

Kevin Ackerman

USBC Level 1 Coach (8962-23392)

USA Youth Fastpitch Softball Coach (1818517)

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Kevin is a USA Certified Youth Fastpitch Softball coach for recreational and competitive girls travel softball teams. He has a concentration on helping the girls develop confidence to be successful. He practices the power of positive principles. In addition to coaching youth softball Kevin is also a USBC Certified Youth bowling coach. He is SafeSport Certified in both bowling and softball. He is a registered volunteer with USBC. He has been a bowling coach for over 16 years. He is a volunteer coach for the Maple Hill High School Varsity girls and boys bowling teams. Since 2018 bowlers on the teams have earned accolades including:

Going Undefeated in a Season, NYS Colonial Council champions,
NYS Section 2 Bowling Competition Second Place, High Game, High Series,
NYS Section 2 First and Second Team All Stars,
Helping students earn individual scholarships worth thousands of dollars,
Compete at the NCAA Division I collegiate level.

Varsity Bowling Fast Track Coaching Maple Hill High School

Kevin Ackerman – USBC Level 1 Coach
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United States Bowling Congress



U.S. Center for SafeSport Training



NCSI Background Screening Solutions

Varsity Bowling Fast Track Coaching

Maple Hill High School

Challenge:

- To teach high school Varsity bowlers, who do not bowl year-round, to be highly competitive against year-round bowlers.
- Given two weeks to teach each bowler the fundamentals of bowling.

Varsity Bowling Fast Track Coaching

Maple Hill High School

Fundamentals:

Lane Courtesy

Feet Placement

Targeting

4 Step Approach

Timing

Pre-Shot Routine

Spare Shooting

Maximizing Consistency

Scoring

Oil and Oil Patterns

Equipment

Lane Conditions

Breathing

Mental Toughness

Confidence

Emotional Control

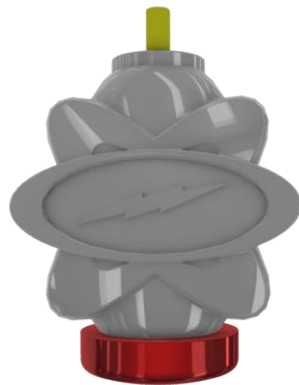
Goal Setting

Fail/Learn

Varsity Bowling Fast Track Coaching

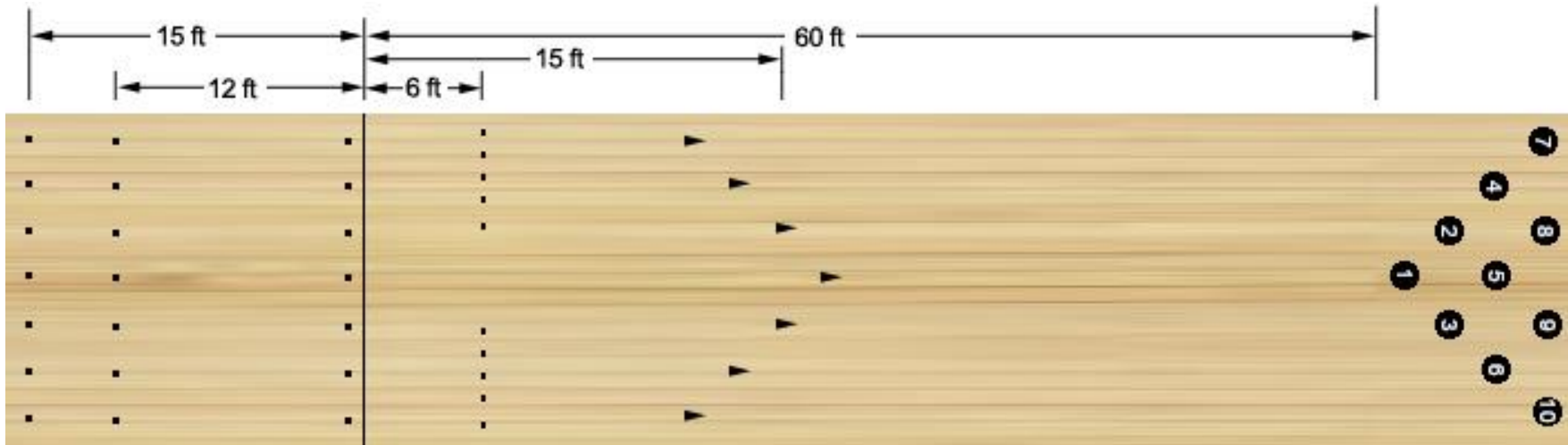
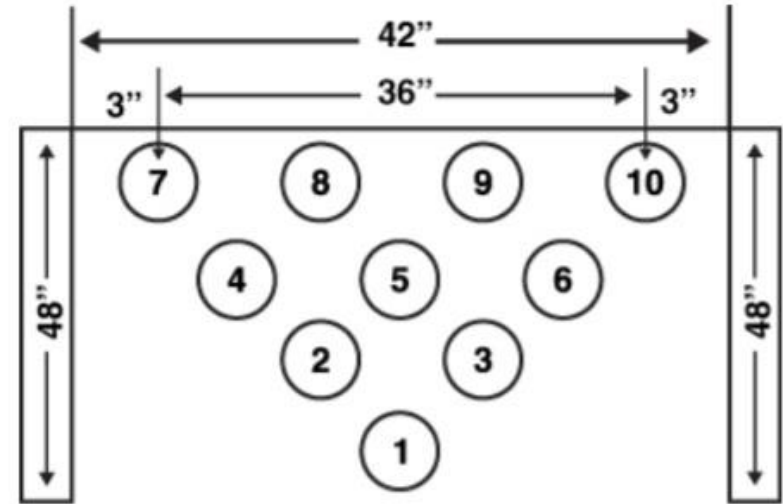
Maple Hill High School

- Equipment for a Varsity Bowler who does not bowl year-round. Entry level reactive ball. Purchase ball at a pro shop, not online.
- Straight shot, up 2nd arrow, non-dominant foot at board 10.
- Stroker style if bowler is ready, non-dominant foot at board 10, target board 7.



Bowling Lane Dimensions

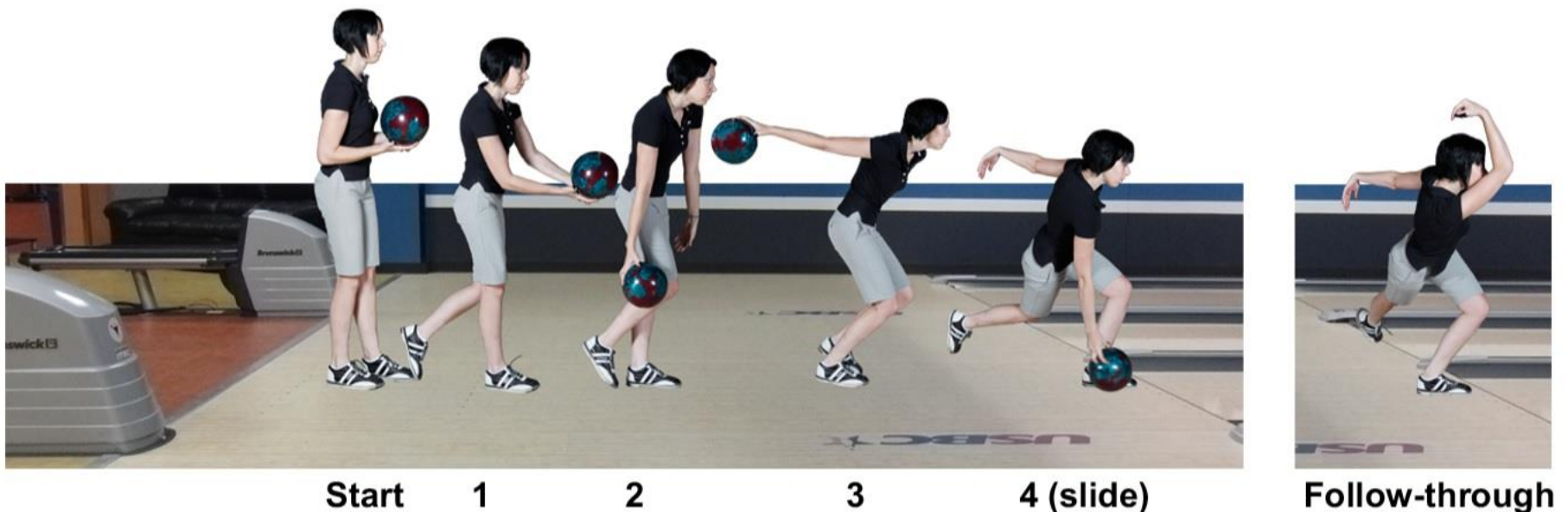
Bowling Pin Identification



Beginner Bowler Approach

Right Hand Bowler

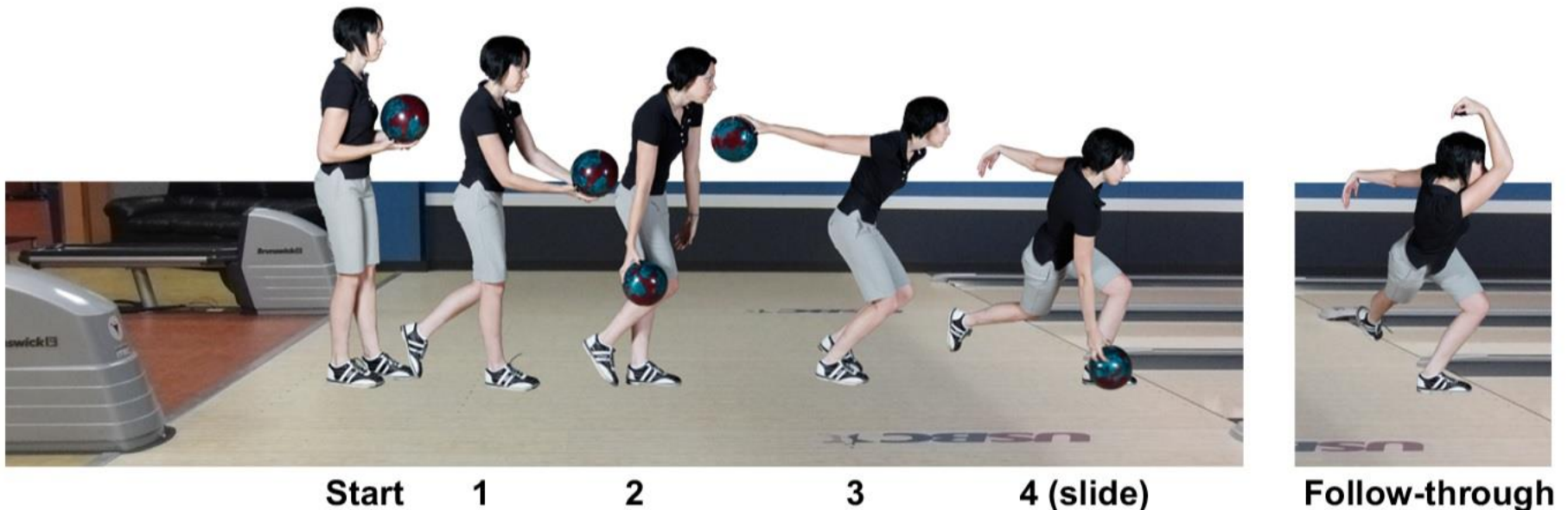
- For any level bowler there is a defined 4 Step Approach. The 4 Step Approach helps with release timing and consistent ball release.
- Push Out, Swing Down, Pull Back, Release.



Beginner Bowler Approach

Right Hand Bowler Setup

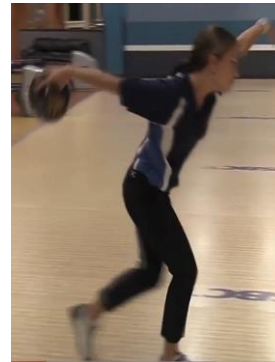
- . Spine to 15° forward tilt
- . Slightly drop or lower your throwing arm shoulder
- . Place your dominant hand underneath the ball
- . Place your non-bowling hand more underneath dominant hand the ball
- . Bend your knees
- . Bring your non-slide foot back behind your slide foot 3 inches



Right Hand Bowler Release

4 Step Approach

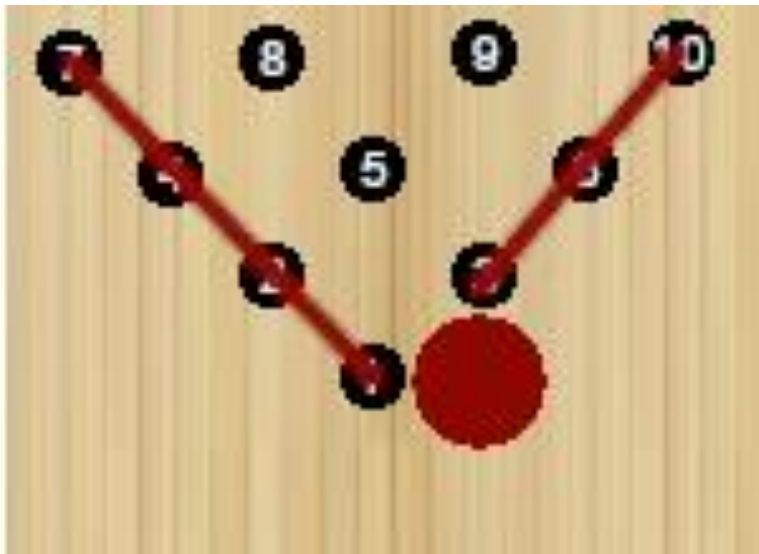
- Step 1 – Push Out
- Step 2 – Swing Down
- Step 3 – Pull Back
- Step 4 – Release



Beginner Bowler Approach

Right Hand Bowler

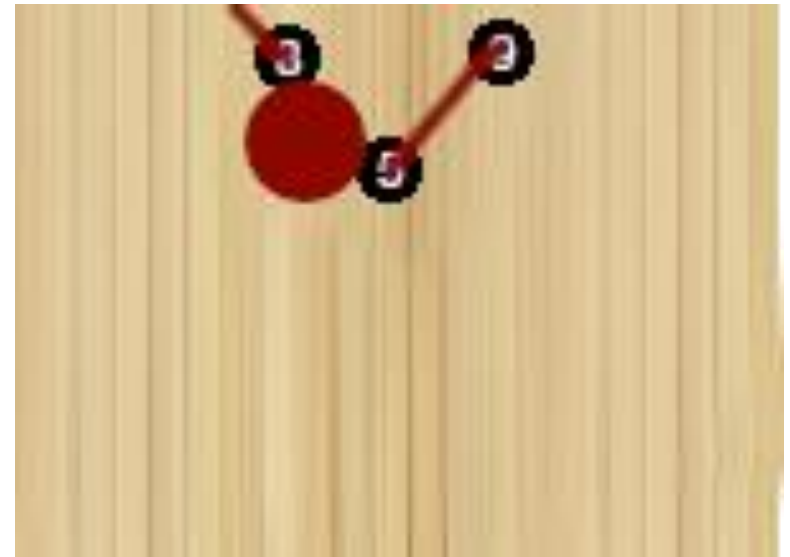
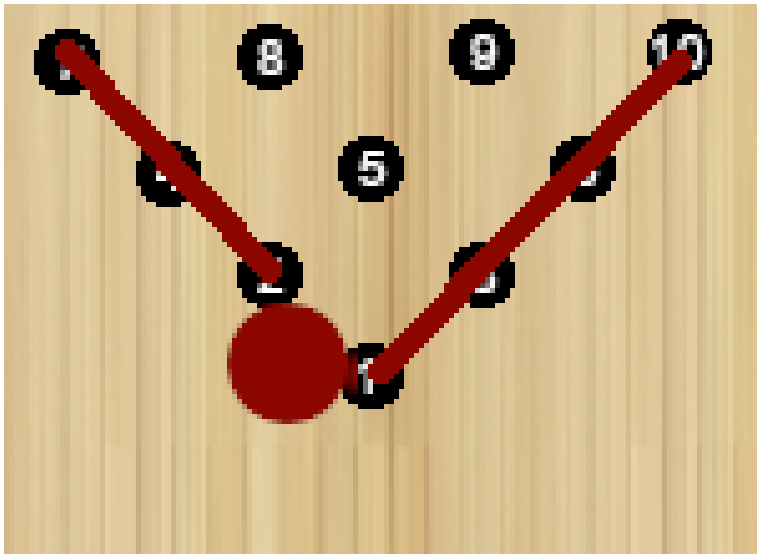
- For the best odds of knocking down all the pins on one shot, the ball will come into contact with 4 pins; Pins 1,3,5,9 for a right-handed bowler.
- The remaining pins are knocked down via deflection.



Beginner Bowler Approach

Left Hand Bowler

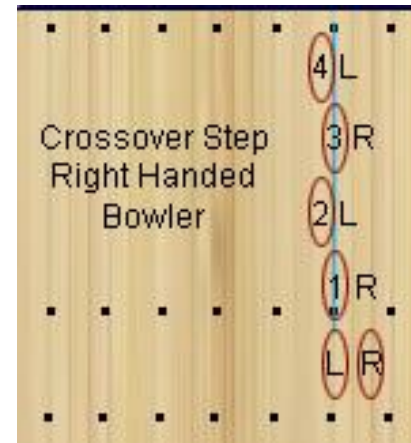
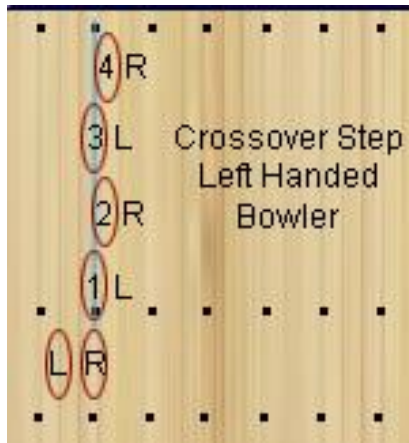
- For the best odds of knocking down all the pins on one shot, the ball will come into contact with 4 pins; Pins 1,2,5,8 for a left-handed bowler.
- The remaining pins are knocked down via deflection.



Beginner Bowler Approach

4 Step Approach

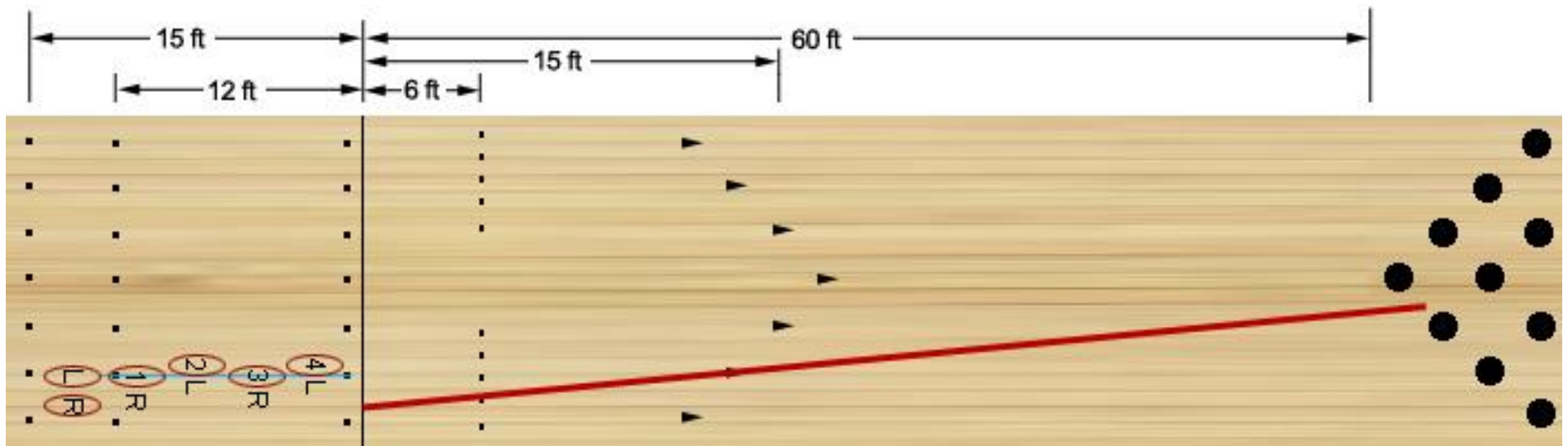
- The first step in the release is a crossover step.
- This helps to keep your swing plane in line by getting your leg out of the way.



Beginner Bowler Approach

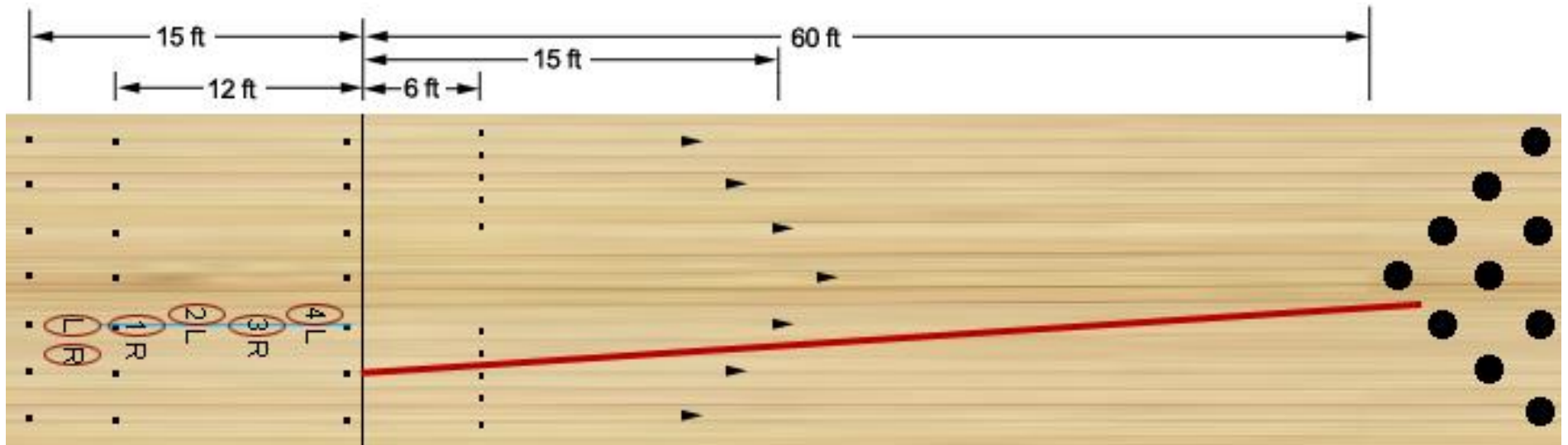
Right Hand Bowler

- Acknowledge lane courtesy.
- For a beginning bowler, line up feet at 2nd dot from dominant arm side. Take 1 second to set.
- Aim for 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball.



Beginner Bowler Approach Alternate Right Hand Bowler

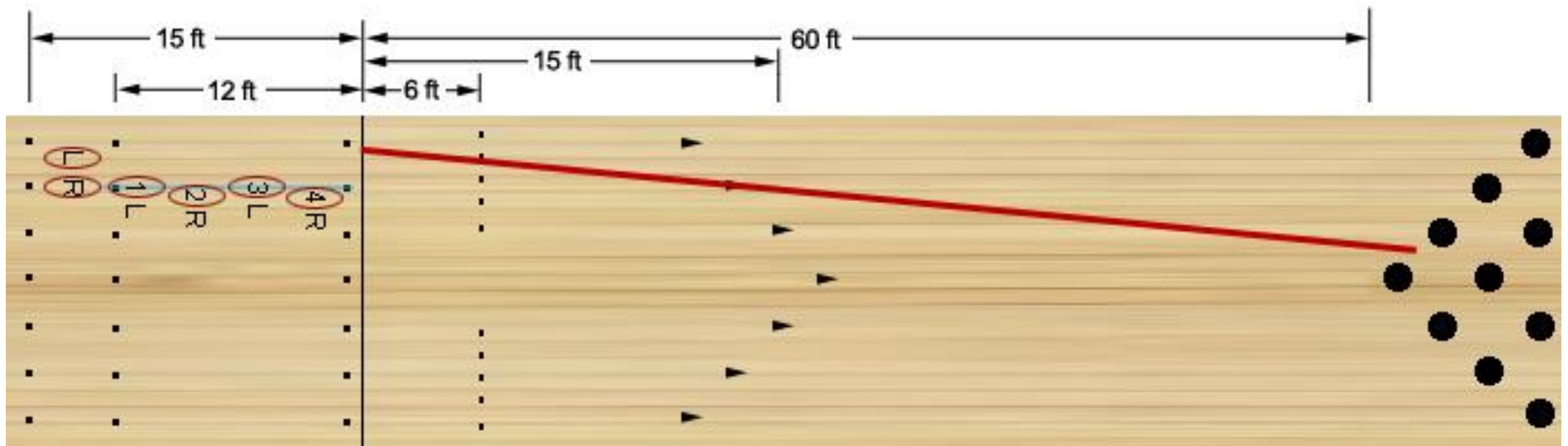
- Acknowledge lane courtesy.
- For a beginning bowler, line up left foot at 3rd dot from dominant arm side. Take 1 second to set.
- Aim between 2nd and 3rd arrow from dominant arm side.



Beginner Bowler Approach

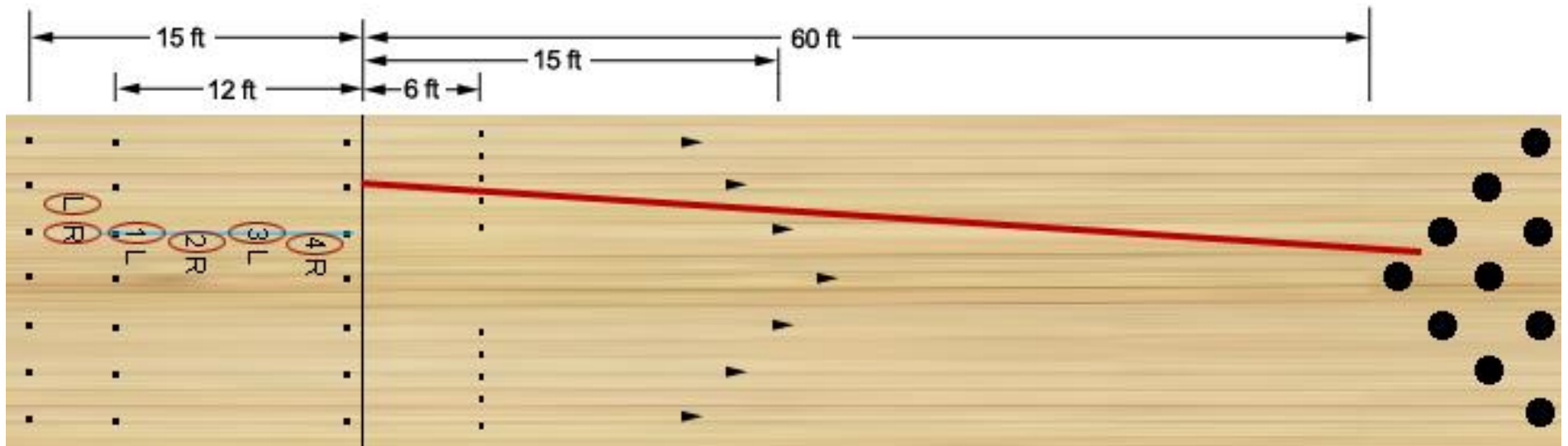
Left Hand Bowler

- Acknowledge lane courtesy.
- For a beginning bowler, line up feet at 2nd dot from dominant arm side. Take 1 second to set.
- Aim for 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball.



Beginner Bowler Approach Alternate Left Hand Bowler

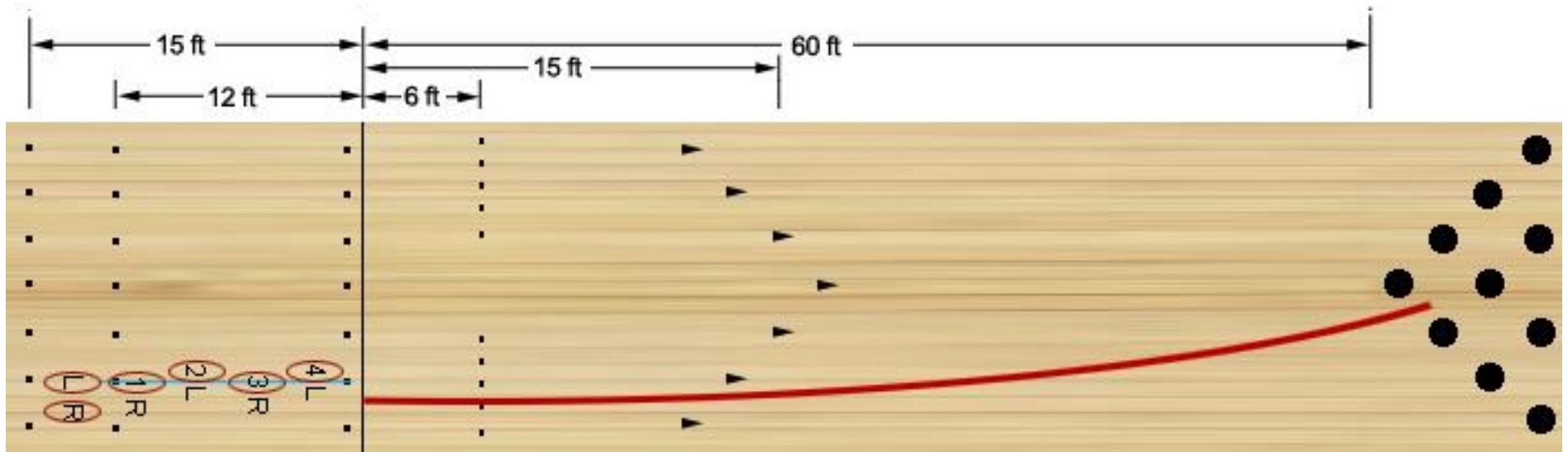
- Acknowledge lane courtesy.
- For a beginning bowler, line up left foot at 3rd dot from dominant arm side. Take 1 second to set.
- Aim between 2nd and 3rd arrow from dominant arm side.



Stroker Bowler Approach

Right Hand Bowler Fingertip

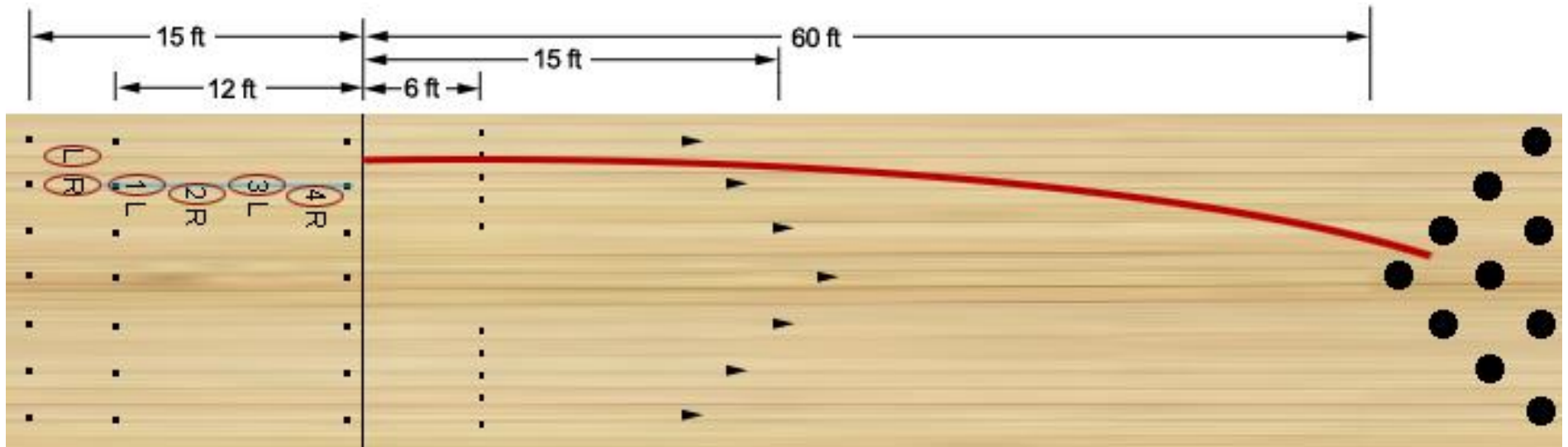
- For a stroker bowler, line up left foot at 2nd dot from right arm side.
- Aim between 1st & 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball, slight arc.



Stroker Bowler Approach

Left Hand Bowler Fingertip

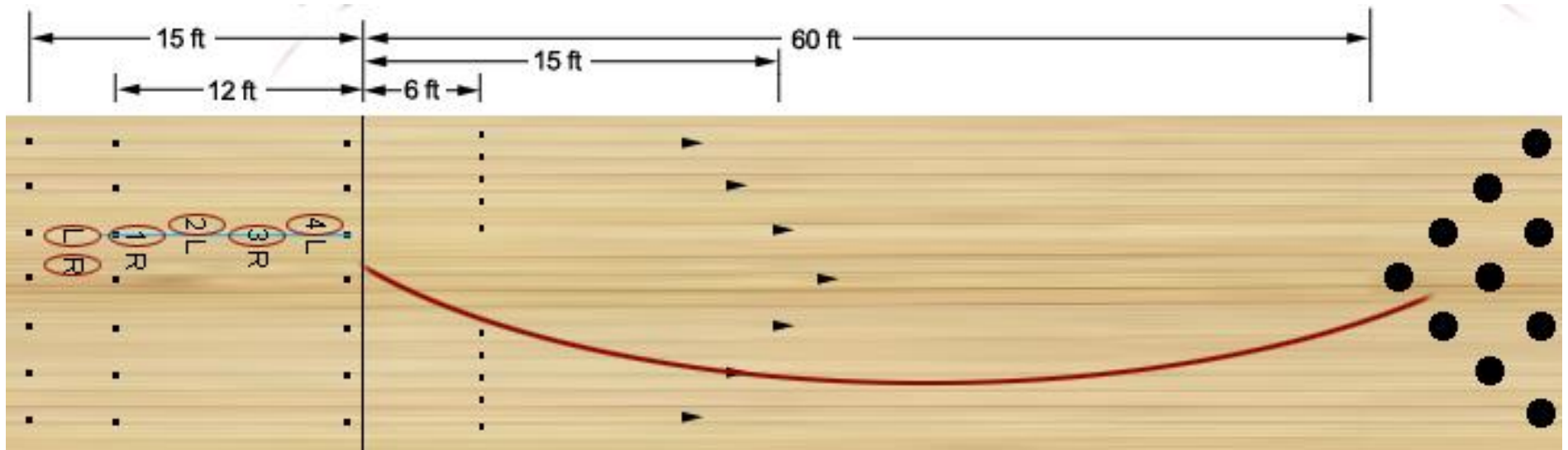
- For a stroker bowler, line up right foot at 2nd dot from left arm side.
- Aim between 1st & 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball, slight arc.



Tweener Bowler Approach

Right Hand Bowler Fingertip

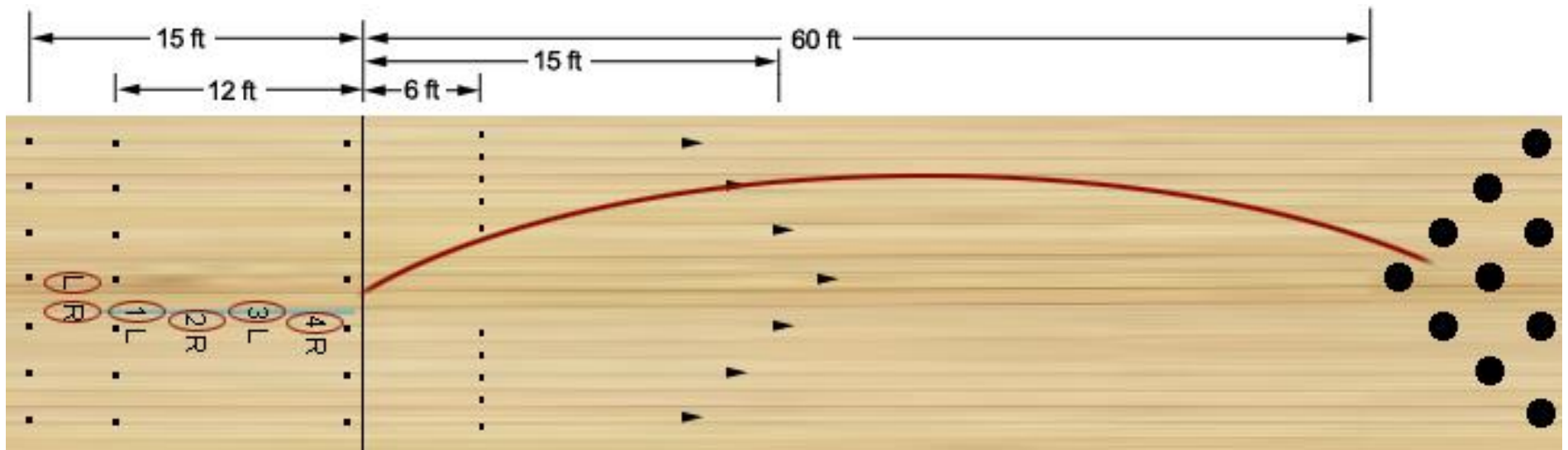
- For a tweener bowler, line up left foot at 5th dot from right arm side.
- Aim for 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball, bigger arc.



Tweener Bowler Approach

Left Hand Bowler Fingertip

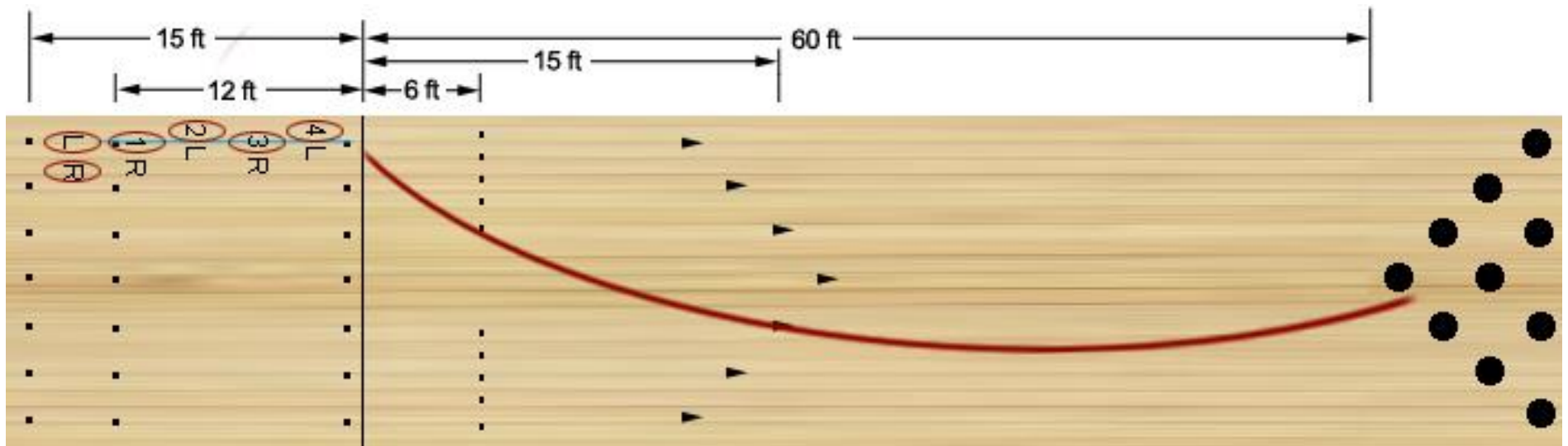
- For a tweener bowler, line up right foot at 5th dot from left arm side.
- Aim for 2nd arrow from dominant arm side.
- Body is relaxed, no muscling ball, bigger arc.



Cranker Bowler Approach

Right Hand Bowler Fingertip

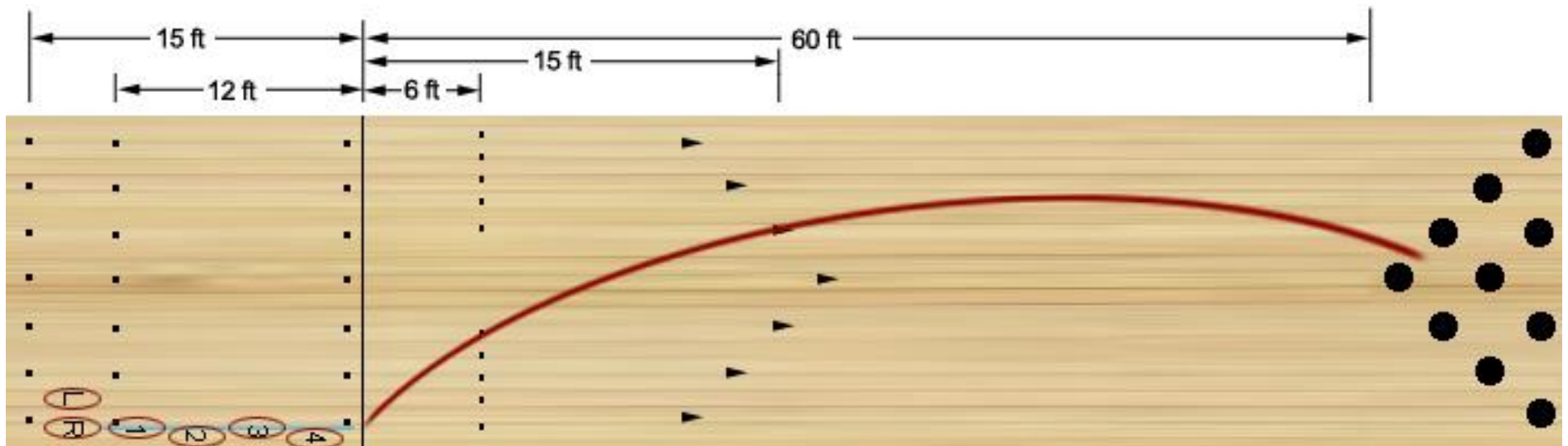
- For a cranker bowler, line up left foot at farthest dot from right arm side.
- Aim for 3rd arrow from dominant arm side.
- Body is relaxed, no muscling ball, largest arc.



Cranker Bowler Approach

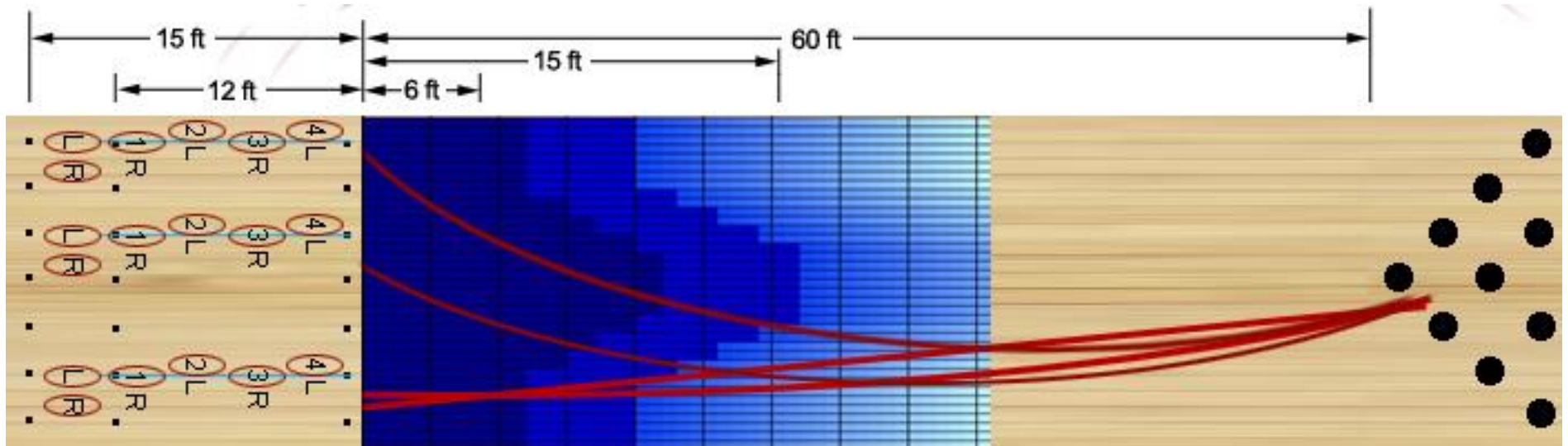
Left Hand Bowler Fingertip

- For a cranker bowler, line up right foot at farthest dot from left arm side.
- Aim for 3rd arrow from dominant arm side.
- Body is relaxed, no muscling ball, largest arc.



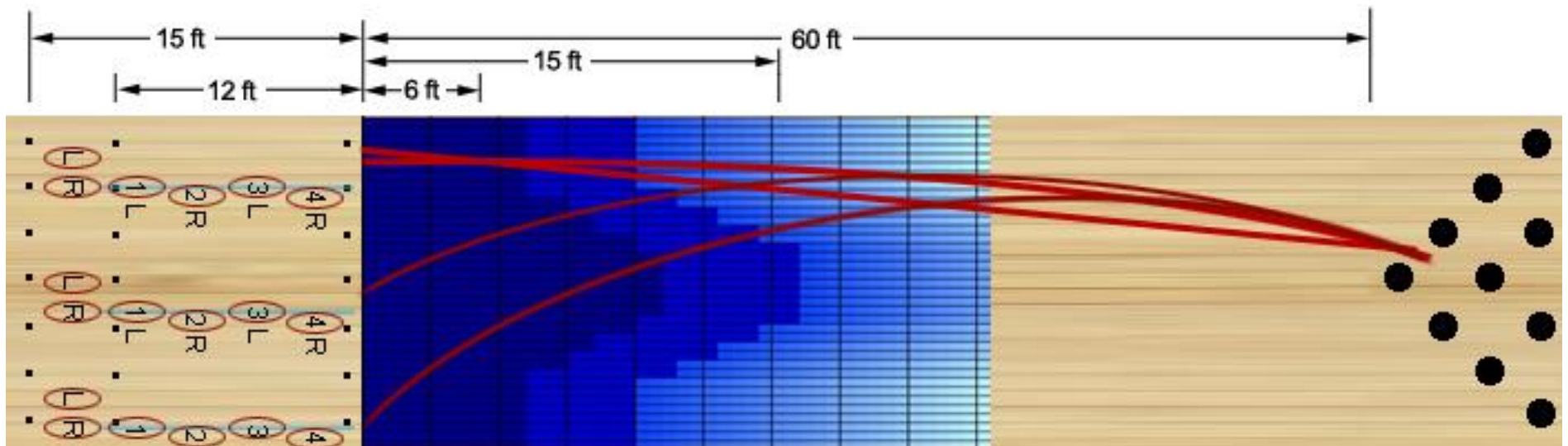
Various Releases with Oil Pattern

- Oil is spread across the lane. The length of the oil and the weight of the oil can make the sport extremely difficult. The ball skids through the oil.
- Where the oil stops is where the ball “reacts” (flips).
- The ball now rolls through the pins with force.



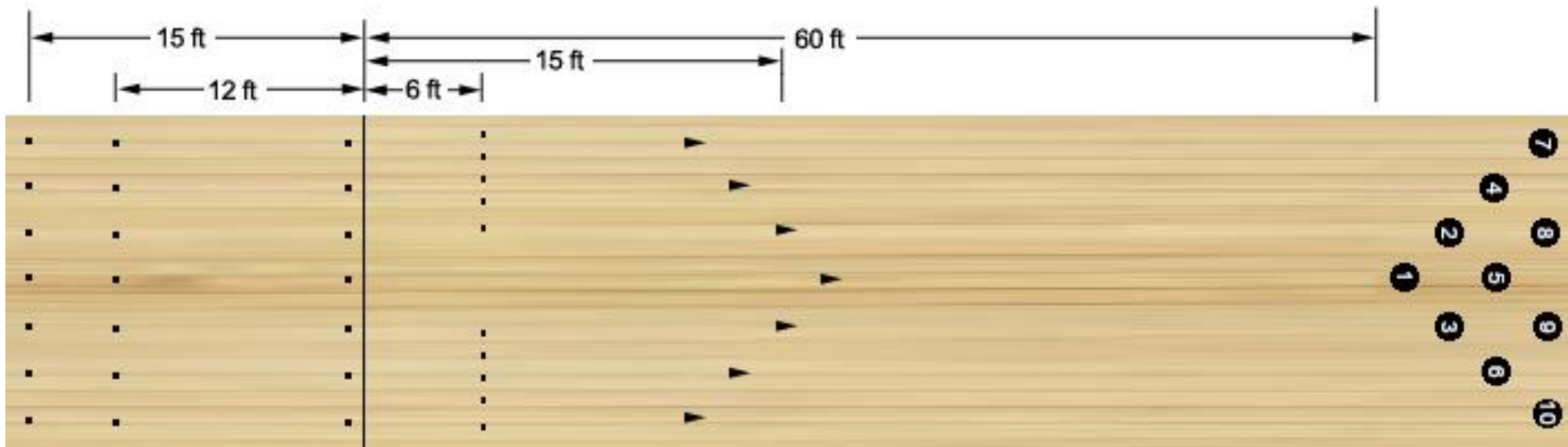
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Spare Shooting Process

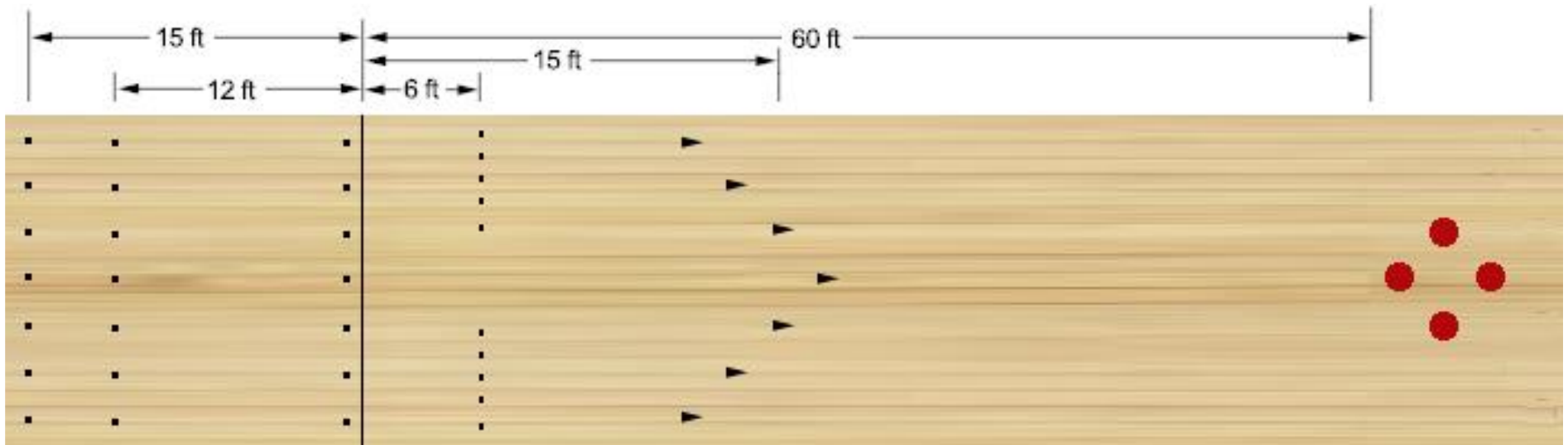
- Being able to convert spares is crucial to the sport of bowling.
- Each bowler should be able to identify where they line up their feet and which arrow they are aiming for.
- The 3-6-9 spare method has not been feasible to teach new bowlers in two weeks.



Spare Shooting Process

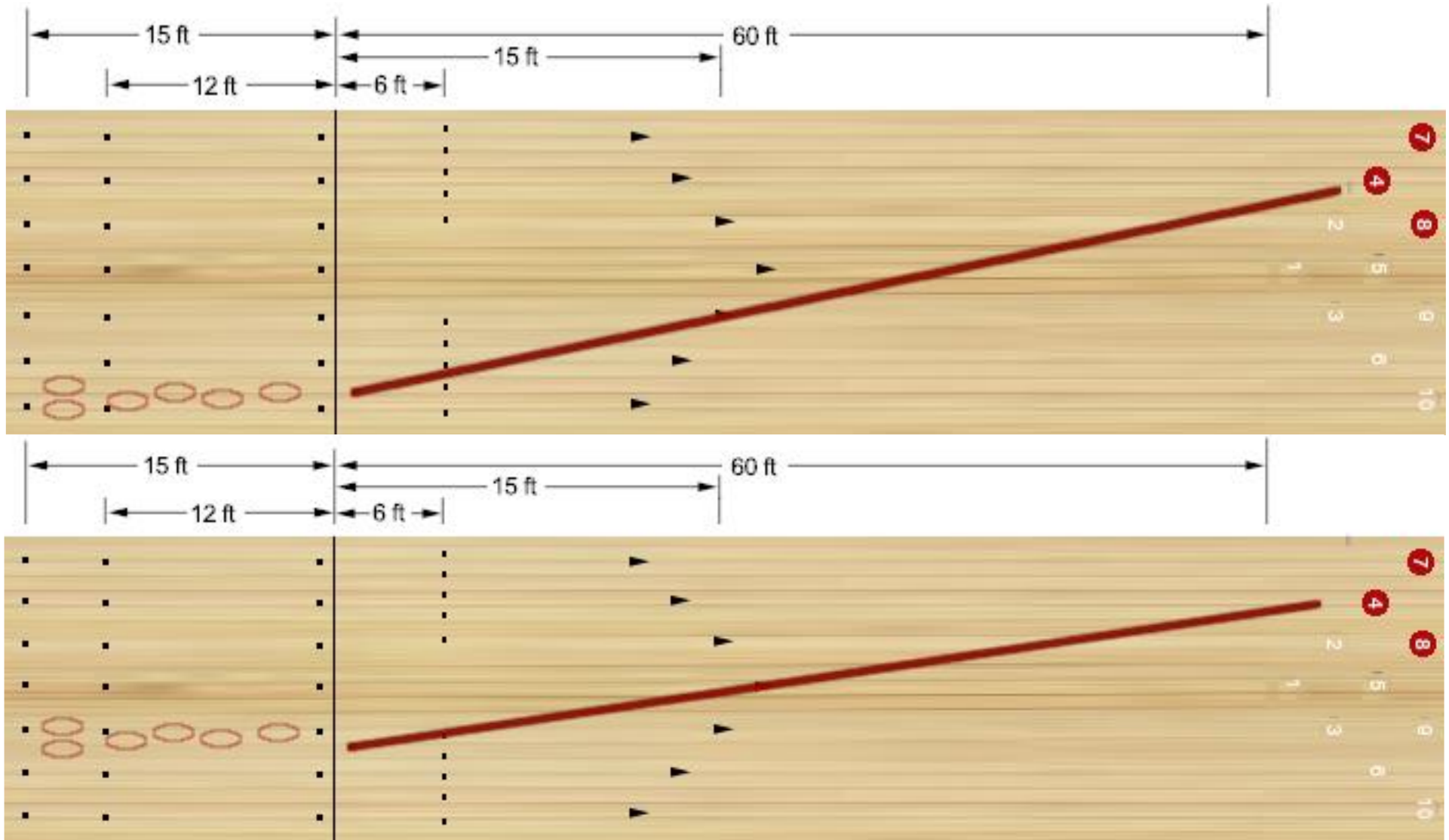
Center Pins

- Line up feet and maintain target for a strike ball.
- For pins 2(Right handed bowler) and 3(Left handed bowler) you might need to move 2 boards toward gutter.



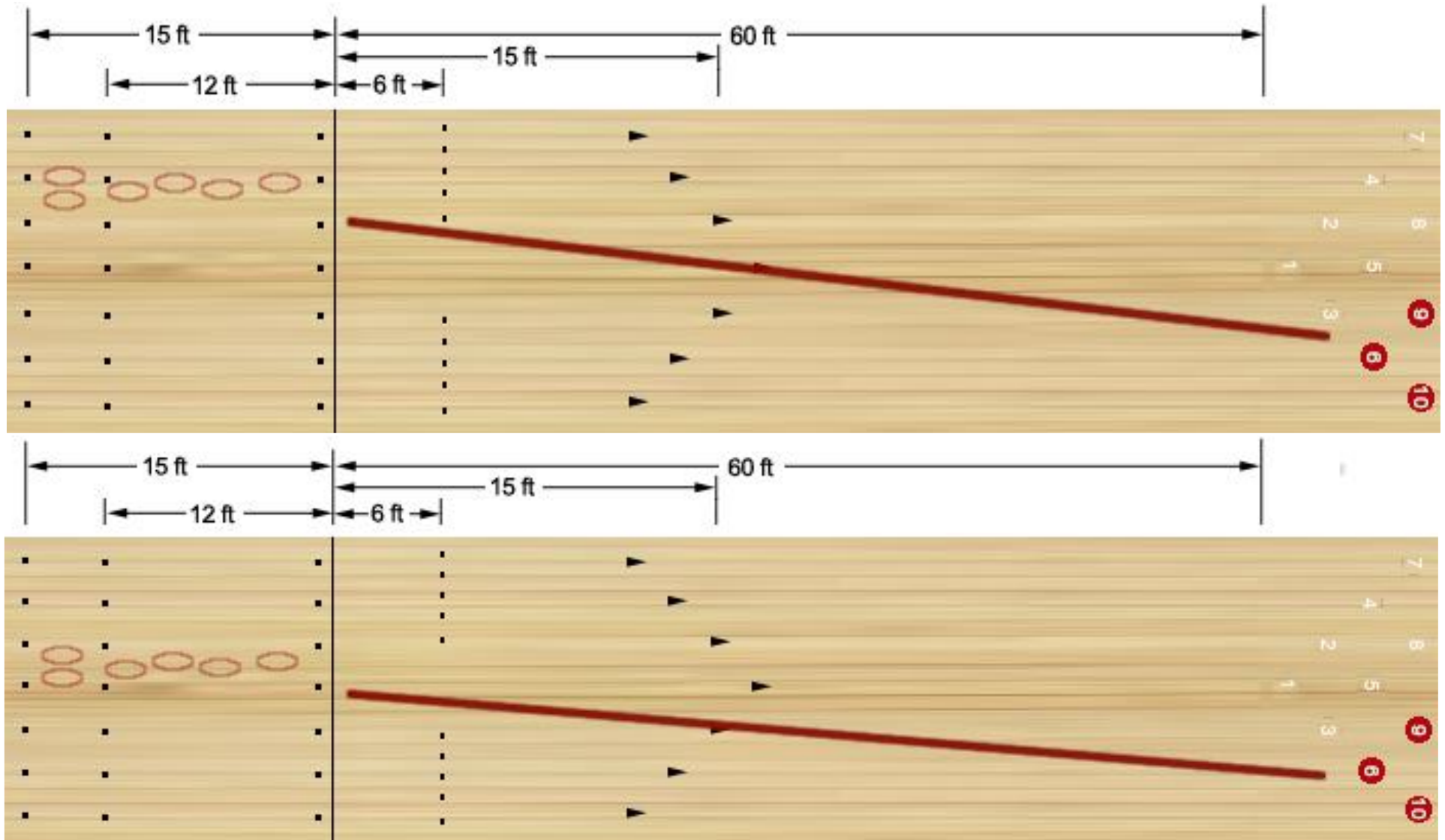
Spare Shooting Process Right Hand Bowler Left Corner Pins

Each bowler needs to find feet location and target that yields the best results in spare making.



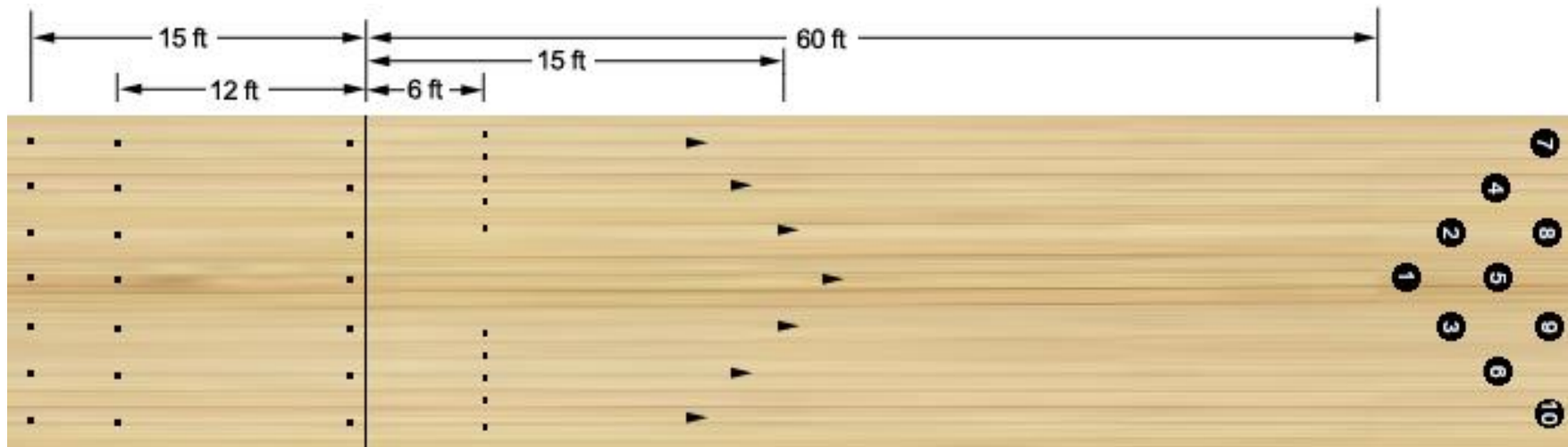
Spare Shooting Process Right Hand Bowler Right Corner Pins

Each bowler needs to find feet location and target that yields the best results in spare making.



Spare Shooting Process

- . The 3-6-9 spare method for experienced bowlers: (RHB)
- . Feet at strike location, move 3 boards left, target between 2nd&3rd arrows, hit pin 3
- . Feet at strike location, move 6 boards left, target 3rd arrow, hit pin 6
- . Feet at strike location, move 9 boards left, target 3rd&4th arrows, hit pin 10
- . Feet at strike location, move 3 boards right, target between 2nd&3rd arrows, hit pin 2
- . Feet at strike location, move 6 boards right, target 3rd arrow, hit pin 4
- . Feet at strike location, move 9 boards right, target 3rd&4th arrows, hit pin 7



Proper Bowling Set up Position

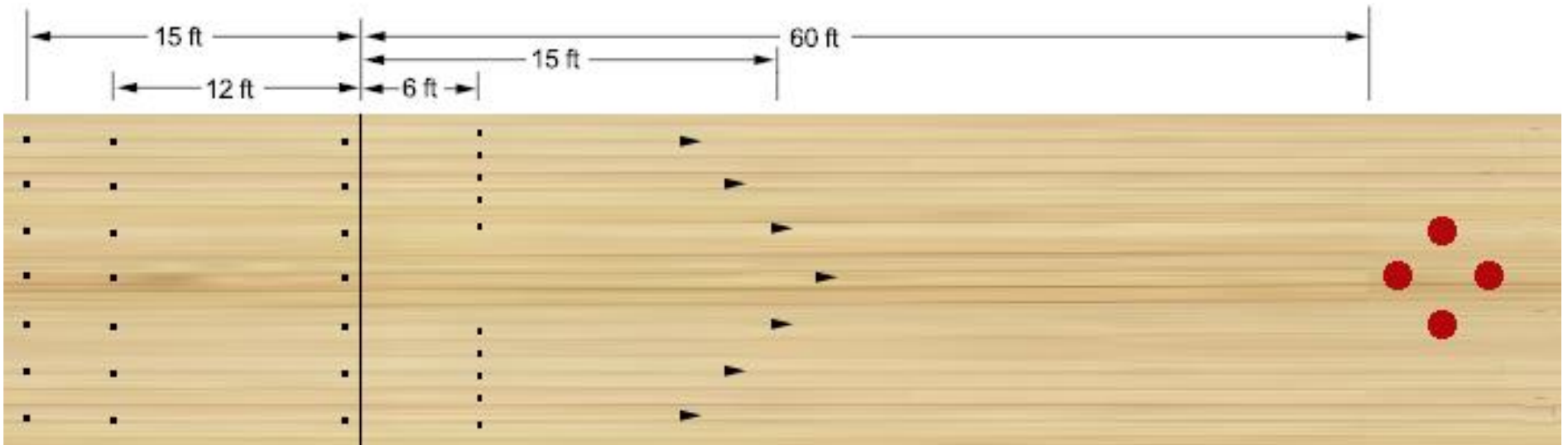
- For a Right Handed Bowler:
- Pull Right Foot Back Slightly
- Bend Knees
- Lean Forward From Hips 10*
- Hold Ball With Forearm Parallel to Ground
- Evenly distribute the ball weight keeping bowling hand, forearm and shoulders
- Take First Step With Right Foot Simultaneously Push The Bowling Ball

Timing and Swing

- . Timing and Swing
- . Timing = Swing speed and feet speed; both need to align.
- . 4" Pro Groove - Shoulder Socket is point of reference.
- . Overreaching at release causes off-balance – (Right Shoulder in Front of Left Shoulder)
- . Opening the thumb - 1" to Left or Right
- . Thumb at 12 O'Clock on low/no oil
- . Let the ball swing your arm.
- . Shoulder and target are aligned.
- . Ball under head, and very close to ankle at release.
- . Ball waist high, body is relaxed, crossover step.
- . Coach holds release arm, releases arm and arm should fall.
- . Elbow outside of ball (close to body)

The Mental Aspect

- . Mental confidence for winning. Pre-match preparation.
- . Everything should be relaxed.
- . Slow down your release.
- . All you need is (opponent's score + 1) to win.
- . Everyone will have an "off" day.



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Drills:

- Feet Placement – Find feet location and target during practice. Move feet 1 board on each side for strike ball; Explain Outcome.
- Targeting – Start with feet at board 5 and target at 1st arrow. Move feet and target 5 boards every 3 frames; must get ball to pocket within 3 frames.
- Spare Shooting – Corner Pins; alternate 1st shot/Left Side, 2nd shot/Right Side.
- Foul Line Drill – Balance Arm Out – Hit Target.
- 1 Step Drill - Start with feet at board 5 and target at 1st arrow. Move feet and target 5 boards towards pocket (RH bowlers move left) every 3 frames; Must get ball to pocket within 3 frames.
- 1 Step Drill with Swing – Feet don't move until the ball gets to the apex of the swing
- Timing – Increase and Decrease speed by 2 MPH; must get ball to pocket.
- Increase score by 10% from previous game or Decrease open frames by 10% from previous game.
- Post your finish until the ball hits the pins.
- The goal of all drills is to adopt a finishing position with the baby-toe side of your foot on the floor and your toes pointing down the lane with your heel back, your balance arm out with palm facing away from the pins, and your bowling hand following the ball down the lane.

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Oil Length and Volume

Long pattern and light volume - strong ball with less surface and weaker layout, go farther and strong reaction (2nd arrow)

Long pattern and heavy volume - strong ball early hooking with surface on ball (3rd arrow)

Shorter pattern and light volume - weaker ball with less surface to get ball down the lane (1st arrow)

Shorter pattern and heavy volume - strong ball with weak layout (1st arrow)

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Solid Reactive vs. Pearl Reactive Coverstock

Solid Reactive Coverstock —

Greatest amount of pores.

Polished Finish

Sanded Finish

More surface friction

Hook sooner than Pearl Reactive

Reduction of Energy as a solid reactive ball travels down the lane

Less sharp hook at breakpoint to the pocket.

Pearl Reactive Coverstock —

Addition of Resin or Mica Particles blended into the reactive coverstock material.

The additives roughens out the microscopic pores causing ball reaction on dry lanes to be extended in length on the front ends.

Skids decisively on the front end of the lanes and stores energy.

Produces a stronger hooking ability on the back ends of the lanes.

The pearl reactive balls have the ability to react quickly to high friction portions of the lane

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Flat 10 Pin vs. Ringing 10 Pin (RHB)

Flat 10 pin - 3 pin hits the back of the 6 which falls in front of the 10.

Ball has lost energy before reaching the pocket, ball has entered roll stage too soon.

As the ball enters the pocket, it drives the 3 pin almost straight back and deflects the 6 pin to the gutter.

If you are leaving a flat 10, you need more angle or a ball that breaks later and sharper.

Change in Speed - Flipping too soon, Increase speed

Rolling too soon - Increase Roll length

Feet/Target Location - Move a board Left, or Move back on the approach but leave target

Add more revolutions (fingers) into the ball release

Ringing 10 pin - The ball rolls into the pocket with too much angle or too much speed.

Change in Speed - Decrease Speed and/or Decrease Angle of Pocket Entry

Rolling too long - Decrease Roll Length

Feet/Target Location - Move a board Right, or Move forward on the approach but leave target

Example: Right Hand Bowler

25 Release Point | 17 Target Board | 8 Breakpoint Board == ringing 10

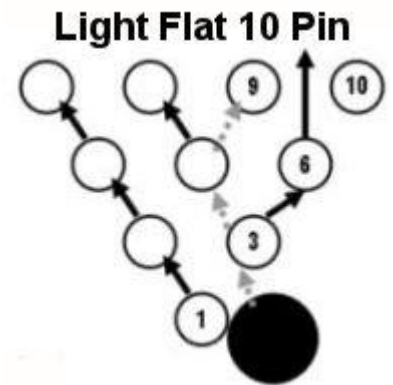
22 Release Point | 18 Target Board | 10 Breakpoint Board == perfect shot

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10 Pin Hitting Light vs. Hitting Heavy (RHB)

Hitting Light - When you are hitting light, the 3 pin hits the front of the 6, sending it to the left of the 10 pin. This can be recognized by watching your strike shot and what would look like a very solid hit, will leave the 10-pin due to the fact that the 3 pin is hitting the 6 pin to far to the right, sending the 6 pin to the left of the 10 pin. You can recognize you are hitting light by watching the 6-pin. If the 6 pin is missing the 10 pin to the left then it is likely that you are hitting light.



If you are leaving 10's by hitting the 6 pin to the left of the 10 pin, you probably need a earlier roll into the pocket. This can be accomplished by changing hand position, reducing ball speed or changing to a ball that has a earlier roll. When you are hitting light, the flat 10 requires a change in entry angle. First, try hitting the 1-3 slightly higher to send the 3 more to the right, which helps the 6 do it's job.

Here are two simple methods that will help fix hitting light:

- Move 1 to 2 and 1/2 boards right on the approach but keep your same target.
- Move 4-6 inches backward on the approach but keep your same target.

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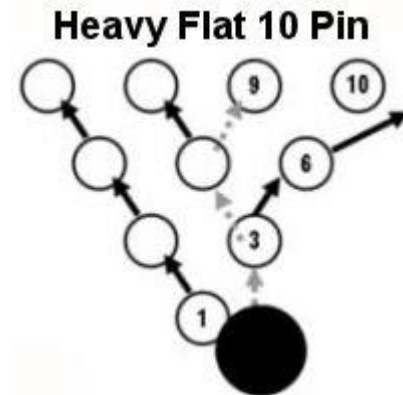
10 Pin Hitting Heavy (RHB)

Hitting Heavy - When you are hitting heavy, the 3 pin usually heads straight back, which sends the 6 sideways to lay in the channel. We leave the 10 pin because the ball lost energy before it enters the 1 - 3 pocket and the ball will hit heavy (more on the head pin). This could be because a few things: The ball is all rolled out and has rolled early and then hits flat, or the ball hits a spot of conditioner carry down on the bowling lane and it come in week or late. Typically you will see the 6-pin lying in the gutter after you shot or “ringing” the 6 pin around the 10 pin

If you are leaving ringing 10's by hitting the 6 pin to the right of the 10 pin, you probably need a later roll into the pocket and/or change the angle the ball is hitting the pocket.

Here a two simple methods that will help fix hitting heavy:

- Move 1 to 2.5 boards left on the approach but keep your same target.
- Move 4-6 inches forward on the approach but keep your same target.



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Making a Ball Change – From Asymmetrical to Symmetrical

Lane Transition: If you notice that your asymmetrical ball is reacting too aggressively or losing energy too soon as the game progresses and the oil pattern on the lanes changes, it might be time to consider a switch. As oil moves around due to bowlers' shots, the lane conditions evolve, potentially requiring a ball that offers a smoother reaction.

Overreaction at the Backend: An asymmetrical ball tends to create a strong and sharp hook at the backend of the lane due to its increased asymmetry and ability to store energy. If you notice that your ball is hooking too much or too sharply, causing you to miss the pocket or leave difficult spares, switching to a symmetrical ball could provide a more controlled reaction.

Excessive Skid or Lack of Traction: If the lane conditions change, becoming either too dry or too heavy with oil, the asymmetrical ball might lose its grip or skid excessively without enough hook potential. In such cases, a symmetrical ball might offer more predictability and better traction on the lane surface.

Struggling to Carry the Pins: If you're consistently hitting the pocket but not carrying the pins effectively with your asymmetrical ball, it might indicate that the ball is using too much energy too early, resulting in less effective pin carry. Switching to a symmetrical ball might help in maintaining energy for better pin action.

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Making a Ball Change – From Symmetrical to Asymmetrical

Lack of Angularity: If you notice that your symmetrical ball is not making a strong enough move towards the pocket or lacks a sharp angle at the backend of the lane, especially on oilier lanes, an asymmetrical ball might offer the increased angular motion needed to carry through the pins effectively.

Early Rolling and Fading Hook: Symmetrical balls tend to have a smoother, more controlled motion. However, on medium to heavy oil conditions, they might begin rolling earlier and lose energy, leading to a weaker hook down the lane. Switching to an asymmetrical ball could provide a stronger backend reaction.

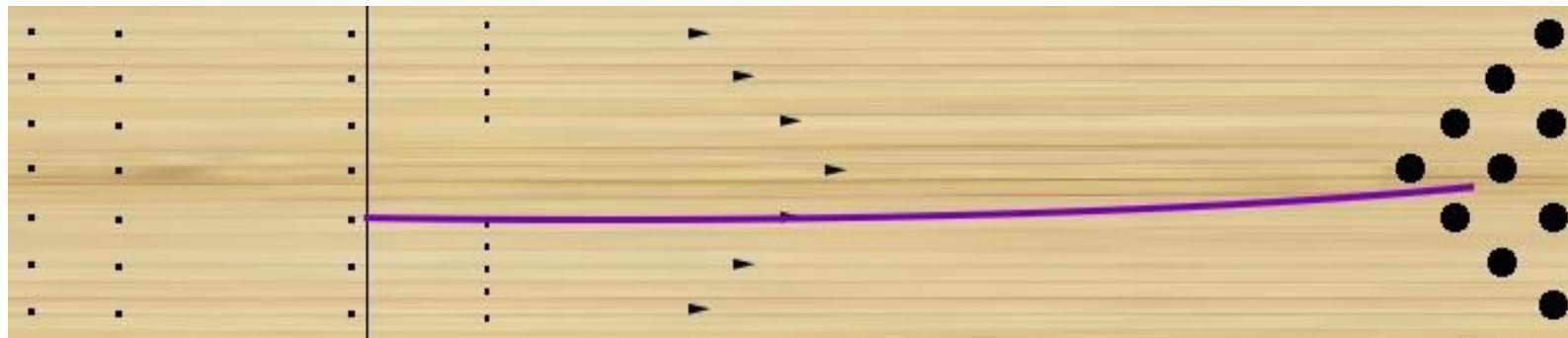
Inconsistent Ball Reaction: If you're finding that your symmetrical ball's reaction becomes less predictable as the oil pattern transitions or breaks down during a game, an asymmetrical ball might handle these changing conditions better, offering a more consistent and reliable ball motion.

Struggling to Maintain Pin Carry: If you're hitting the pocket consistently but not carrying the pins effectively with your symmetrical ball, especially in scenarios where the lanes have heavy oil, switching to an asymmetrical ball might provide the necessary hook potential and pin carry.

Desire for Increased Hook Potential: Bowlers looking for a more aggressive hook motion, whether due to personal preference or specific lane conditions, can benefit from an asymmetrical ball's ability to generate a stronger and sharper hook.

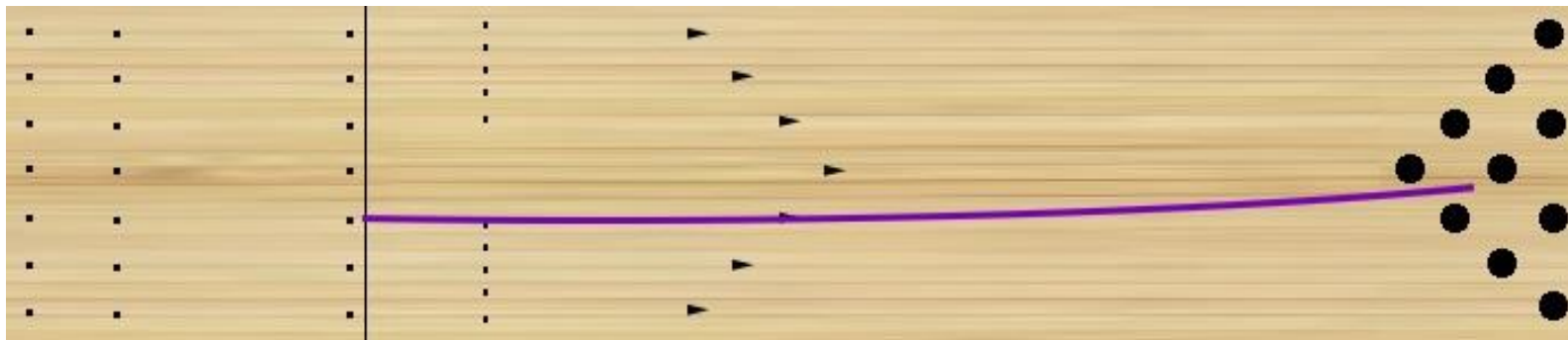
Troubleshooting Discussion Points

Bowler targets 2nd arrow and ball hits pin 3. When would 1st arrow and 3rd arrow be an appropriate move.



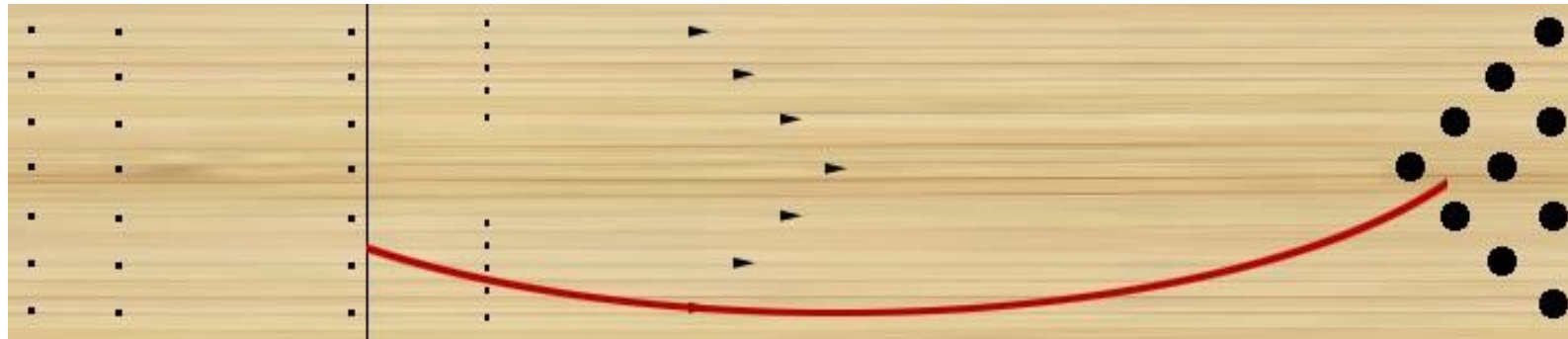
Troubleshooting Discussion Points

Bowler targets 2nd arrow, ball crosses over and hits pin 2. Would moving feet and increasing ball speed be an appropriate move? Would moving feet and target be an appropriate move?



Troubleshooting Discussion Points

Bowler targets 1st arrow and leaves flat 10 pin. Would moving feet and target be an appropriate move? Would moving feet, target and increasing ball speed be an appropriate move?



Troubleshooting Discussion Points

Adjustments

What if you're hitting your target arrow on the lane and the ball keeps missing the pocket. What do you do? Move your feet the direction of the miss and keep your target the same. This will change the path the ball takes.

Angular Adjustments

As the lanes start to hook more, you might move your starting position one board to the left/right but keep your target the same. This is a slight angular adjustment.

The 2-and-1 rule for making angular adjustments means that for every two boards you move with your feet, you move your target one board in the same direction.

Parallel Adjustments

A parallel adjustment is made when both your target on the lane and your starting position move the same amount and in the same direction.

Lane Adjustments

To increase ball speed - Step backward, raise ball , speed up feet

To decrease ball speed - Step forward, lower ball, slow down feet

Coming up high - Change to a weaker coverstock ball (to extend the skid phase and move break point farther down)

Coming up light - Change to a stronger coverstock ball (to shorten the skid phase and move the break point closer)

Troubleshooting Discussion Points

Pin Carry and the Role of Deflection

At its simplest, strikes are the result of appropriate deflection of the ball as it hits the pins. Too much deflection or too little deflection will create the wrong angles for the pins to deflect into each other. In these cases, the solution is to find a way to change your ball reaction to create more optimal deflection through the pins.

Too much deflection often results in flat 10 pins and "weak" splits, such as the 8/10 (for righthanders). Here, bowlers need to create less deflection by going to a ball that retains energy longer, increasing their axis rotation angle, and generally delaying the ball's hook.

Too little deflection will often result in 9 pins or ringing 10 pins. To create more deflection, try to get the ball to roll a bit sooner and/or skid a bit less by using more forward roll or more surface, or by switching to a less angular bowling ball.

Shorter Oil Pattern

Use more forward roll for a smoother reaction.

Target a breakpoint closer to the gutter.

Smoother bowling balls like urethane or low-flaring reactive.

On very low volume short patterns, use a weak urethane ball and play at near or outside the first arrow. The pocket angle is very good, and you can sometimes get a much better reaction with great carry doing this.

Troubleshooting Discussion Points

Corner Pins

For a RHB, if the 6 pin is going straight back and missing the 10 pin to the left, it means you are hitting “high” on the head pin. The 3 pin has too much angle on the 6 pin and is causing it to fall, or get pushed, straight back instead of at an angle into the 10 pin. Try moving your feet slightly to the left and keeping the same target or move your target farther down the lane. Move 4-6 inches forward on the approach but keep your same target. We want the ball to enter the pocket with less stored energy.

For a RHB, if the 6 pin is going into the right gutter, it means you are hitting “light” in the pocket. The 3 pin does not have enough angle into the 6 pin and it is missing the 10 pin to the right. Try moving your feet slightly to the right and keeping your same target or move your target closer to you and in front of the arrows. Move 4-6 inches backward on the approach but keep your same target. We want the ball to enter the pocket with more stored energy.

Troubleshooting Discussion Points

Situational Adjustments

Situation: Ball skids too far, comes up too light to pocket, leaving head pin.

RHB: Feet at 27 and Target at 15

Move Feet to 21 (6 boards) and Target to 12 (3 boards)

Situation: Ball crosses over, flips way too soon.

RHB: Feet at 14 and Target at 8

Move Feet to 20 and Target to 11

Situation: Ball hits pocket and leaves flat 10 pin.

RHB: Feet at 20 and Target at 11

More revolutions (cup hand and tuck pinky) same target and same feet location

Situation: Ball comes in light.

RHB: Feet at 22 and Target at 13

Throw slower: Step forward towards foul line, lower ball down, slow down feet

Situation: Ball comes up High

RHB: Feet at 18 Target at 8

Throw Faster: Step backward towards foul line, raise ball up, speed up feet

Situation: Strong ball flips too soon, comes in high, leaves 3,6,10

RHB: Feet at 15 and Target at 8

Ball Down: Same Feet, Same Target, Ball skids slightly longer

Ball Rotation

Preferred Spin Axis/Mass Bias

The Preferred Spin Axis (PSA), or Mass Bias, is on an asymmetrical ball.

All asymmetric balls have a labeled PSA. It's the point on the ball that rolls stable.

For the bowler, this matters, since the axis on which the ball is rolling is constantly changing (this is what causes flare rings). You release the ball on a certain axis (your PAP). The ball continues to migrate this axis until it reaches the PSA on an asymmetric. When it does, the ball will straighten out and roll end-over-end.

This means that there's an additional fine-tuning tool that's available on asymmetrical balls. You get to determine how far the axis needs to travel from your PAP to the PSA.

Having a Mass Bias causes the center of gravity (CG) mark of a ball to move away from the pin.

Mass Bias refers to increasing the dynamic effect of shifting the center of mass away from the pin by having a specific part of the core present on one side of the ball that is not present on the other side of the ball. Enhancing the mass bias affects the direction and rate at which the ball migrates toward its preferred spin axis. Track flare is caused by the migration of the bowler's positive axis point (PAP) toward the ball's preferred spin axis.

The most aggressive position is 3 3/8" PAP to PSA. Lower numbers mean that it'll reach the PSA much sooner, meaning it will roll much sooner. Higher numbers mean that it will reach its PSA much later, meaning it will roll much later.

When the bowling ball rolls down the lane it revolves around its axis. The PAP is important because it can be seen throughout a shot and the bowling ball's reaction is influenced by how far the pin and mass bias is away from the PAP.

Every bowler has a PAP (positive axis point) that is uniquely yours and the positioning of the core relative to your release will be how your pro shop operator comes up with your layout.

Ball Rotation

Radius of Gyration

RG (Radius of Gyration) is measured in inches; Radius of Gyration is the distance from the axis of rotation at which the total mass of a body might be concentrated without changing its moment of inertia.

A good example to illustrate lower RG vs. higher RG is that of a spinning figure skater. When their arms are out, they spin at a slower speed (high RG). When their arms are tucked in however, their spinning accelerates because they become smaller and more compact (low RG).

Low RG bowling balls are good for bowlers who tend to throw the ball faster as well as bowlers with a lower rev rate. Remember, smaller cores create a lower RG. The weight is more center-heavy. This gives the ball the ability to get into a roll (the third phase of ball motion) sooner.

High RG balls are good when the lanes are drier, and you need more skid. This also provides a larger angular move when it hits the friction down lane.

Track flare is the amount of surface on the bowling ball that actually touches the lane.

This is a goal setting exercise. Every bowler has a score to aim for. Its OK to have an off day.

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Tournament Lineup

First Position – Person with third highest average. High percentage of first frame strikes to set pace.

Second Position – Person with lowest average, who struggles with pressure or consistency. Good placement for subbing in and out.

Third Position – Person with fourth highest average, who has better consistency and stronger mental toughness than second bowler.

Fourth Position – Person with second highest average, who can mentally step up and deliver in frames 9-12 under pressure. Battery/Clutch person.

Fifth Position – Person with highest average, who is most consistent and can deliver under extreme pressure in frames 8-12.

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Bowling Recap

- Line up feet consistently for strike and spare shots.
- Have one consistent process for shooting spares.
- Mental Confidence to win.
- Mental Control at all times.
- Everything is loose and relaxed.
- 4 Step Approach controls timing.
- 9th and 10th frame strikes can win matches.
- A winning score is (opponent score + 1).
- Break down a perfect game into 3 frames at a time.

Two Handed Bowling Release

- A two-handed bowler will use their non-dominant hand to cradle the front of the ball a to help stabilize and support the ball during the backswing.
- Knees slightly bent and relaxed, your feet placed on the proper boards for your aiming marks. Your ball should be about waist high and your spine should be tilted about five to ten degrees forward.
- During the third/fourth steps the bowler should utilize what are called 'skip steps'.
- A back swing past the shoulder blades will have a lot of power.
- The more powerful the throw the less control you have of the ball's trajectory.
- Kneeling Drill / Stationary Drill - Isolates proper finish position - Home in front of mirror
- Dominant Hand past ear, balance arm out.

Bowling Speed Chart

2.0 sec/20.8 mph

2.1 sec/19.9 mph

2.2 sec/19.0 mph

2.3 sec/18.1 mph

2.4 sec/17.4 mph

2.5 sec/16.7 mph

2.6 sec/16.0 mph

2.7 sec/15.4 mph

2.8 sec/ 14.9 mph

2.9 sec/14.4 mph

3.0 sec/13.9 mph

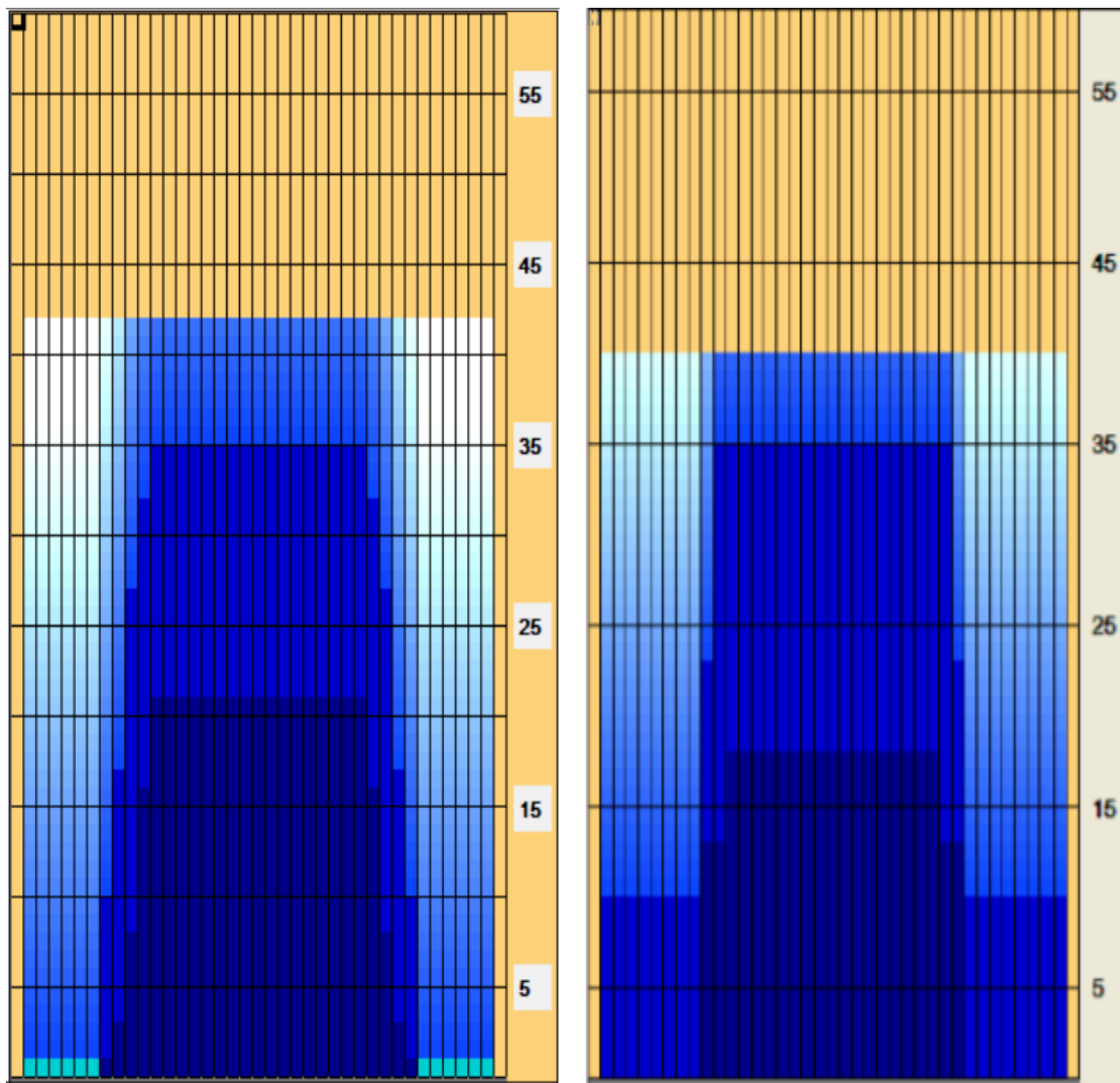
2023 Kegel Stone Street Oil Pattern and Typical House Shot Oil Pattern Comparison

How to read an oil pattern sheet: (Beginner)

Length – Provides information on Break Point. Longer length should indicate closer to head pin. Rule of 31: Subtract 31 from length of oil pattern to get a baseline breakpoint at the length of the oil pattern.

Volume – Provides information on what ball type to use. Drilling layout, surface and weight block are also considered in ball choice. A baseline to follow is the thicker, or higher, the volume the more accurate the bowler needs to be.

Ratio – Provides information on how much oil is in the center of the lane vs. outside of lane. This ratio gives you how much shape there is to the pattern. Generally, the higher the number, the softer the pattern which leads to higher scoring. Lower ratios indicate a higher level of difficulty to the bowler.



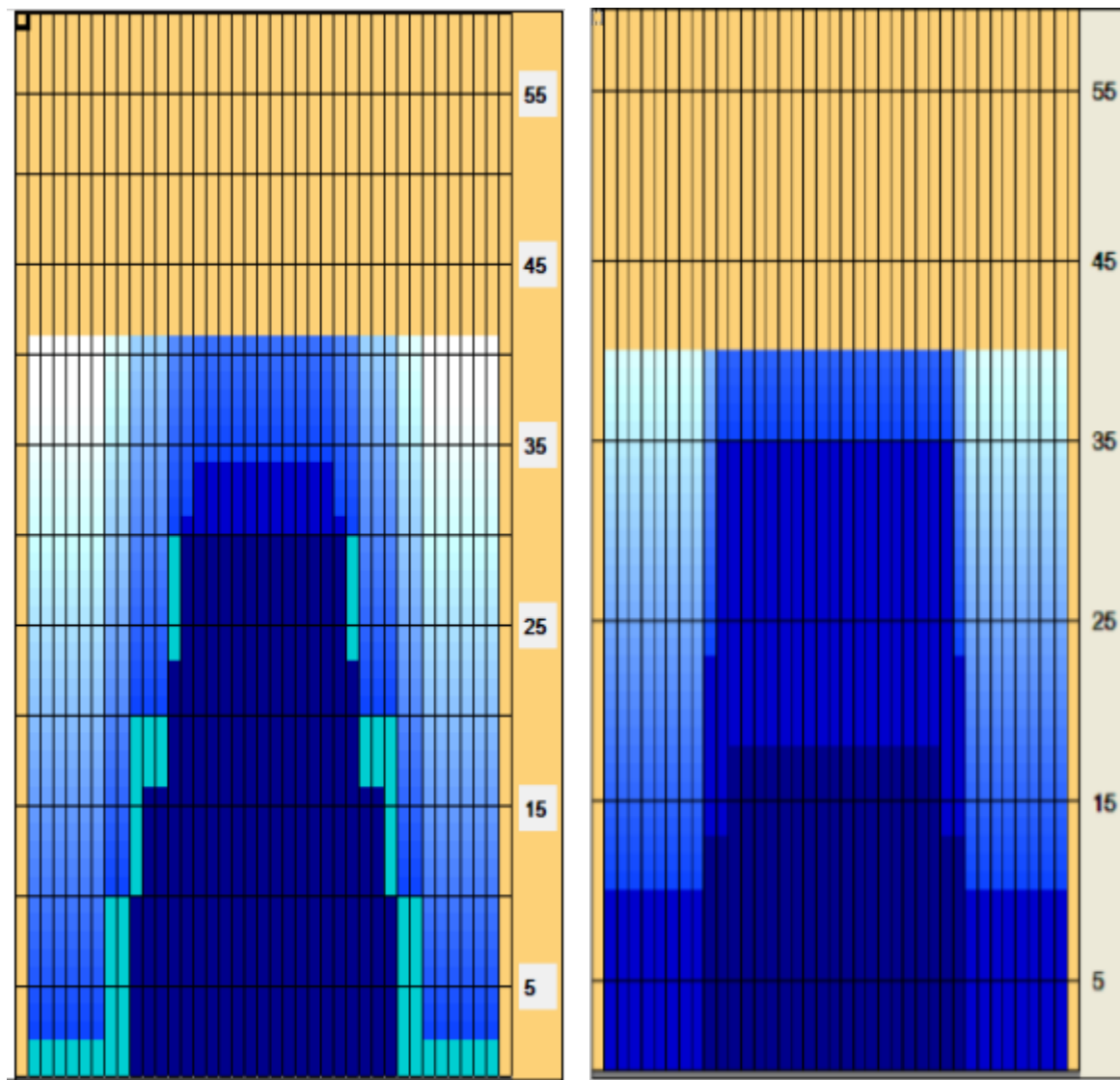
2021 Kegel Main Street V2 Oil Pattern and Typical House Shot Oil Pattern Comparison

How to read an oil pattern sheet: (Beginner)

Length – Provides information on Break Point. Longer length should indicate closer to head pin. Rule of 31: Subtract 31 from length of oil pattern to get a baseline breakpoint at the length of the oil pattern.

Volume – Provides information on what ball type to use. Drilling layout, surface and weight block are also considered in ball choice. A baseline to follow is the thicker, or higher, the volume the more accurate the bowler needs to be.

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2023 Kegel Stone Street Oil Pattern and Typical House Shot Oil Pattern Comparison

Kegel Stone Street

42 foot recreation level oil pattern

2023 Maple Hill High School

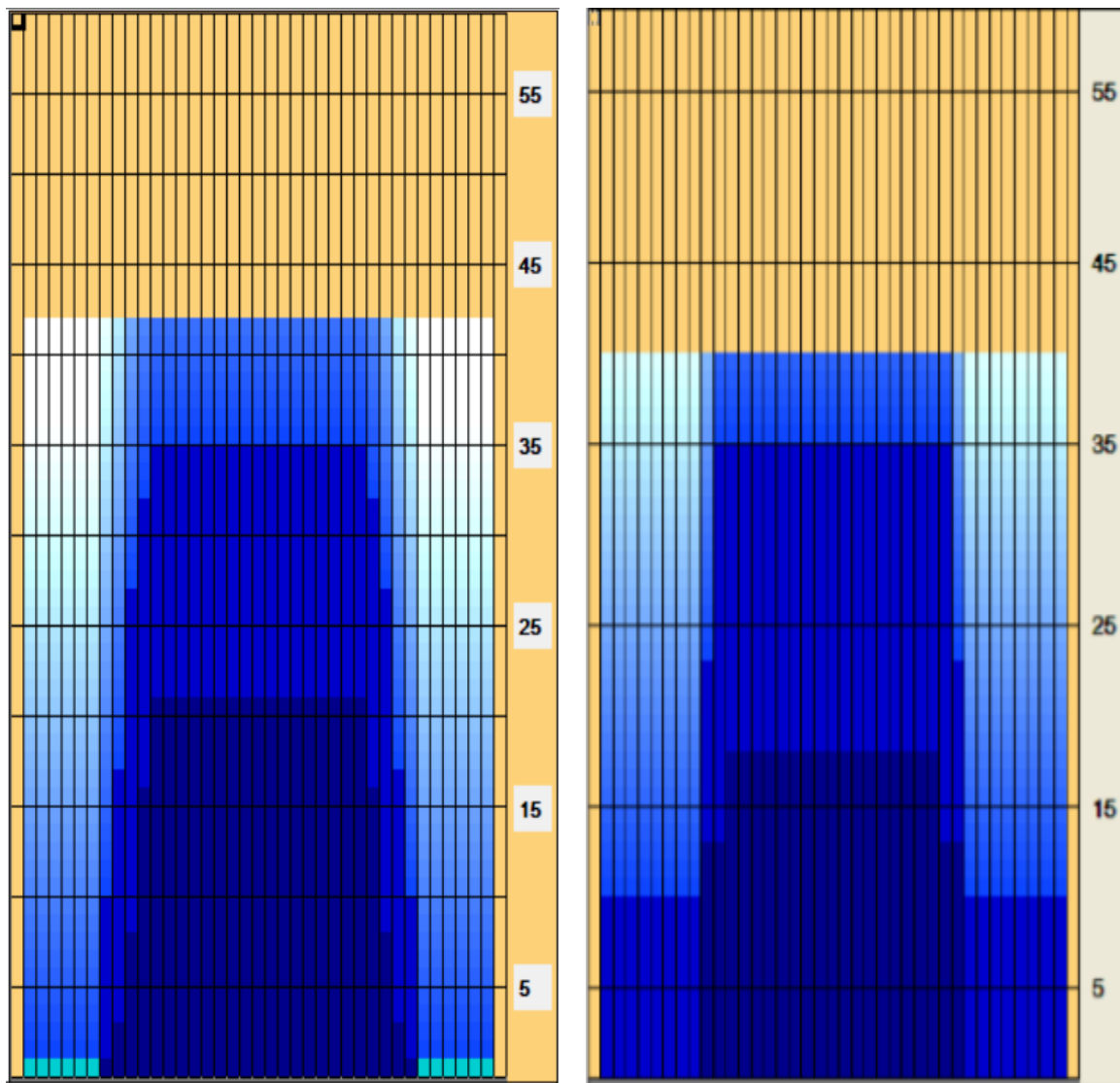
Sectionals Match

Length: 42 feet

Volume: 24315

Ration: 10.5:1

Typical House Shot 39 foot oil
pattern



2021 Kegel Main Street V2 Oil Pattern and Typical House Shot Oil Pattern Comparison

[Kegel Main Street v2 1241](#)

41 foot recreation level oil pattern

2021 Maple Hill High School

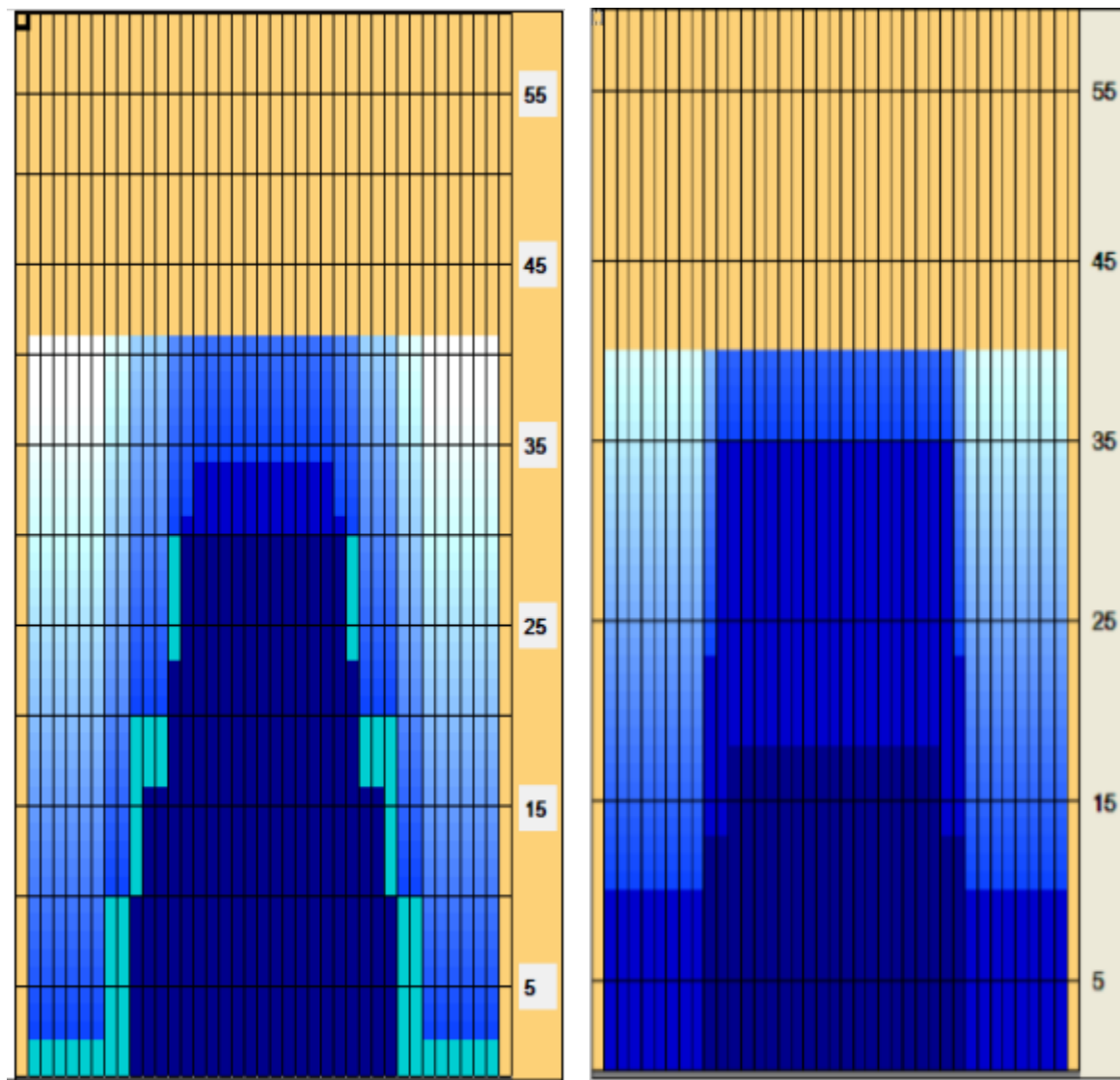
Sectionals Match

Length: 41 feet

Volume: 24.35

Ration: 12.5:1

Typical House Shot 39 foot oil pattern



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High Performing Team Mentality

- Show up to win vs. Show up and hope for the best.
- Everyone contributes to the team goals (I contribute, we succeed).
- Everyone needs to be accountable (No games under 130).
- Have complete self control during a tough game.
- Stay optimistic – This game changes very fast.
- Don't coast on past successes.
- Sense of urgency.
- Practice with a purpose.
- Striking in frames 9-12 will win matches.

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Off Season Practice

As with any sport or skill, each person gets out what they put in. Here are some off season practice drills that can help refine each bowler:

- [Kids Bowl Free](#) – 2 free games daily throughout summer
- Corner Pins – 1 game weekly shooting each corner pin.
- Speed Control – +/- 3 MPH over arrows 1,2 and 3. 1 game weekly
- Target and breakpoint accuracy – 1 game weekly
- Foul line and 1-Step drills – 1 game weekly
- Timing – 4 step approach at home daily – 1 minute daily
- Crossover Step - 4 step approach at home daily – 1 minute daily

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Season Notes 2023

This season had the following team records:

- Season matches Varsity team was 14 – 0
- NYS Patroon Conference Varsity team was 1st place.
- NYS Section 2 Class C Varsity team was 3rd place.

Patroon Conference Accolades:

- Patroon Conference - MVP Bowler Named
- Patroon Conference - 3 1st team All-Stars Named
- Patroon Conference - 2 2nd team All-Stars Named

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Season Notes 2022

This season had the following team records:

- Season matches Varsity team was 14 – 0
- NYS Patroon Conference Varsity team was 1st place.
- NYS Section 2 Class C Varsity team was 3rd place.

Patroon Conference Accolades:

- Patroon Conference - MVP Bowler Named
- Patroon Conference - 3 1st team All-Stars Named
- Patroon Conference - 2 2nd team All-Stars Named

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Season Notes 2021

This season had the following team records:

- Season matches Varsity team was 14 – 0, Junior Varsity was 4 - 0
- NYS Patroon Conference Varsity team was 2nd place.
- NYS Section 2 Class C Varsity team was 6th place.
- One 9th grade and three 7th grade athletes were awarded Varsity letters

This season had the following challenges and program changes:

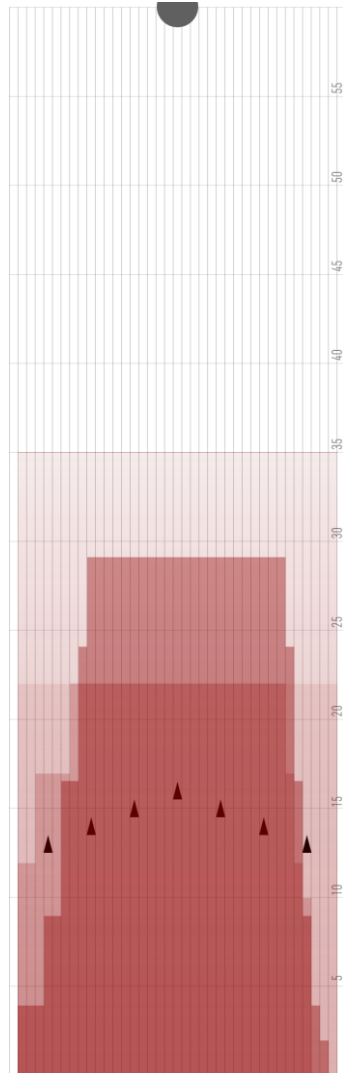
- Continuing to compete with the covid-19 global pandemic.
- Changed from 2 Varsity teams (1 All-Boy and 1 All-Girl teams) to 1 Co-ed Varsity and 1 co-ed Junior Varsity teams.

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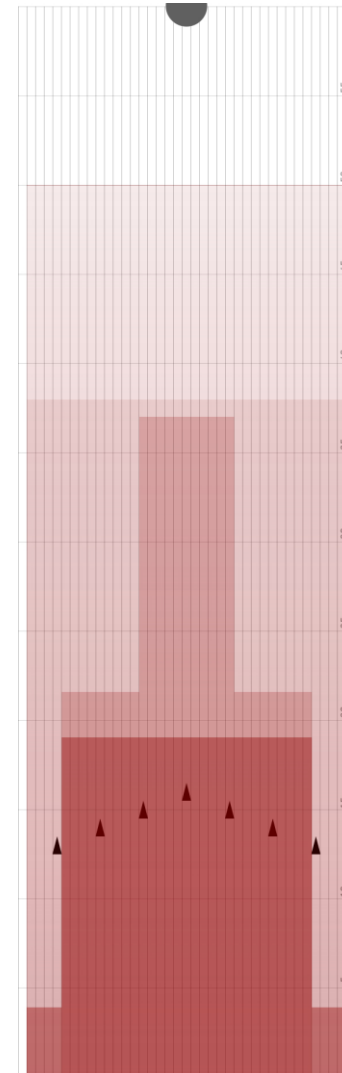
Helpful Information

2021 USBC Junior Gold Oil Pattern U18

2021 USBC Junior Gold 35ft



2021 USBC Junior Gold 50ft



Cranker Hand Position at Release

Hand Begins with fingers at 10, and 11 o'clock



Hand Remains behind ball, pointer finger down



At ankle, ball is released, hand begins handshake



After release, hand is raised straight up to handshake

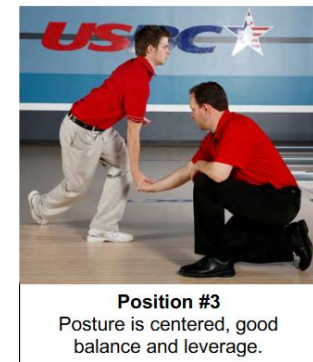
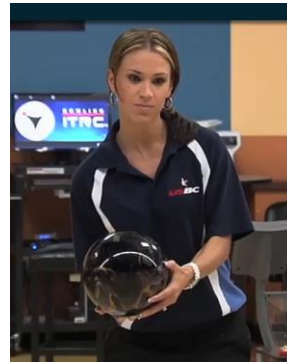


Spine Tilt

Right Hand Bowler

Incorrect Spine Tilt

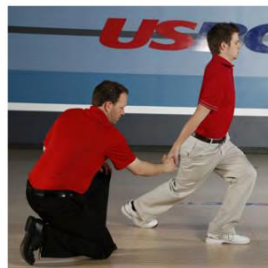
Correct Spine Tilt



Position #3
Posture is centered, good balance and leverage.

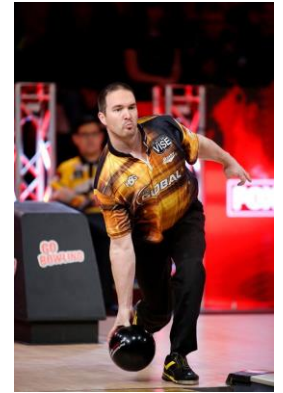
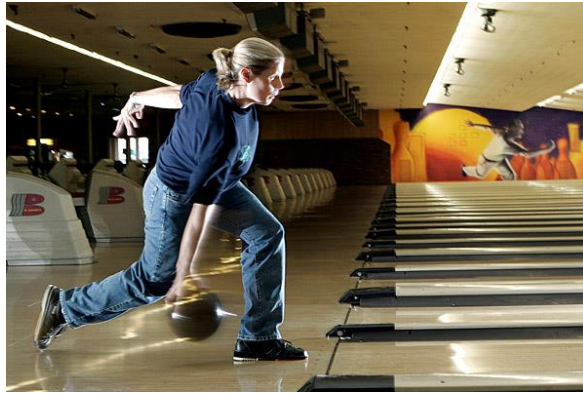


Position #1
Posture is forward, Imbalance.
No leverage



Position #2
Posture is back, Imbalance.
No leverage

Professional Bowling Releases



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Resources

[Understanding Oil Patterns](#)

Rule of 31 = Length of oil – 31 to get baseline breakpoint.