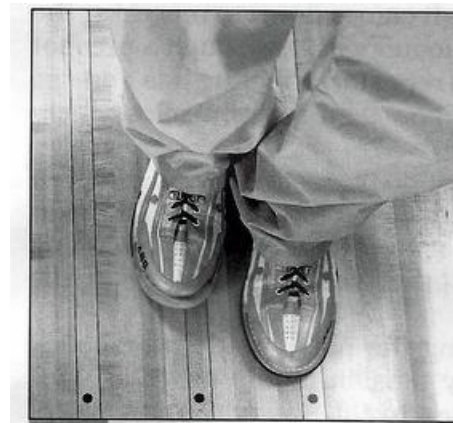
Left Handed Straight Ball



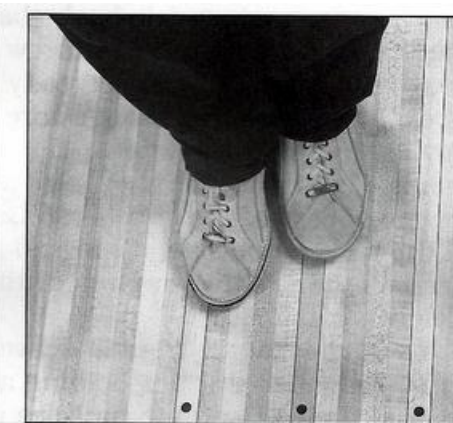
Right Handed Hook Ball



Left Handed Hook Ball



Right Handed Reverse Hook



Left Handed Reverse Hook

Basic Timing

Athletic Pose

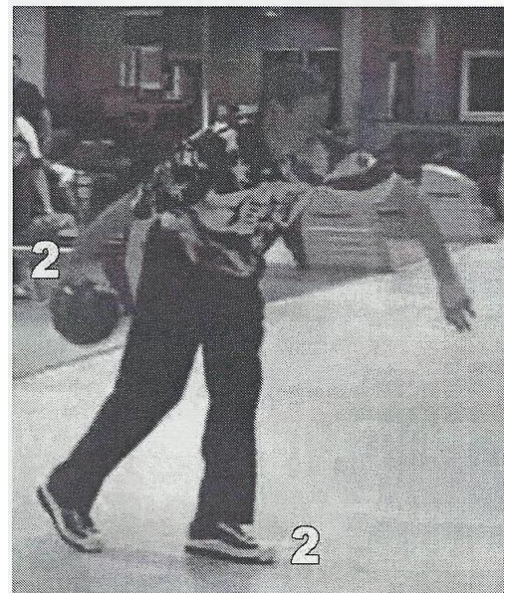


Step 1



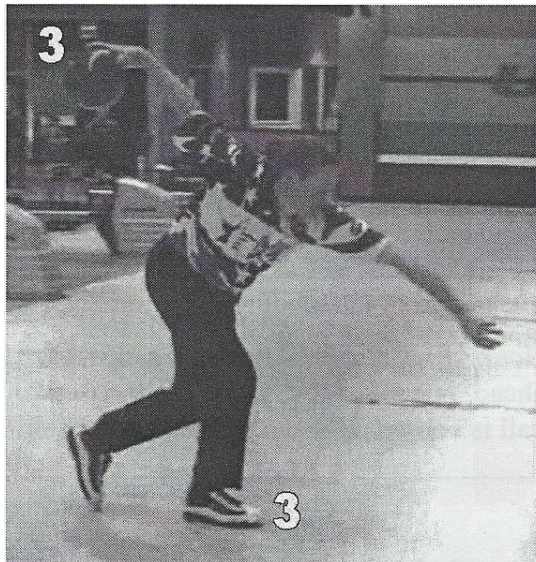
Ball over foot at the completion of the first step.

Step 2



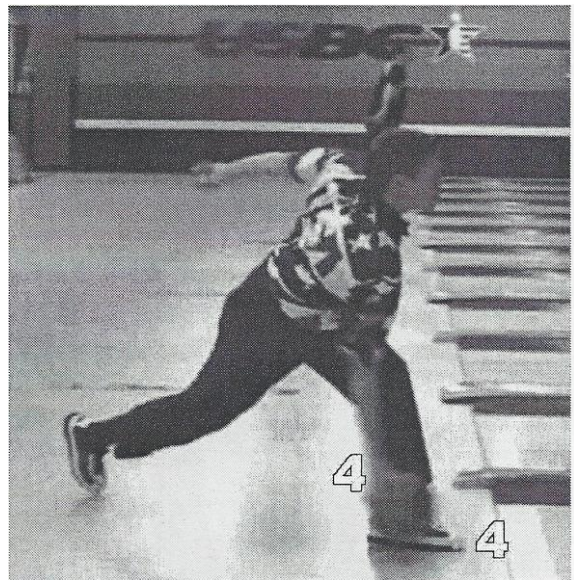
The ball is near the ball-side leg at the completion of the second step.

Step 3



The Ball is at the top of the back swing at the completion of the third step.

Slide



Ball is near the slide foot ankle at the completion of the slide.

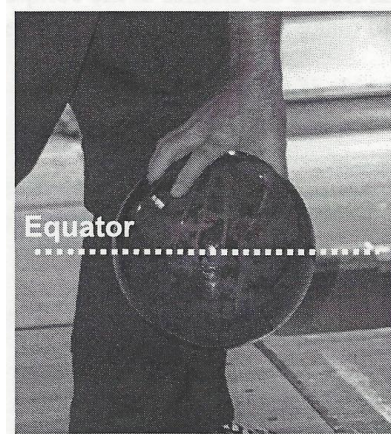
The number represents ball and the feet positions during each step.

Hand and Wrist Position

Relaxed Wrist

The relaxed or collapsed wrist places the hand on top of the ball. With the hand located above the equator of the ball, the fingers exit the ball earlier, creating less revolutions and a weaker roll.

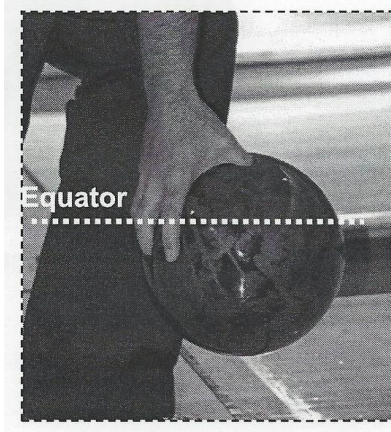
Weaker-rolling – straighter ball path
Lower number of revolutions.



Firm Wrist

An essential step to creating a hook is by having the wrist in a firm position at the release, which places the fingers near the equator of the bowling ball. This keeps the fingers in the ball longer to give the athlete an opportunity to develop a stronger roll and create more revolutions.

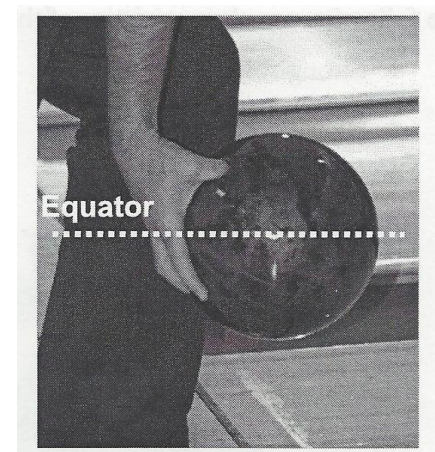
Strong-rolling ball – More revolutions
Increased hook potential



Strong Wrist

An athlete must be fairly strong to use the Strong Wrist position. The fingers are below the equator of the bowling ball, which increases the amount of revolutions and therefore creates a much stronger roll. Because the fingers will remain in the ball longer after the thumb releases.

Stronger-rolling ball – Higher number of revolutions – Higher hook potential



The Release

Release Types

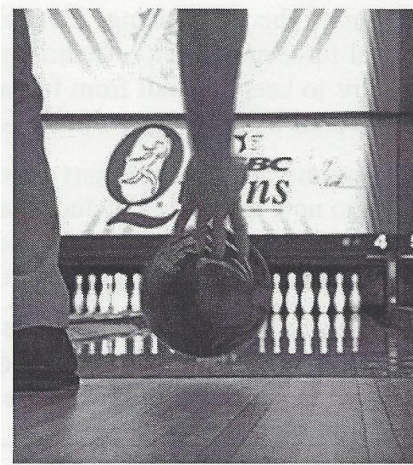
There are many different releases used by bowlers. The types of release listed below are described in detail below:

- Straight Ball
- Basic Hook
- High Rev
- Reverse Hook

Straight Ball

The straight ball release is beneficial in certain situations. It is ideal for picking up difficult spares where accuracy is critical.

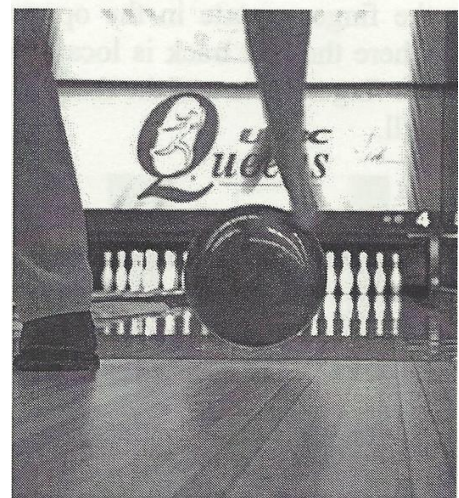
To roll a straight ball, athletes should keep their thumb toward the pins throughout the approach. As the thumb releases, the ball should roll off the palm with the fingers behind the ball and follow through with the palm facing up.



Accuracy is the hallmark of a straight ball delivery. However, the percentage of strikes will be lower due to the ball not coming into the pocket at an angle.

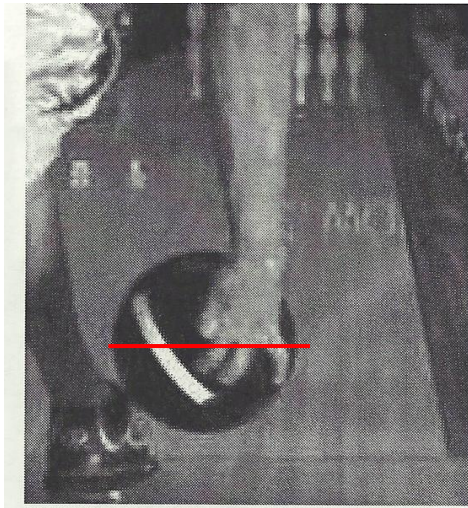
Hook Release

As the thumb exits the ball, the wrist rotates the hand Counterclockwise for a right-handed, clockwise for a left-hander - followed by the ball rolling off the hand and fingers in the same direction.



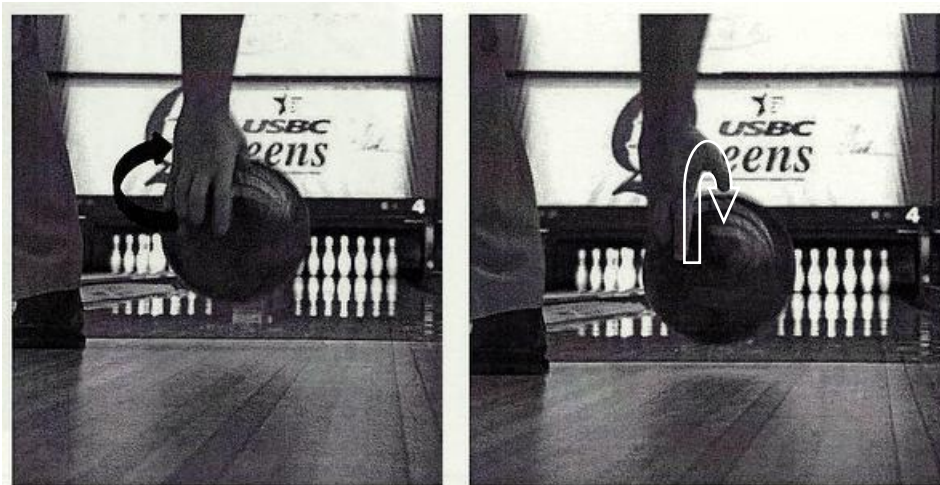
High Rev Release

Athletes who use a high-rev release are able to produce more revolutions. To create this release, the athlete's hand needs to be under the equator of the ball at the point of release. This release will create more RPMs and generate more hook potential.



Reverse Hook Release

The athlete rotates the ball in the opposite direction of a basic hook. Athletes will turn their thumb out and away from the body at the point of release.

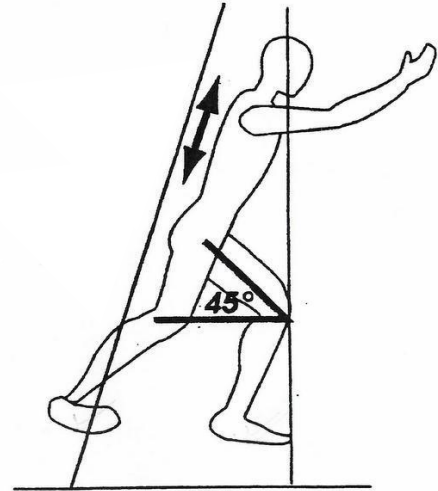


REVIEW - Lane Courtesy & Bowling Etiquette Outline

- Who Bowls First
- Don't wait. Just Do It!
- Practice Restraint
- Bowling Safety

Stance, Lining up, Body Position, Balance & Footwork Outline

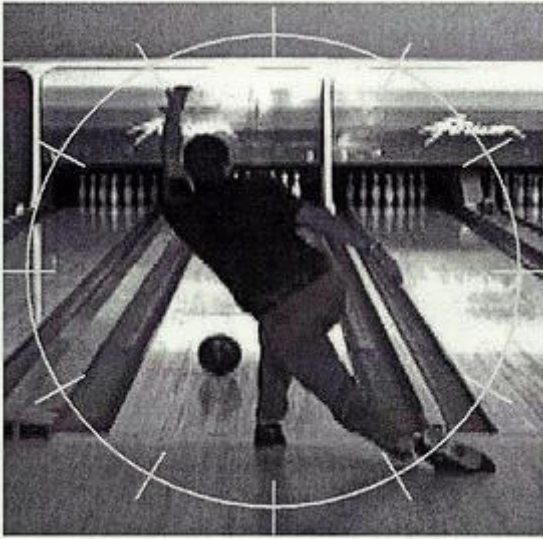
- Where to line up
- How to line up
- Distance from foul line
- Lining up left to right
- Body Position
 - Waist Down
 - Knees
 - Waist Up
 - Spine
 - Shoulders
 - Arms
- Where to hold the ball
 - Slow Speed, Medium Speed or Fast Speed
- Wrist Positions
 - Cupped, Straight or Broken (3 M's)
- Balance
 - Weight on balls of feet
 - Body Position – Toe, Knee, Chin alignment



Four Step Approach (Right Handed Bowler)

- What are the 5 separate positions?
 - Step 1, Step2, Step3, Slide (Step 4) and Release and Follow Through
- Right Handed bowler starts with Right Foot
- Ball and Leg move together on 1st step
- Move ball – straight out toward your target line
 - This is called the pushaway or ball placement
- Left foot moves forward as the bowl swings down on the 2nd step
 - Where should the ball be at the completion of the 2nd step?
- Right foot moves forward as the ball swings back to the highest point of the armswing
- Left foot should step forward into the slide as the ball swings down. At the end of the slide,
The ball should be in the lowest part of the armswing.
 - Where should the right arm be at this point?

Finish Position



Left Handed

Left Arm – 11:00
Right Arm – 2:00;3:00
Slide Foot (Right Foot) – 6:00
Trail Leg (Left Leg) – 4:30-5:00
Head – 11:00 – 12:00



Right Handed

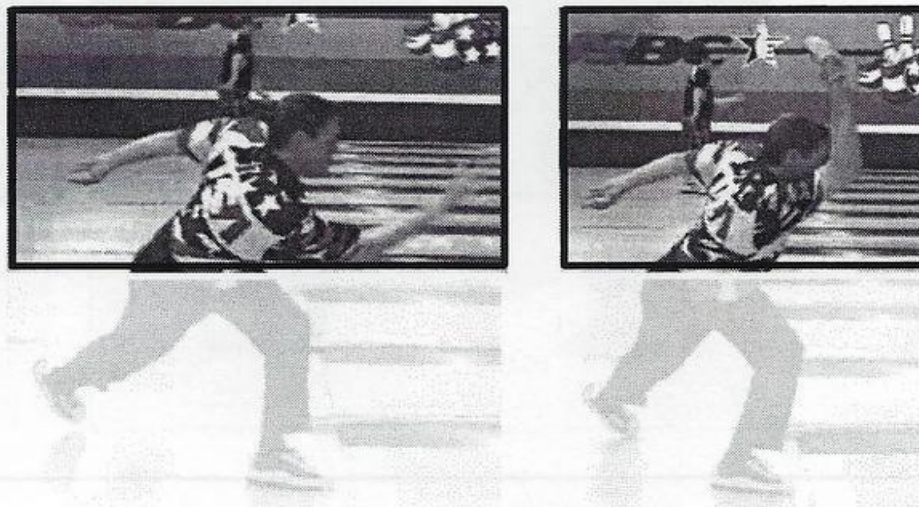
Right Arm – 1:00
Left Arm – 9:00-10:00
Slide Foot (left Foot) – 6:00
Trail Leg (Right Leg) – 7:00-7:30
Head – 12:00 – 1:00



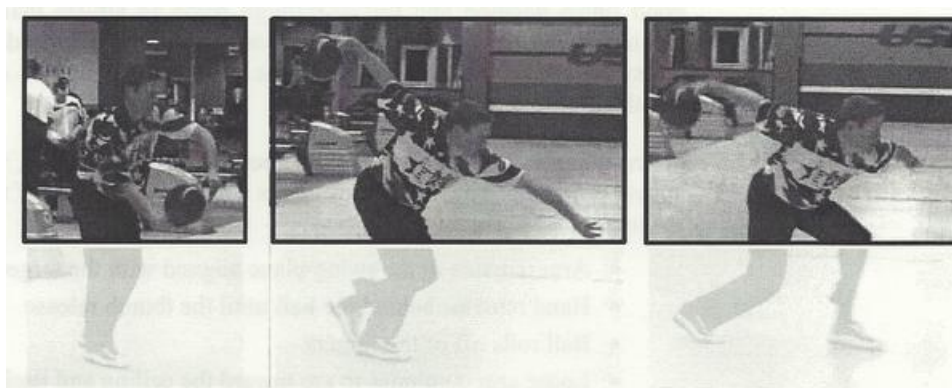
Posture: The Chin, Knee and Toe are in alignment

- The spins is angled slightly forward
- The knees are bent to produce better leverage
- Follow-through has good extension above the bowler's head
- Opposite arm is to the side for balance.

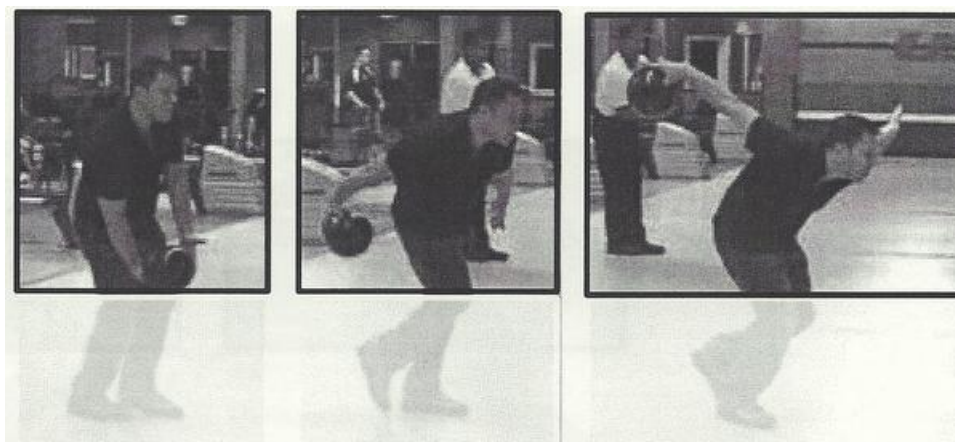
Follow Through



- Arm remains in the swing plane aligned with the target line.
- Hand remains behind the ball until the thumb release.
- Ball rolls off of the fingers
- Loose arm continues to arc toward the ceiling and back down



Just after the ball start, the opposite hand will come off the ball and, depending on the athlete's style, it will move toward the front or the side of the body. This should have a smooth lateral movement. The athlete should rotate their opposite arm and hand so the thumb points to the floor, this will help keep the shoulder still.



Armswing

Flat Swing

Generally a lower backswing height with upper-body posture usually finishing in a upright position.



Rounded Swing

The rounded swing shape is generally shoulder height with the upper body usually being slightly forward.



Steep Swing

The steep swing generally has a higher back swing and extreme forward body posture. At times the elbow bends prior to the release.



REVIEW

Armswing Outline

- Talking About Accuracy
- Two Keys to Accuracy
 - Keeping armswing in line
 - Developing a consistent armswing
- Pro Groove
 - Slight loop action during the armswing
 - Slight – no more than two inches either way
 - Narrow 4" slot
 - Achieve consistent accuracy
- Armswing Tempo
 - Armswing faster than your feet
 - ✓ Ball will go left
 - Armswing slower than your feet
 - ✓ Ball will go right

Release Outline

- The release should occur naturally
 - Handshake position in stance
 - Thumb should drop out of the ball at the end of the sliding step
 - The finger remain in the ball while lifting out and up during the follow through
 - Fingers are on the side of the ball, creating sideways rotation on the ball
- Wrist Position
 - Broken / Weak / Minimum
 - Straight / Firm / Medium
 - Cupped / Strong / Maximum

Finish Position Outline

- A good finish will promote a correct follow-through
 - Head at 12 o'clock
 - Sliding foot at 6 o'clock
 - Trailing leg at 7 o'clock
 - Follow Through at 1 o'clock
- Two Main Points
 - Swing arm out and up
 - Keep the body down and balanced
- Remember your Balance Line – Toe, Knee, Chin

SPARES

- **PICKING UP THE SPARE**

Everybody loves to get a strike. The feeling you get as all 10 pins fall is incredible. But what happens if they all don't fall? Making the spare sometimes seems impossible. Don't panic. Learning to make the spare isn't as hard as you might think.



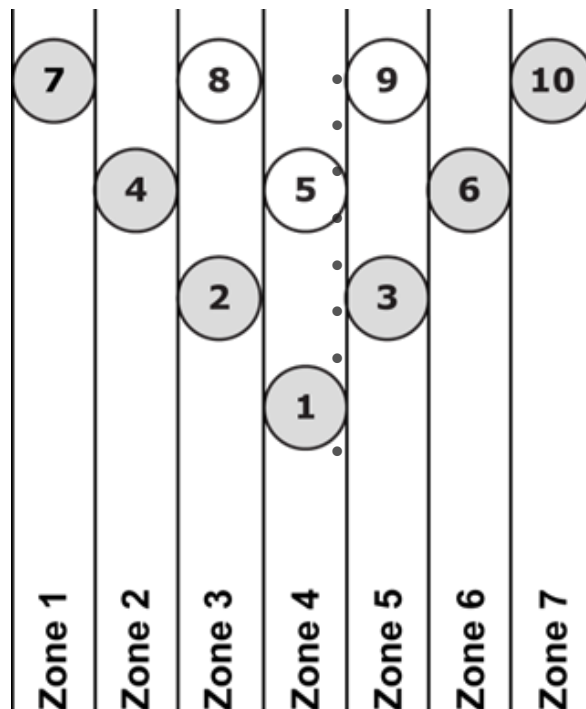
- *Keep calm and spare.*

- **How do you make a spare?**

Spare shooting is an art in and of itself. Spares are different. Many spares will continually show up (like those pesky corner pins), and there are hundreds of spare combinations - some of which are much harder to master. For the sake of laying a solid foundation, we're going to cover your run-of-the-mill spares - not hard to reach splits.

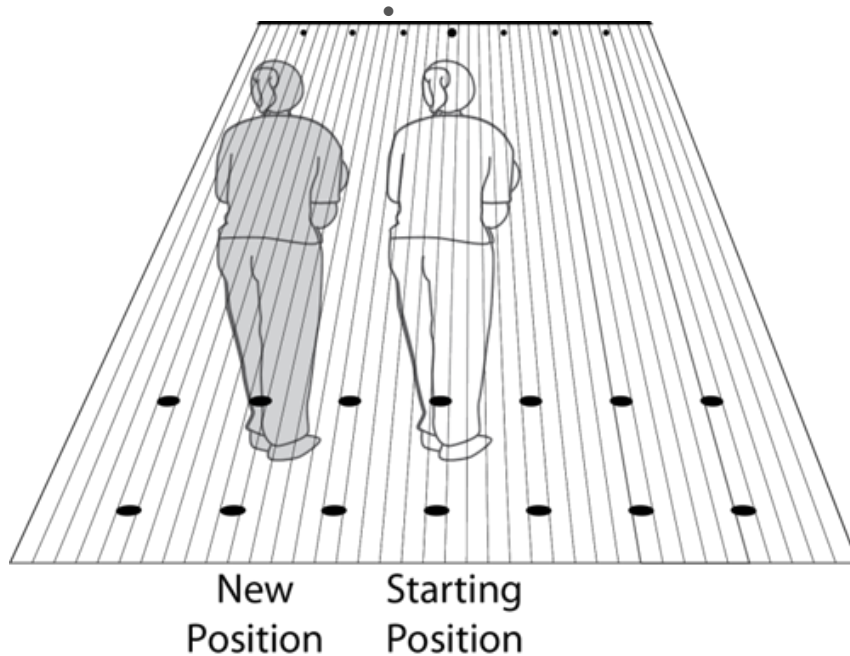
Zones

So, where do we begin? Let's start by separating the pins into seven zones:



- **Move starting position on approach**

If the key pin is in Zone 4, don't change a thing – use your strike shot for these spares. For key pins in Zones 1, 2 or 3, move your feet to the right. The farther left the key pin, the farther right you will move your feet. For key pins in Zones 5, 6 or 7, move your feet to the left; the farther right the key pin, the farther left you will move your feet.



- **Face your spare**

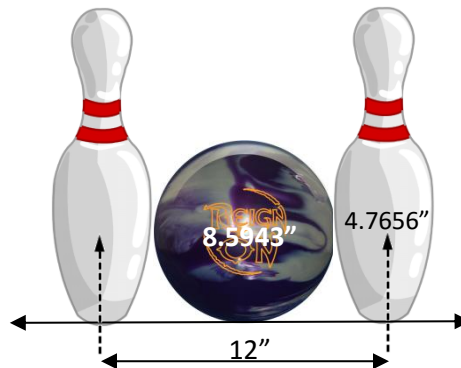
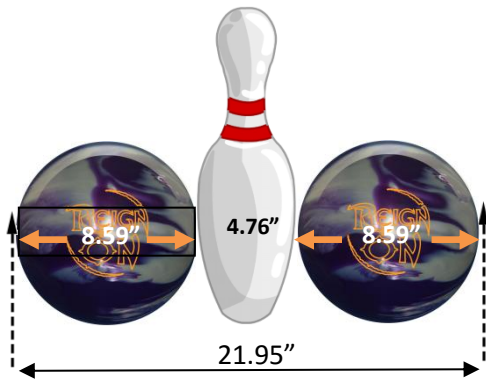
Once you move your feet, you will need to align your body so you are facing the spare. Draw an imaginary line from the pin straight back to your ball and shoulder. This will help keep your arm swing in a straight path towards your spare.

Keep within the Target Area

- Calculating that the ball is 8.59 in diameter
- And the pin is 4.76", and that you have a chance
- To hit the pin on either side, the target is almost
- 22 ", providing you keep the ball entirely within
- the target area.
- Miss a single pin spare you miss half of the lane.
- 13599 inches less than the ball width.

Spits Can Be Converted

Split combination as the 4-5, 5-6, 7-8 and 9-10 are easier to convert than they appear. Pins are 12" apart, center to center. Halves of two pins equals 4.765 and distance between the widest Part of each is 7.344". Diameter of a ball is 8.5943. Distance between the two pins is



Right-Handed Spare Conversion Chart

Spares Right of Head Pin

Feet

Move 4 Boards Left for Each Pin Right of Head Pin.

Target

#3 Pin:
Aim Between
2nd and 3rd
Arrows.

#6 Pin:
Aim at
3rd Target
Arrow.

#10 Pin:
Aim Between
3rd and 4th
Target Arrows.

#3 Pin —————
#6 Pin
#10 Pin - - - - -



Spares Left of Head Pin

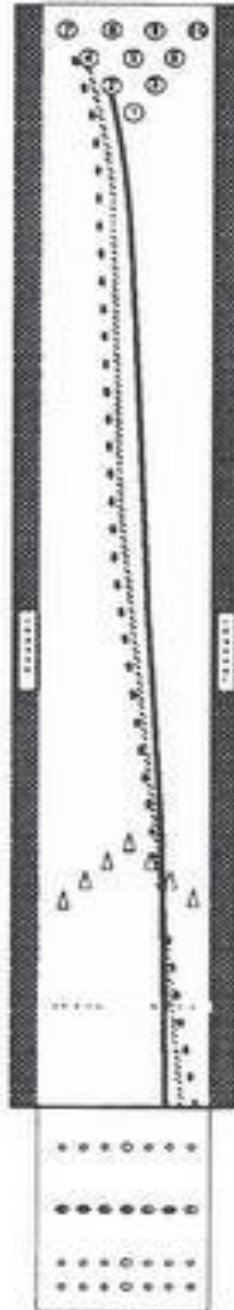
Feet

Move 3 Boards* Right for Each Pin Left of the Head Pin.

Target

Aim Between
2nd and 3rd
Arrows.

#2 Pin —————
#4 Pin
#7 Pin - - - - -



* #1 and #5 Pins Same as Strike Line.

* Note: Make all spare adjustments based upon your adjusted strike position.

Left-Handed Spare Conversion Chart

Spares Left of Head Pin

Feet

Move 4 Boards Right for Each Pin Left of the #1 Pin.

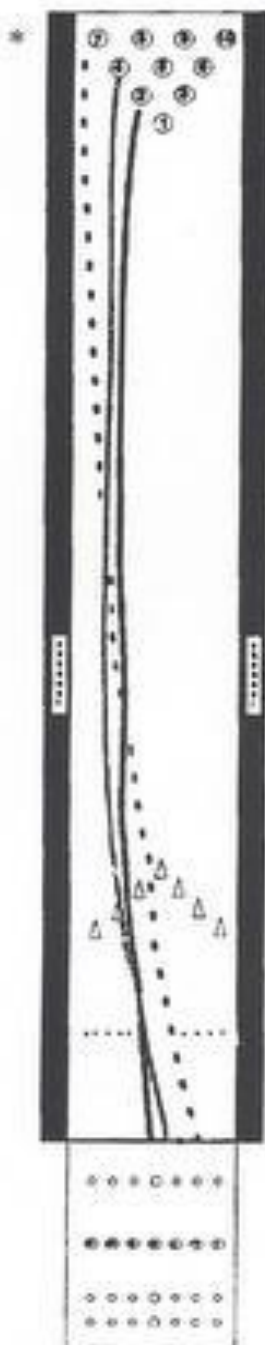
Target

#2 Pin: Aim Between 2nd and 3rd Arrows.

#4 Pin: Use 3rd Target Arrow.

#7 Pin: Aim Between 3rd and 4th Arrows.

#2 Pin —————
 #4 Pin —————
 #7 Pin - - - - -



Spares Right of Head Pin

Feet

Move 3 Boards Left for Each Pin Right of the Head Pin.

Target

Aim Between 2nd and 3rd Arrows.

#3 Pin —————
 #6 Pin —————
 #10 Pin - - - - -



* #1 and #5 Pins Same as Strike Line.

* Note: Make all adjustments based upon your adjusted strike position.

Spare Outline

- What is a Spare?
- Three Keys to Making Spares?
 - Determine the Key Pin to hit to make the spare
 - Line up your feet in the proper position
 - Aim for the correct target.
- Locator Dots
 - All three sets line up with each other
- Target Arrows
- What are the seven Key Pin Positions?
 - Any spare can be made by simply aiming at one of the seven Key Pin Positions.
- Know your Pins by Number!!!
- Determine the Key Pin
 - Two pins left standing – Key Pin is the Pin Closest to you
 - With three or more pins left standing – Key Pin is the Pin in the Middle
 - Key pin in the 4 -7 spare is _____
 - Key pin in the 3 – 10 baby split is _____
 - Key pin in the 1 – 2 – 4 spare is _____
- Spares Right of the Head Pin
 - Move your stance position left four boards at a time
 - #3 – 4 boards left of strike position
 - #6 – 8 boards left of strike position
 - #10- 12 boards left of strike position
- Spare Left of the Head Pin
 - Move your stance position right three boards at a time
 - #2 – 3 boards right of strike position
 - #4 – 6 boards right of strike position
 - #7 – 9 boards right of strike position
- Always point your body in the direction of the target
 - Presetting the angle of the direction
- Walk straight towards your target line
- Remember – Face your Target, Walk towards your Target and Follow Through in the Direction you want the ball to travel.

Handicap System

Most league competition is based on a handicap system. The handicap system spots bowlers with lower averages extra pins to equalize the competition. It's like getting a head start before the game even begins.

When you bowl in league your average is calculated by the league secretary each week. Your average is a running total of all your scores divided by the number of games you have bowled that season. This means that if you start bowling better each week, your average will go up.

An individual handicap is based on a percentage of the difference between your average and 200, which is par in bowling. This percentage is usually 80%, 90%, 100% depending on what the individual league decides.

A team handicap is based on a percentage of the difference between your team's average and the average of the other team.

Example: - 90% of the difference of average and 200 = handicap

Team #1			Team #2		
	Avg	Hdcp		Avg	Hdcp
Sally	145	49	Michelle	186	16
Jim	157	38	Mike	206	0
Ed	<u>105</u>	85	Dave	<u>157</u>	38
Total	407		Total	445	

Team Handicap – 90% of the difference between your teams averages and your opponent

Team #1 - 407

Team #2 – 445

Difference is $38 \times 90 = 34$ pins hdcp for Team #1

Individual Handicap – 90% of the difference between your average and 200.

Sally's Average 145 difference is $55 \times 90 = 49.5$ or 49 pins per game.

Scoring System

This sample game will demonstrate everything we have discussed previously. If you can follow the steps frame-by-frame, you will have no difficulty scoring your own game.

In the first frame, you bowl a spare. Notice we have not filled in a score for the frame, because you have to bowl another ball first. In the second frame, you bowl a strike. The 10 from the first frame to give you a score of 20 in the first frame.

We have not filled in a score for the second frame, because you have to bowl the next two balls first.

In the third frame, you make eight on your first Ball, then miss the remaining pins on your second shot. We can now fill in the second frame ($20+10+8=38$) and the third frame ($38+8=46$)

Since you're beginning to warm up, you bowl strikes in the fourth and fifth frames. Indicate strikes for these frames but don't fill in the scores yet since a strike is worth 10 pins plus the next two balls.

In the sixth frame, you bowl a nine on the first Ball then pick up the remaining pin for a spare. Now we can fill in the running totals for frame Four ($46+10+10+9=75$) and frame five ($75+10+9+1=95$). In the seventh frame, you knock down nine pins on your first ball, and then miss the last pin on the second ball. We can now fill in the running totals for frame six ($95+10+9=114$) and frame seven ($114+9=123$)

In the eighth and ninth frames, you bowl strikes.

Indicate these strikes but don't fill in any running scores at this time. Remembering the rule to score a strike, we must wait for the second balls before we can score the two strikes or a double. The tenth frame you roll 9 on the first ball, now we can score the eighth frame.

($123+10+10+9=152$). You pick up the one pin left for a spare. Now we can score the ninth frame ($152+10+10=172$) tenth frame you have a spare and you roll one more ball and get a strike. Now you can score the tenth frame ($172+10+10=192$). Nice Game!

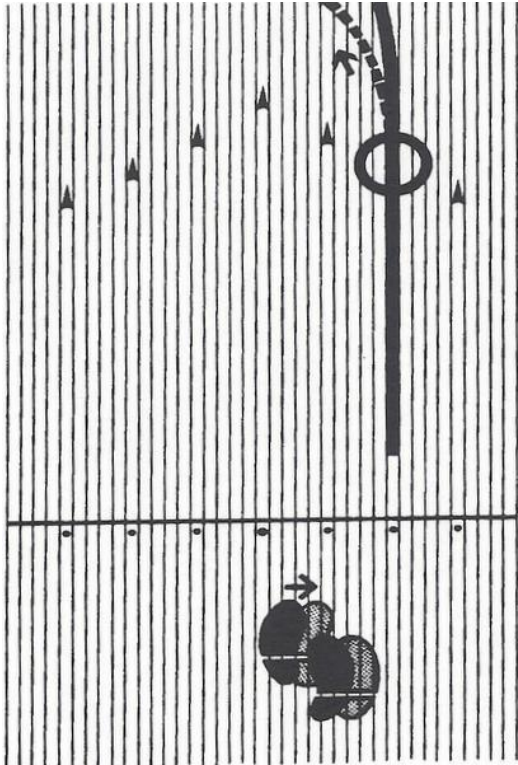
Sample Score Sheet

Frame	1	2	3	4	5	6	7	8	9	10
1	6 / 20									
2	6 / 20	X								
3	6 / 20	X	8 — 38							
4	6 / 20	X	8 — 38	X						
5	6 / 20	X	8 — 38	X	X					
6	6 / 20	X	8 — 38	X	X	9 / 46				
7	6 / 20	X	8 — 38	X	X	9 / 114	9 — 123			
8	6 / 20	X	8 — 38	X	X	9 / 114	9 — 123	X		
9	6 / 20	X	8 — 38	X	X	9 / 114	9 — 123	X	X	
10	6 / 20	X	8 — 38	X	X	9 / 114	9 — 123	X	X	9 / X 192

Now do your own score provided in class.

Making Lane Adjustments

The bowler's goal is to hit the pocket. However, the bowler's ball might hit the head pin straight on or "cross-over" to the wrong side of the head pin but still produces a strike. This is what we call pure luck...The bowler's goal is to hit the pocket. The pocket for the right-hander is between the 1 and 3 pins. For the left-hander it's between the 1 and 2 pins.



Here's the rule of thumb for adjusting to get the ball in the pocket: If the ball misses the pocket to the right, move your feet to the right on the approach. If the ball misses to the left, move your feet to the left. In other words, move your starting position in the direction of the miss.

Moving your feet to the right results in the ball path moving left because the ball is now coming from further right in relation to your target, so when it goes past the target it will be moving further left.

Make adjustments in increments. If the ball is consistently missing the strike pocket to the right, move your feet two or three boards to the right and roll the ball over the same target. On the next shot, determine if you made a good shot. If so, and the shot still misses right, move another couple of boards and keep doing so until you are "lined-up". If you miss your strike pocket to the left, use the same system .

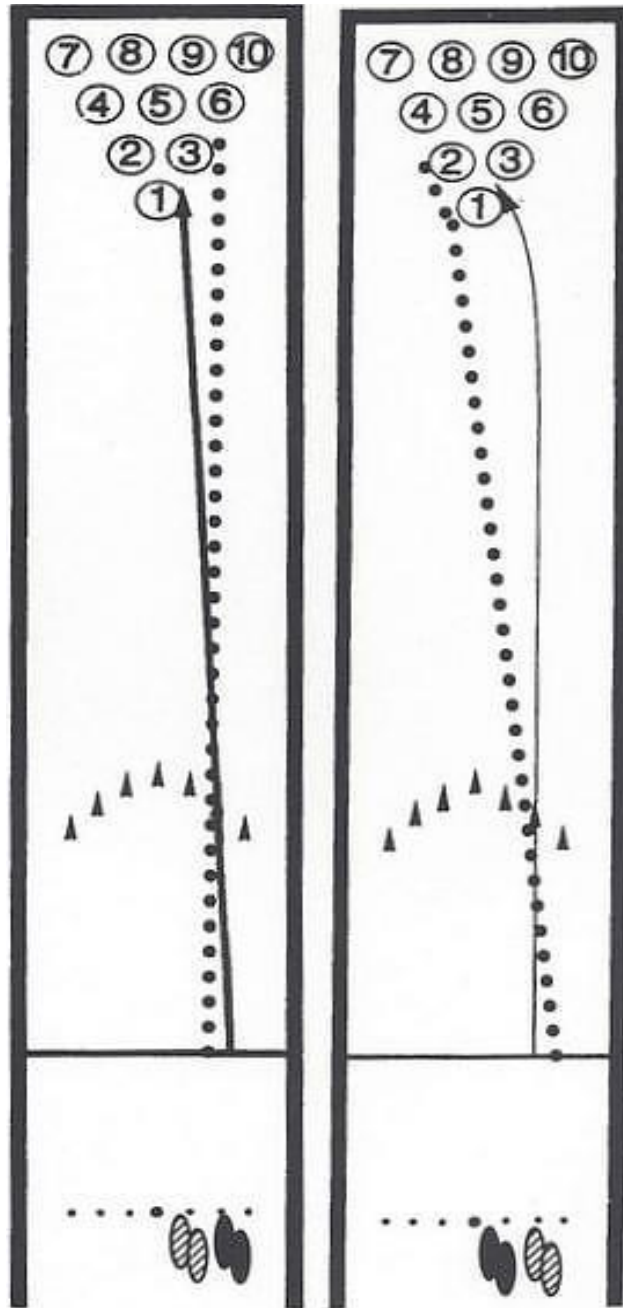
Making Lane Adjustments

Straight-Ball Path

First ball misses to the right. The bowler moves feet to the right which changes the angle of the ball path, starting the path further right, which causes the ball to be moving left as it crosses the target toward the pocket.

Hook-Ball Path

First ball misses the pocket to the left. The bowler moves feet to the left which changes the angle of the ball path, starting the path further left, which causes the ball to be moving right as it crosses the target toward the pocket.



First Ball Path: Dotted Line
Corrected Path: Solid Line
First Ball Feet Position: Lined
Corrected Feet Position: Solid Line

Terminology

- ADDRESS - The Bowlers starting position.
- ANCHOR - The last bowler in the lineup of a team. The anchor on most teams is the bowler with the highest average.
- ANGLE- Direction the ball travels into the pocket.
- APPROACH- The area in front of the foul line on which the bowler stands.
- ARROWS- Aiming points embedded in the lane to help the bowler in targeting.
- AVERAGE- Bowlers averages are determined by adding their individual game scores and dividing the total by the number of games they bowled.
- BABY SPLIT- Leaving the 2 and 7 pins or the 3 and 10 pins.
- BACK UP- A ball that rolls or breaks to the right for right-handed bowlers or to the left for left-handed bowlers. Also known as a "reverse".
- BEDPOSTS- The 7-10 split otherwise known as a "Railroad".
- BIG FOUR- The 4-6-7-10 split.
- BLIND- A score given to an absent bowler.
- BLOW, ERROR, MISS, OPEN- Failure to pick up a possible spare.
- BOARDS- The strips of wood that make up the lanes.
- BROOKLYN- A right-handed bowler hitting to the left of the head pin or a left-handed bowler hitting to the right of the head pin. Also called a "cross-over".
- CHANNEL- The deeply grooved area on both sides of the lanes.
- CHOP- To chop or miss one of the back pins or the side pins.
- CONVENTIONAL GRIP- A ball drilled so the bowler can grip it by placing his/her fingers in the ball to the second joint, and entire thumb in thumb hole.
- CONVERSION- Making the spare.
- COUNT- The number of pins a bowler gets on the ball after a spare.
- CRANKER- A person who throws a ball that has a big hook at the end.
- CURVE BALL- A ball that breaks in a big arc from the right to left for a right-handed bowler, and from the left to right for a left-handed bowler.
- DEAD BALL- Bowler bowls out of turn, on wrong lane, or ball hits channel.
- DECK- The end of the lane where the pins are located when standing.
- DELIVERY- The way a person rolls the ball.
- DOUBLE- Two strikes in a row.
- DOUBLE WOOD- When one pin is directly behind another pin in a spare attempt. Double-wood leaves are 1-5, 2-8 and 3-9.
- DUTCH 200- Scoring a 200 game by alternating strikes and spares.
- ERROR- A miss, or a blow.
- FINGER TIP GRIP- Ball drilled so the bowler grips it by inserting his/her fingers into the holes to the first joint, and can insert the entire thumb in the thumb hole.
- FOUL- Touching or going over the foul line during the delivery.
- FRAME- A Players turn and a game consists of ten frames.
- GUTTERBALL- Throwing the ball into the channel
- HANDICAP- A scoring adjustment used to equalize bowlers based on their averages.
- HEAD PIN- The #1 pin.
- HOOK- A ball that breaks sharply into the pocket on a good hit.

TERMS (CONTINUED)

<u>HOUSE-</u>	The Bowling center.
<u>KEGLER-</u>	A German term for bowler.
<u>LANE-</u>	The playing surface.
<u>LEADOFF-</u>	The bowler who bowls first for the team.
<u>LEAGUE-</u>	An organized group of bowlers that bowl on a regular basis.
<u>LEAVE-</u>	Term given for pins remaining after the first ball.
<u>LIFT-</u>	The upward motion of the fingers at the point of release.
<u>LOFTING-</u>	Throwing a ball well out onto the lane instead of rolling it.
<u>MARK-</u>	A strike or a spare.
<u>NOSE HIT-</u>	A ball that hits full on the head pin. Nose hits usually result in big splits.
<u>OPEN-</u>	Failure to get a strike or spare in the a frame.
<u>PERFECT GAME-</u>	Rolling all strikes (12) in a single game to achieve a score of 300.
<u>PIN BOWLER-</u>	A bowler who looks or aims at the pins when bowling.
<u>PIT-</u>	The area at the end of the lane into which the ball and pins fall.
<u>PITCH-</u>	The angles of the holes drilled into the ball.
<u>POCKET-</u>	The 1-3 pins for right-handed bowlers and the 1-2 pins for left-handers.
<u>POINTING-</u>	Aiming the ball.
<u>POSITION ROUND-</u>	When teams determined by position in the league compete against each other.
<u>PUSHAWAY-</u>	Moving the ball into motion on the first step of the delivery.
<u>RELEASE-</u>	The point in the delivery when the ball leaves the hand.
<u>RESET-</u>	Setting the pins up for a second time due to missing or out of line pins.
<u>ROTATION or REVOLUTION-</u>	The number of times a ball completely rolls around its axis after it leaves the bowlers hand and rolls down the lane.
<u>RUNNING LANE-</u>	A lane on which the ball hooks easily.
<u>SANCTIONED-</u>	Any bowling competition conducted in accordance with the rules USBC.
<u>SANDBAGGER-</u>	A bowler who keeps his average low purposely in order to receive a higher handicap.
<u>SCRATCH-</u>	Bowling without the benefit of a handicap.
<u>SLEEPER-</u>	A pin hidden behind another pin. Also known as "Double Wood".
<u>SPAN-</u>	Distance between the thumbhole and finger hole on a ball.
<u>SPARE-</u>	Knocking down all ten pins with two shots in one frame.
<u>SPLIT-</u>	A spare leave in which the head pin is down and the remaining pins have another pin down immediately ahead or between them so that the gap is greater than the width of the ball.
<u>SPOT BOWLER-</u>	A bowler who looks at a spot or arrows on the lanes instead of the pins.
<u>STRIKE-</u>	Knocking down all pins with one ball.
<u>TAP-</u>	A pin that remains standing on what was apparently a perfect hit.
<u>TIMING-</u>	Coordination of all elements of delivery.
<u>TRACK-</u>	The line the ball follows on the way to the pins.
<u>TURKEY-</u>	Three strikes in a row in a single game.
<u>TURN-</u>	Action of hand and wrist toward pocket area at point of ball release.
<u>USBC-</u>	National governing body of bowling in the United States.
<u>WASHOUT-</u>	The 1-2-10 or 1-2-4-10 leave or 1-3-7 and 1-3-6-7.

Beginning Bowling Midterm Review

- 1. Lane Specifications**
- 2. Courtesy And Safety**
- 3. Where to line up....distance from foul line and left or right.**
- 4. Basic body positions**
- 5. Where to hold ball in relation to ball speed.**
- 6. Wrist positions**
- 7. Grips**
- 8. Balance position during delivery**
- 9. Ball surface**
- 10. Straight Ball vs hook ball**
- 11. Two keys to success in bowling**
- 12. Spare shooting line up keys**
- 13. Seven Key Pins**
- 14. How to determine key pins**
- 15. Board adjustments left of head pin
Board adjustments right of head pin**
- 16. Targeting and locator dots**
- 17. Lane Conditions and “reading” lanes**
- 18. Terms, scoring and handicap system**