

7up POOL

Players Guide

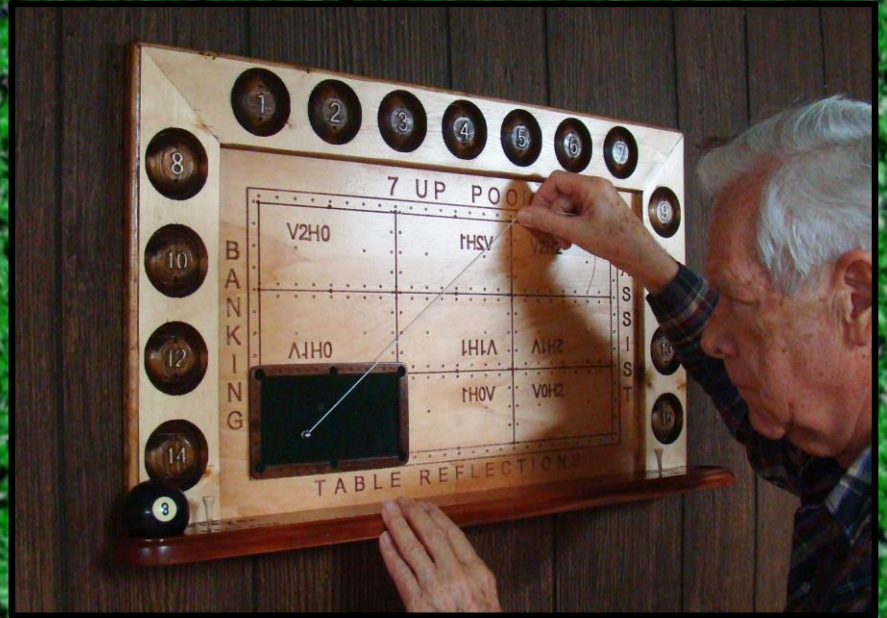


Table of Contents

Introduction	4
Rules.....	4
Pocket balls 1-7 (solids) in order (rotation).....	4
Bank shot sometimes required.....	4
Behind the 8 ball	5
”fizz” balls.....	6
Winning the game	7
Setup.....	7
Break	8
Lagging	9
Safety	9
Kitchen.....	10
Spotting	10
Primary Object Ball Bank shots.....	11
Fouls.....	12
Phase one.....	13
Phase two (the burp)	13
Exceptions.....	15
Reminders	18
Number of players.....	19
Strategy:.....	20
Benefits:.....	21
Banking Assist Frame.....	22
Keeping score.....	22
Magnetic table.....	22
Proximity tool	22
8 ball apertures.....	23
Each Pool Game is Like a Life:	24
Shooting tips.....	26
Fundamentals (intuitively obvious stuff).....	26
Body mechanics.....	26
Chalk.....	26

Analyze	27
Bounce angle	27
Basic improvements (common sense)	29
Using English.	29
Using sight spots (diamonds).	29
Reflections	32
Parallels	38
Technical improvements (not so intuitive or common sense)	39
Two finger rule	39
Cut angle.....	41
Understand.....	42
90 degree path.....	42
Miscellaneous rules of thumb.....	43
Glossary	44
7up The Making of a Legend	45
Vintage 7up ad.....	48
Index	49

Introduction

The 7up pool game evolved from basics of standard 9-ball. Added options and strategy for a more interesting friendly competition. By a couple of old timers that have been playing weekly (and weakly) for years. Not for money or prize just fun and pride. 7up Pool provides many new strategy opportunities which increase the need to appraise the table for each shot. The theme using 7up is convenient because of the 7 ball significance.

Rules

Pocket balls 1-7 (solids) in order (rotation)

The next remaining lowest 1-7 ball is referred to as the “primary object ball”.

Bank shot sometimes required

When sinking primary object ball that is too close to a pocket (too easy). Being closer than (or equal to) 7 inches from a pocket puts it in proximity requiring banking. A simple one cushion bank or deflection off a legal ball (“fizz” ball) will suffice. Using the 8 ball is legal only if it is also pocketed.

There is a “proximity tool” used to measure for proximity accuracy.



Illustration 1: Outside of proximity

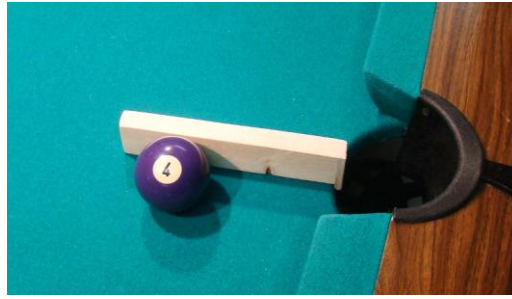


Illustration 2: Within proximity

No restriction on sinking a primary object ball in any other pocket (non proximity). No banking requirement for non primary object balls (8-15).

Behind the 8 ball

Can be pocketed at any time to obtain a future option, or continue play.

Future options are:

1. Extra shot.
2. Force opponent to shoot next (since defensive shots are difficult, require hitting object ball to avoid a foul).
3. The lithium option, use of the reflection assist board.

Retrieve the 8 ball from pocket and retain. Can be saved on the reserved aperture on “Banking Assist frame”.



Illustration 3: The 8 ball save apertures (player 1 - left, player 2 - right)

To continue play, spot the 8 ball and shot again (forfeiting future option).
If the normal spot position is occupied, place in front of the obstruction ball.



Illustration 4: Stacked spot

When an 8 ball future option is used, the 8 ball must be spotted. After being spotted the option must be used (cannot pickup the 8 ball again).

The choice to use the future extra shot must be declared prior to opponent being positioned for next shot (cue anchor on table).

When using the lithium option to employ the reflection assist board, a chalk cube (or other) can be temporarily placed on the table frame to mark the aim point.

If another ball is pocketed when making the 8 ball, the turn continues (w/o foul).

"fizz" balls

Balls 9-15 (stripes) are "fizz" balls.

Can be used at any time to pocket, or pocket another ball, to earn another shot.



Illustration 5: Fizz balls (stripes)

Winning the game

1. Sinking 7 ball (w/o a foul).
2. Five cushion hit of primary object ball.
3. Opponent forfeit (foul during pocketing the 7 ball).

Setup

Pool table components

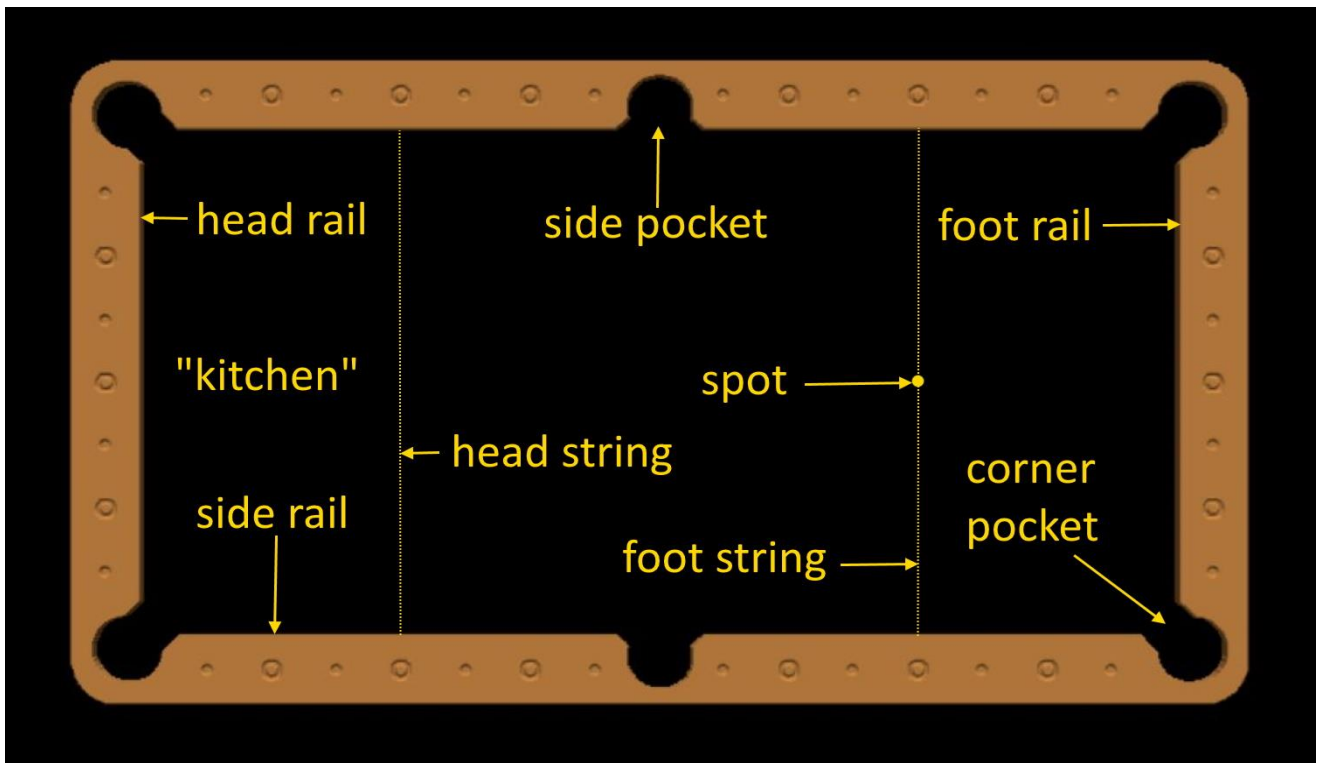


Illustration 6: Table terms

Rack balls 1-15

- 1 ball in front
- 7 ball in middle

- 8 ball middle of back row
- alternate solids and strips
- position rack with 7 ball over the table “spot”

The question sometimes asked: how any combinations of balls are possible? If all fifteen balls can be positioned anywhere in the rack it would be 15 factorial:

1,307,674,368,000 (1.3 trillion).

Fixing the 1 ball position reduces it to 14 factorial or 87,178,291,200 (87 billion).

Also fixing the 7 and 8 ball reduces it to 12 factorial or 479,001,600 (half a billion).

Then alternating fizz balls and object ball reduces it to only 604,800.



Illustration 7: Rack

Break

1. At least 3 balls must touch a cushion to prevent a foul.
2. Pocketing the 7 ball wins game (w/o foul).
3. Pocketing the 8 ball gives future option (w/o foul).
Turn continues if any ball other than the 8 ball is also pocketed.
When only the 8 ball is pocked, the future option to spot the 8 ball and continue is available.
4. Any ball leaving the table causes automatic re-break.
5. Opponent may demand a re-break following a foul.

Break is Performed by winner of previous game.

Lagging

The Initial break is determined by lagging the cue ball. Players lag the ball from kitchen, down the table and back again. The player who gets their ball to stop closest to the head rail wins. In case of a tie, the lagging is repeated. Lagging can occur simultaneously using two cue balls. When lagging is performed individually, the visitor goes first.

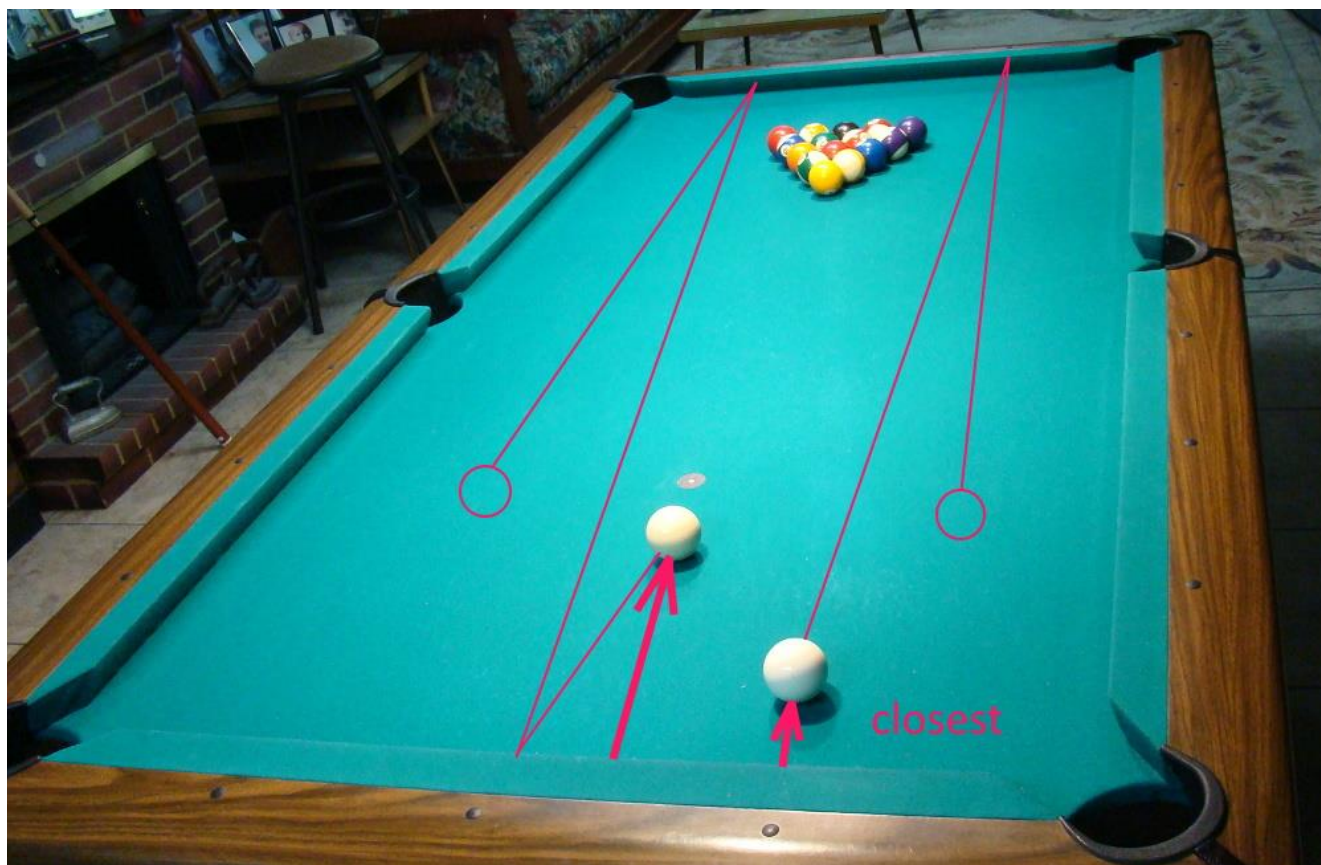


Illustration 8: lagged ball closest to head rail wins (the break)

It's legal to bounce off the head rail.

Safety

Intentionally giving up turn by attempting to leave a poor shot for opponent. Failing to hit the primary object ball results in a foul, however.

Kitchen

Area of the table between the head rail and head string. Available for placing the cue ball following a foul. When player gets cue ball in hand for use within the kitchen, and target ball is also within the kitchen, a bank out of kitchen is required.

Spotting

The middle of the foot string has a designated spot. It is used for orienting the rack prior to a break, and placement location when “spotting” a ball.

1. The 7 ball is spotted as normal “burp” function.
2. The 8 ball is spotted prior to executing a future option.

The effected ball is normally placed on the spot.

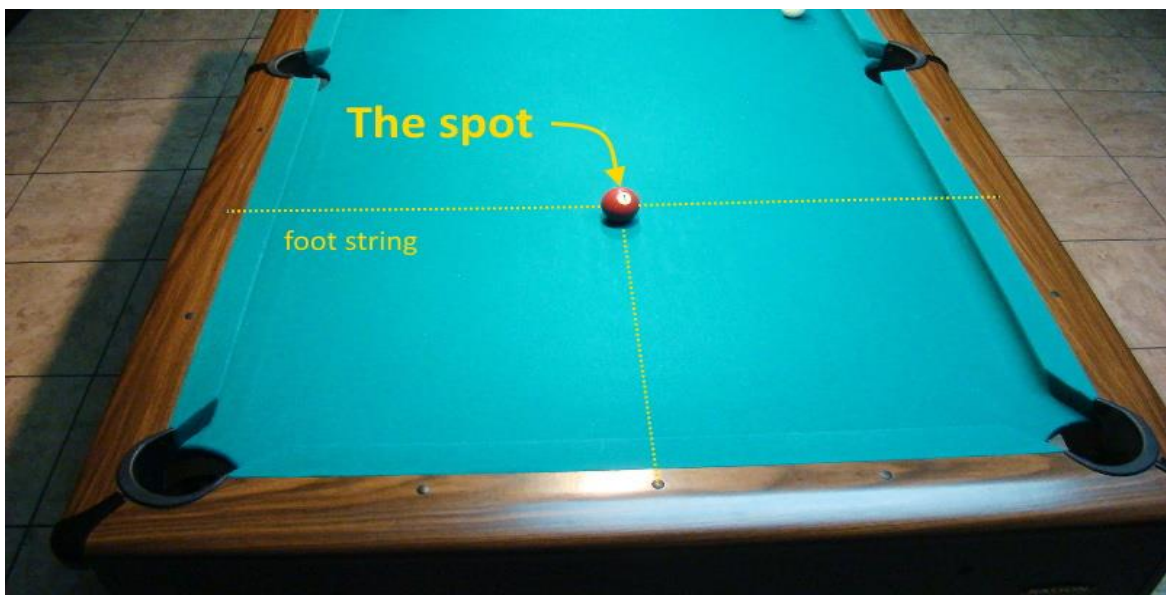


Illustration 9: Normal spot

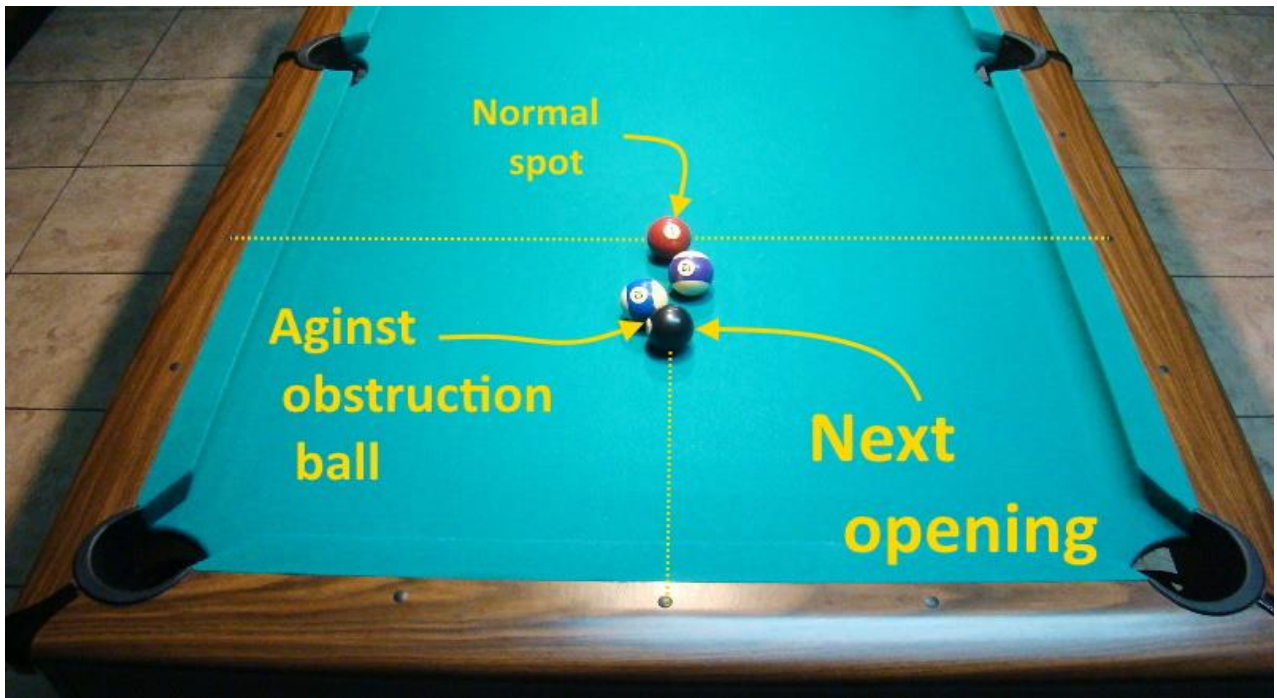


Illustration 10: Obstructed spot

If another ball or balls are in the way, place immediately against the obstructing ball(s), at the first opening perpendicular to the foot string toward the foot rail. In the rare instance that there is no available opening on the foot rail side, position at the first opening toward the head rail.

Primary Object Ball Bank shots

1. Either cue ball or primary object ball (lowest 1-7 ball remaining) must strike a cushion or “fizz” ball prior to pocketing.

2. Cue ball must strike the cushion at least 2 sight spot (diamond) segments ahead of the target pocket. Not affected by primary object ball proximity location.

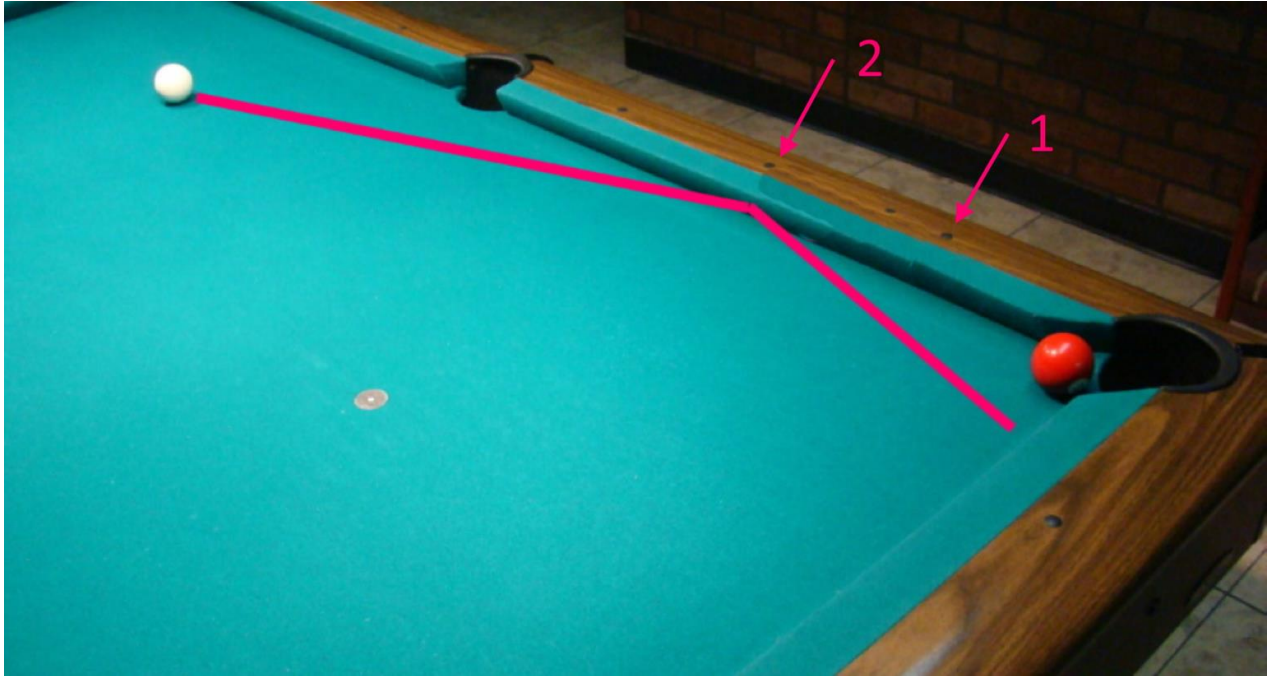


Illustration 11: Two sight segments from OB

Fouls

1. Not contacting primary object ball first, and failing to sink a ball.
2. Failed primary object ball bank shot rules.
3. Hitting 8 ball first and not pocketing it.
4. Scratch (cue ball is pocketed).
5. Any ball leaves the table (non cue ball spotted, if phase 2, returned to original setup position).
6. Misqueing more than once on same turn (consecutive misques).
7. Continuing to shoot after making last fizz ball without phase 2 setup.
8. Player not touching the floor, with either foot, during a shot.

Turn is lost, play resumes with option to place cue ball within the kitchen. A pocketed 8 ball is spotted. Player may elect to use the future extra shot option, if applicable.

Phase one

Begins following break shot. Continues until game is won or all the “fizz” balls (9-15 stripes) are gone.

Phase two (the burp)

1. Begins when none of the “fizz” balls (9-15 stripes) remain.
2. Remaining 1-6 balls that are not already within the 7 inch proximity are positioned at 1/2 inch from the nearest pocket (lowest ball wins a tie).
3. 7 ball is placed on the spot.
4. Cue ball and 8 ball stay in place.



Illustration 12: Ready for the "burp"

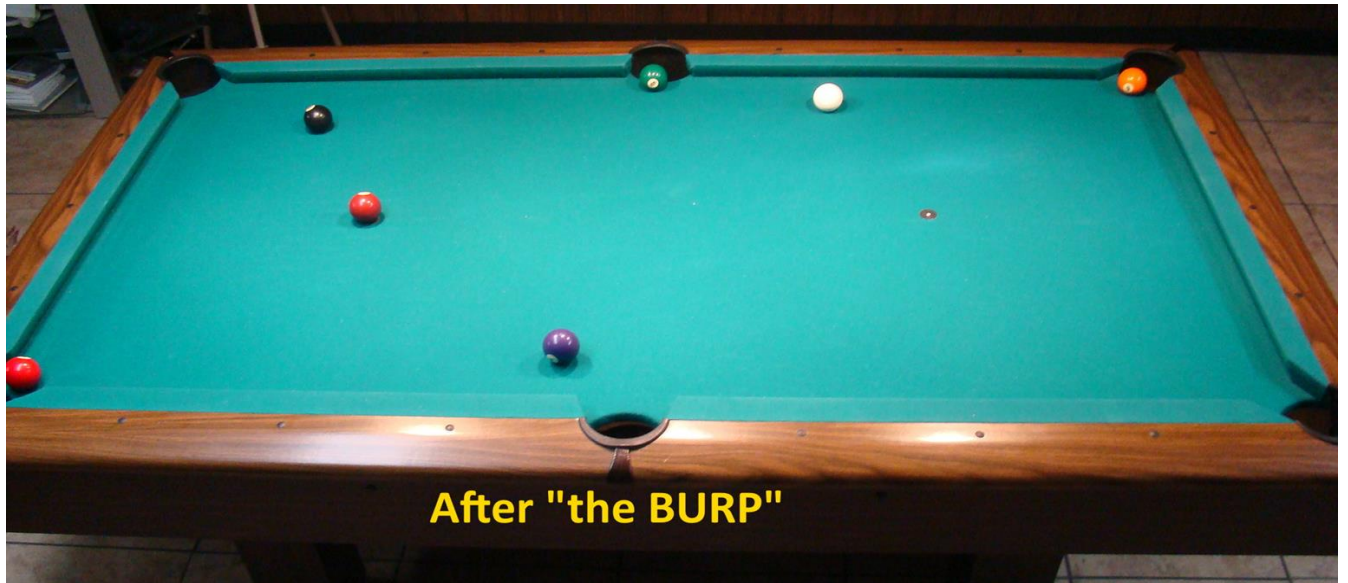


Illustration 13: After the "burp"

5. If cue ball, or 8 ball is in the way of the $\frac{1}{2}$ inch position, place ball against the interference ball aligned with normal target position.



Illustration 14: Cue ball in the way

6. Cue ball positioned in kitchen if scratched.
7. Player making the last fizz ball (9-15 stripe) resumes play, unless the cue ball was also pocketed, in which case the 8 ball future option is a possibility.

Exceptions

1. Striking the primary object ball after two cushions (w/o foul) allows another shot. Sinking the ball earns optional cue ball in kitchen.

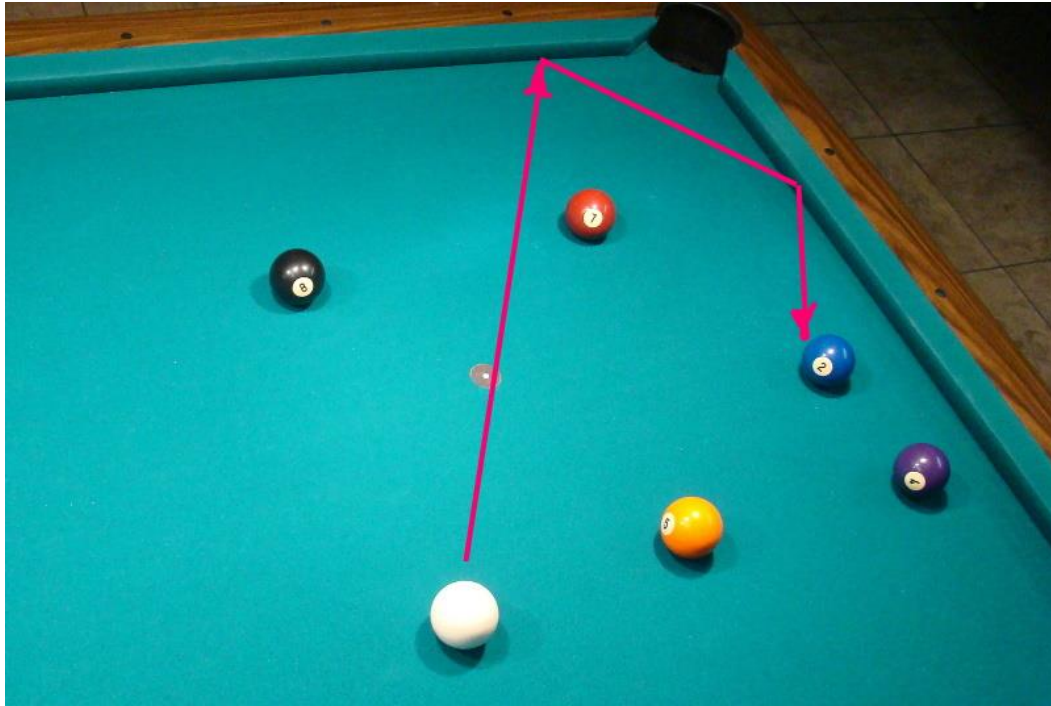


Illustration 15: 2 cushion bank

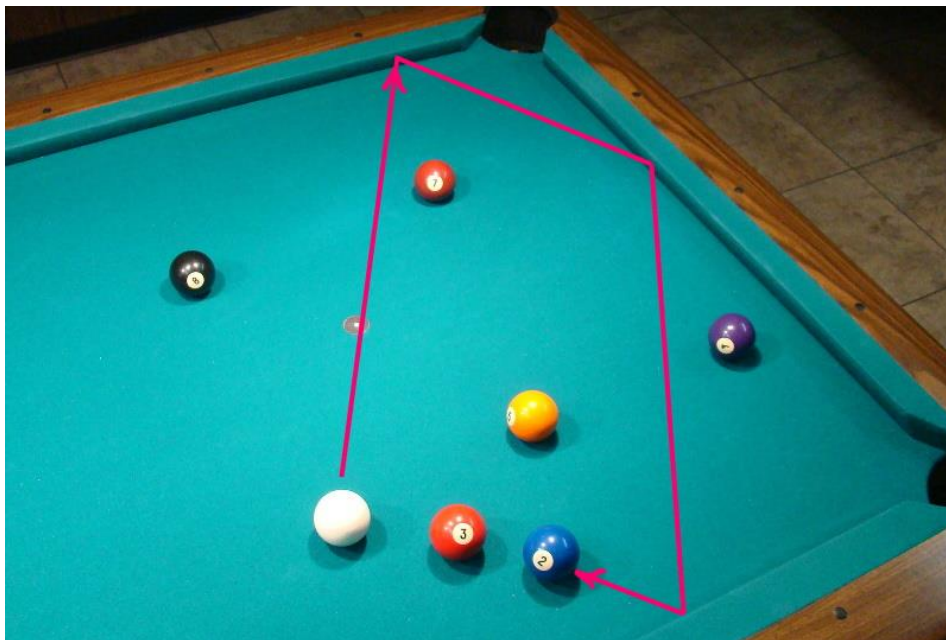


Illustration 16: 3 cushion bank

Striking the primary object ball after three cushions (w/o foul) allows another shot plus option for ball in hand from kitchen. Sinking the ball allows ball in hand.

2. Striking the primary object ball after four cushions (w/o foul) allows option for ball in hand from anywhere. Sinking the ball is a win.

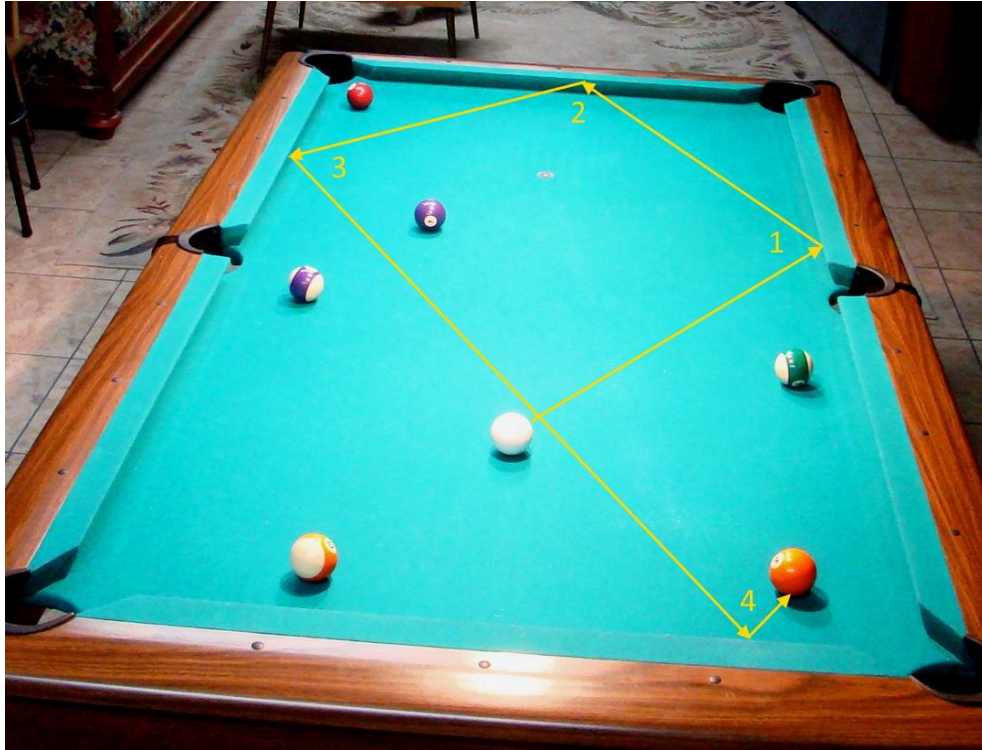


Illustration 17: 4 cushion bank

3. Striking the primary object ball after five (or more) cushions (w/o foul) is automatic win.

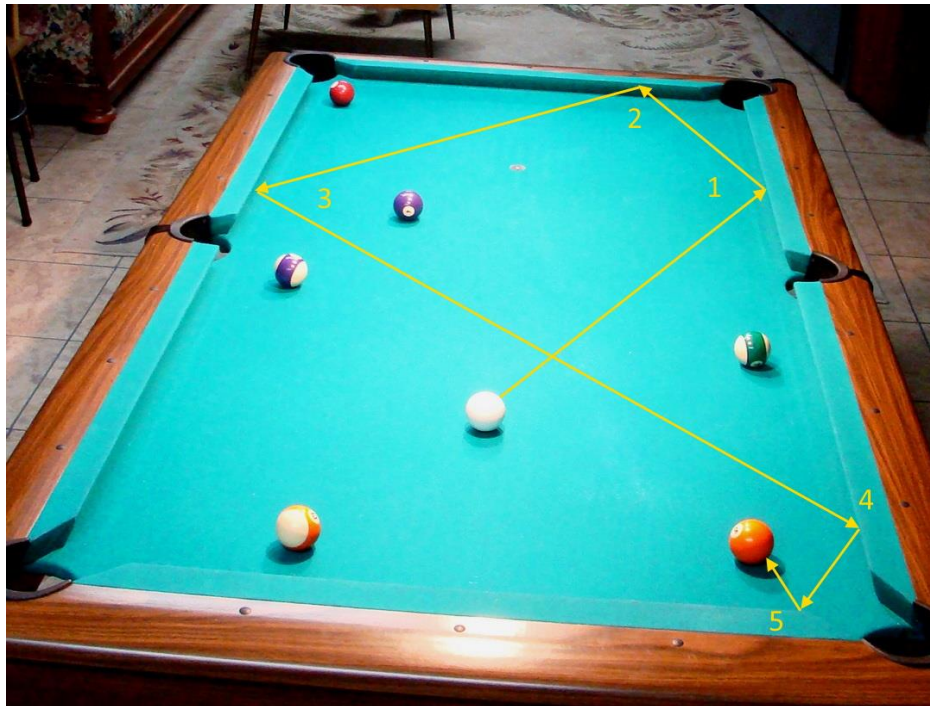


Illustration 18: 5 cushion bank

4. Miscue, and cue ball travels less than 4 inches. One do-over allowed (per turn).
5. Making the 8 ball and another ball on the break allows another shot in addition to the future option.

Reminders

1. Banking is not required for primary object ball (1-7) when using a pocket outside of the 7 inch proximity.
2. Only primary object balls require banking for pocket within the 7 inch proximity.
3. Can win game at any time by sinking the 7 ball without fouling. This includes using the primary object ball or fizz ball. The 8 ball can be involved as long as it was not hit first. If 8 ball is hit first it must also be pocketed to prevent a foul.
4. Can win game at any time by using four cushions and sinking the primary object ball.
5. Can win game at any time by using five cushion (or more, w/o scratch) hit of primary object ball.
6. A future option, earned by sinking the 8 ball, can only be used during the current game (does not carry over).
7. The earned future option can be used to force opponent to shoot next.
8. If previous shot resulted in a foul, the future extra turn is treated the same as when opponent shoots next (cue ball to kitchen option).
9. Making the 7 ball on a foul forfeits the game.
10. If opponent is positioned for shot (cue anchor on table), it is too late to declare extra shot.
11. When choosing to use the 8 ball option, the 8 ball is first spotted and available again.
12. Once the 8 ball is spotted, the option must be completed.
13. When choosing to use a future option after sinking the 8 ball, the 8 ball is spotted prior to next shot.
14. Player can also use future extra shot if last fizz ball included a scratch of cue ball. 8 ball is spotted after the “burp” setup.
15. When the 8 ball is hit first, it must be pocketed to to avoid a foul.
16. Player needs at least one foot touching floor during shot to avoid a foul.
17. When executing the “burp”, multiple balls may occupy the same pocket's proximity.
18. One of the future option (from making the 8 ball) is to use the banking assist frame.
19. Turn continues if another ball is pocketed along with the 8 ball (w/o foul).

Number of players

Normally 2 players. Alternating turns, only one winner and one loser. Lag for the initial break.

A third player works well, shooting in turn. Only one of three possible winners, always two losers. Lag for the shooting sequence and initial break.

When using 4 players, decide on two teams of two players. Each team alternates team players for each shot. Or it came be played alternating team players for each turn, but it greatly lengthens the wait time for a players next turn. Always two winners and two losers. Can use the lag to determine shooting order and initial break.

Strategy:

1. Use any legal ball (primary object, fizz or 8 ball) to sink the 7 ball for a win. However, using the 8 ball requires it to be pocketed as well.
2. Walk around and look. Consider where the next primary object ball is positioned and try to optimize the resulting cue ball position.
3. Use multiple cushions option to get a another, hopefully better, shot, or the win.
4. Use fizz balls to earn a better shot.
5. Sink 8 ball to earn a future option. If game end can be attempted, spot 8 ball and continue.
6. Don't waste earned future option until game ending sequence is planned.
7. Consider consequence of committing a foul and opponent has option to move cue ball to kitchen.
8. If legal contact can be made but no reasonable expectation to pocket a ball, try to move the 7 ball, shoot hard and hope (slop shot).
9. As last resort for difficult shot, consider defensive resulting cue ball position (safety). or use of earned future option to skip turn.
10. When shooting the 7 ball, with available extra shot, consider positioning for next shot.
11. Use available future option when advantageous. In rare instances it may be advantageous to consecutively pocket the 8 ball for cue position.
12. Take advantage of the future option to use of the banking assist frame (possible 5 cushion win!).

Benefits:

1. Gentle physical exercise (plus some stretching) can help combat aging process.
2. Burns calories, 2 hour session approximately equivalent to $\frac{3}{4}$ mile walk.
3. Mental exercise requires focus and concentration.
4. Temporary escape from daily problems.
5. Sharpens the mind. Requires mental estimates and calculations enabling one to think on their feet.
6. Hones hand-eye coordination. Involves agile coordinated tasks.
7. Tones muscles. Includes low-impact toning of the back, hip and leg muscles.
8. Improves cognitive skills. The mental stimulation of pool owing to infinite table layouts that challenge imagination, visualization and creative problem solving.
9. Conversation, catch up on family and local news.
10. Generates smiles and chuckles.
11. Helps build control. Those who play pool are able to think logically, encouraging action without hysterics.
12. Stimulation, adrenaline makes the heart beat faster, increases blood flow to the brain and muscles.
13. Enjoyment. Releases dopamine in the brain which reduces feelings of fatigue and depression.

Banking Assist Frame

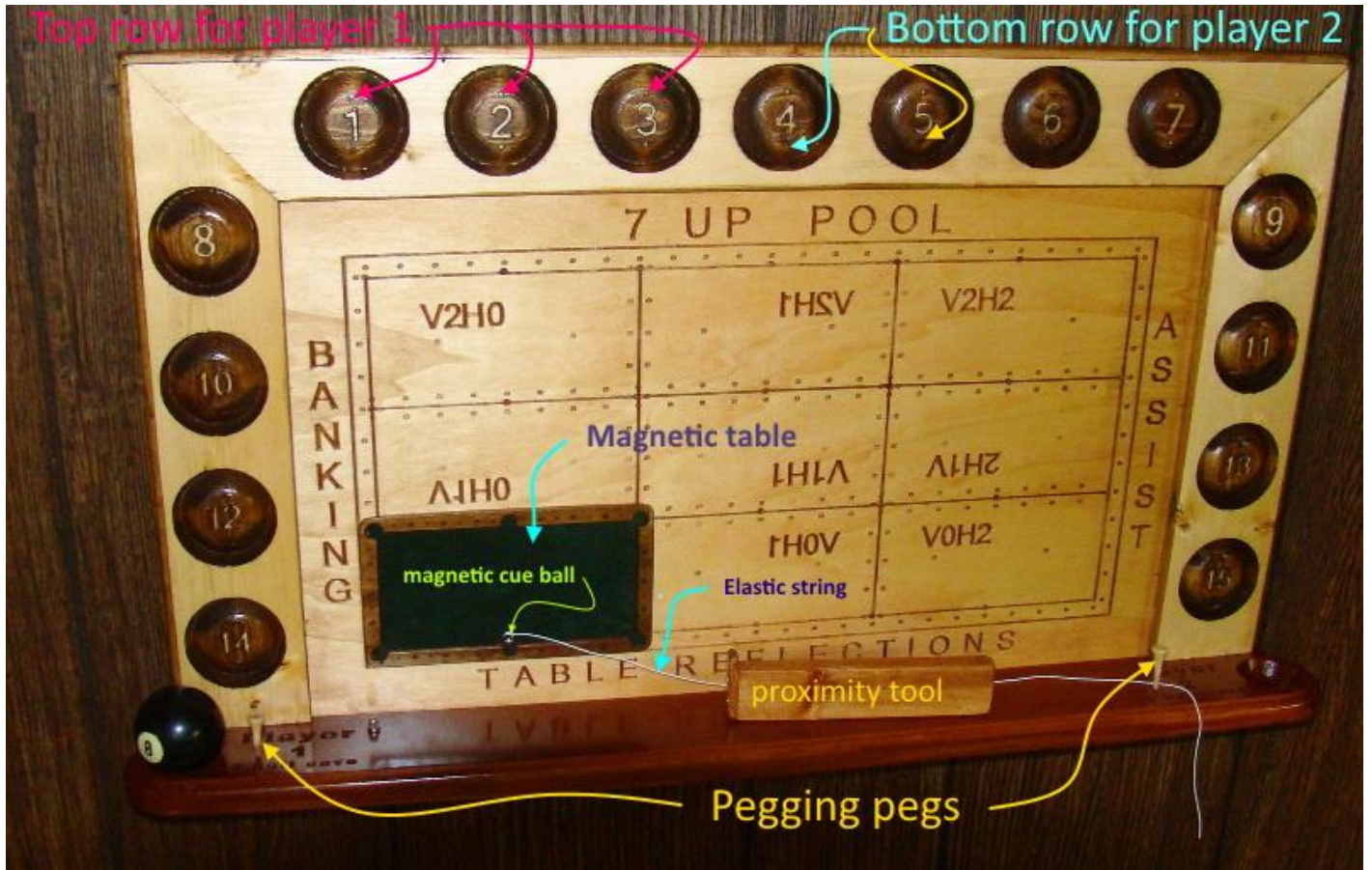


Illustration 19: Banking assist frame

Keeping score

The 15 engraved pool balls (1 – 15) contain two sets of holes (upper and lower) for pegging game wins. The upper peg holes are reserved for player 1, and the lower holes for player 2. Following each game win the peg is advanced.

Magnetic table

Simulated pool table with metal base and velvet covered. A magnetic cue ball is used to set up bank shot simulation. The elastic string is used to locate relative reflection position. More details are provided under “Shooting tips, Reflections”.

Proximity tool

Used to measure primary object ball distance from pocket for proximity. The tool has a hook on one end to anchor the pocket end when measuring.

8 ball apertures

Used to save the 8 ball after pocketing. The 8 ball is spotted when future option is invoked.



Illustration 20: 8 ball aperture

Each Pool Game is Like a Life:

1. *Some are longer, but all are short.*
2. Learning helps.
3. Mistakes will be made.
4. *Each one is different.*
5. Ideas are tested.
6. Nearly infinite possibilities.
7. Effected by luck, good and bad.
8. The more you practice the luckier you get.
9. Practice does not make perfect.
10. Follow thru helps.
11. Don't use more power than you can control.
12. Think, strategy and accuracy.
13. Mixes ritual with geometry.
14. It helps to plan ahead.
15. Play for the outcome not the income.
16. It helps to analyze the opportunities.
17. It's OK to accept suggestions.
18. Some opportunities (shots) are awkward.
19. A little spin (English) can makeup for poor position.
20. Extra money (chalk) is not that important.
21. Good habits are beneficial.
22. Good decisions come from experience.
23. Don't be a jerk (when striking the ball).
24. Praying and crying is useless.
25. Opportunities often wasted.
26. Predictions are compared with outcomes.
27. Hast makes waste.
28. Take whats offered.
29. Some cussing is required.
30. There is always a shot, you just have to find it.
31. You miss all of the shots you don't take.
32. If you bash the ball too hard you get nowhere.
33. *Except life doesn't end by winning or losing, always equipment failure.*
34. *Nothing matters over time.*
35. Meaningless event in a universe that will eventually spread into nothing.
36. Don't blame the stick, it's you.
37. Think while standing not while shooting.

38. Fortune favors the bold.
39. Don't whine and complain if you don't get what you wanted.
40. Good things come to those who wait.
41. Don't count your chickens before they hatch.
42. A little bit of knowledge is a dangerous thing.
43. It's no use crying over spilled milk.
44. Measure twice, cut once.
45. Slow and steady wins the race.
46. The only moment in time to which you have control is now.
47. Learn from the past.
48. You have to trust in something – your gut, destiny, life, karma, whatever.
49. The future starts now, not tomorrow.
- 50. *Some errors are less noticeable because of other compensating errors.***
- 51. *Its ok to lose a little.***

Shooting tips

Fundamentals (*intuitively obvious stuff*)

Body mechanics

The only thing you can actually control is your pool cue. Your body mechanics are the first thing you should check when your shooting is not going well.

- 1 Make your shooting stance natural and strong. Your stance should be strong enough that you can resist a shove on your shooting side.

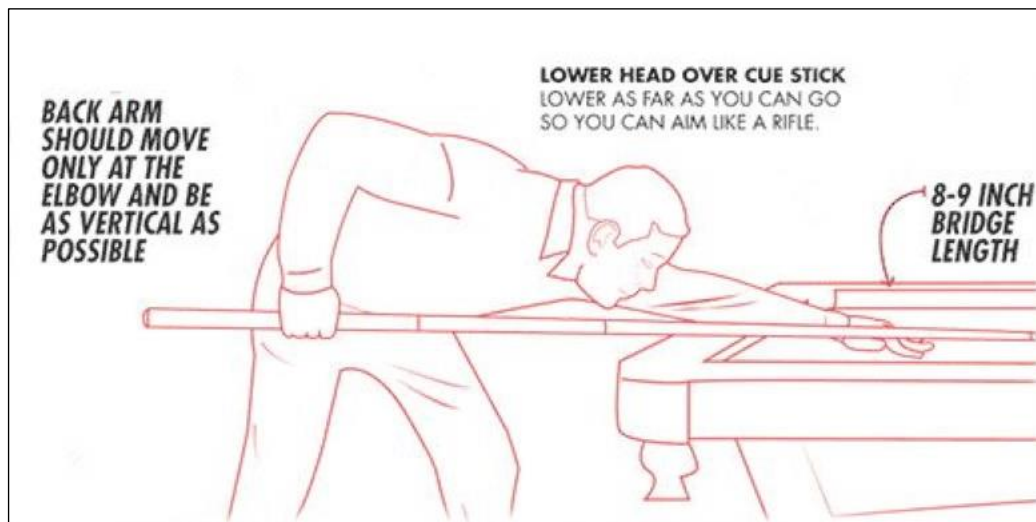


Illustration 21: Shooting stance

Hold your cue parallel to the table for maximum control.

- 2 Position your cue anchor hand about 8 inches from object ball for average shot (further or closer for more or less power).
- 3 Take a few sample strokes. A stroke should be a smooth, rhythmic motion with a beginning, middle and end. Don't rush your stroke, and don't choke it off. Accelerate slightly as you strike the ball.
- 4 Keep your follow through straight and relaxed. Your cue shouldn't slow down until after hitting the ball.
- 5 Stay down after the shot to prevent accidental jumpy motion.
- 6 Strike the cue ball in the center for basic cue ball accuracy (other considerations described later).

Chalk

Apply chalk to the cue tip (at least once in a while). Experts say "rotate onto cue tip" rather than turning cue into chalk(?). Especially important to have properly chalked tip when attempting English. Increases the friction at cue tip contact.



Illustration 22: Chalk accessory (Semo's lead weight)

Analyze

Analyze your misses. After you miss make a mental correction for the next similar situation.

Bounce angle

A ball that strikes a rail at angle X will bounce off it at approximately angle X as well. This assumes the table cushions are true, no ball spin and not over powered. Depending on the table characteristics, as the strike angle gets smaller the bounce angle gets smaller faster. **Green dotted line shows theoretical path**

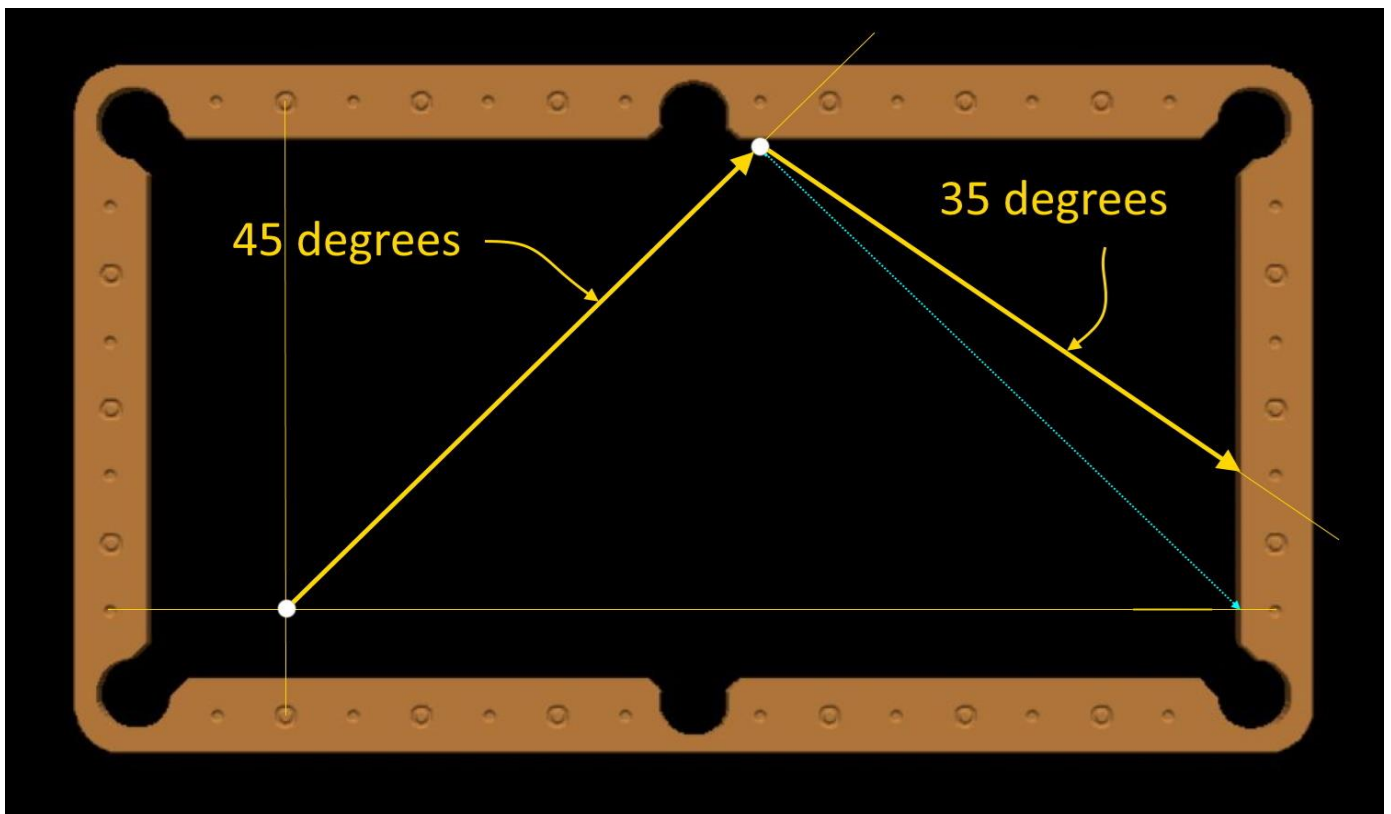


Illustration 24: Example bounce angle deviation for 45 degree strike angle

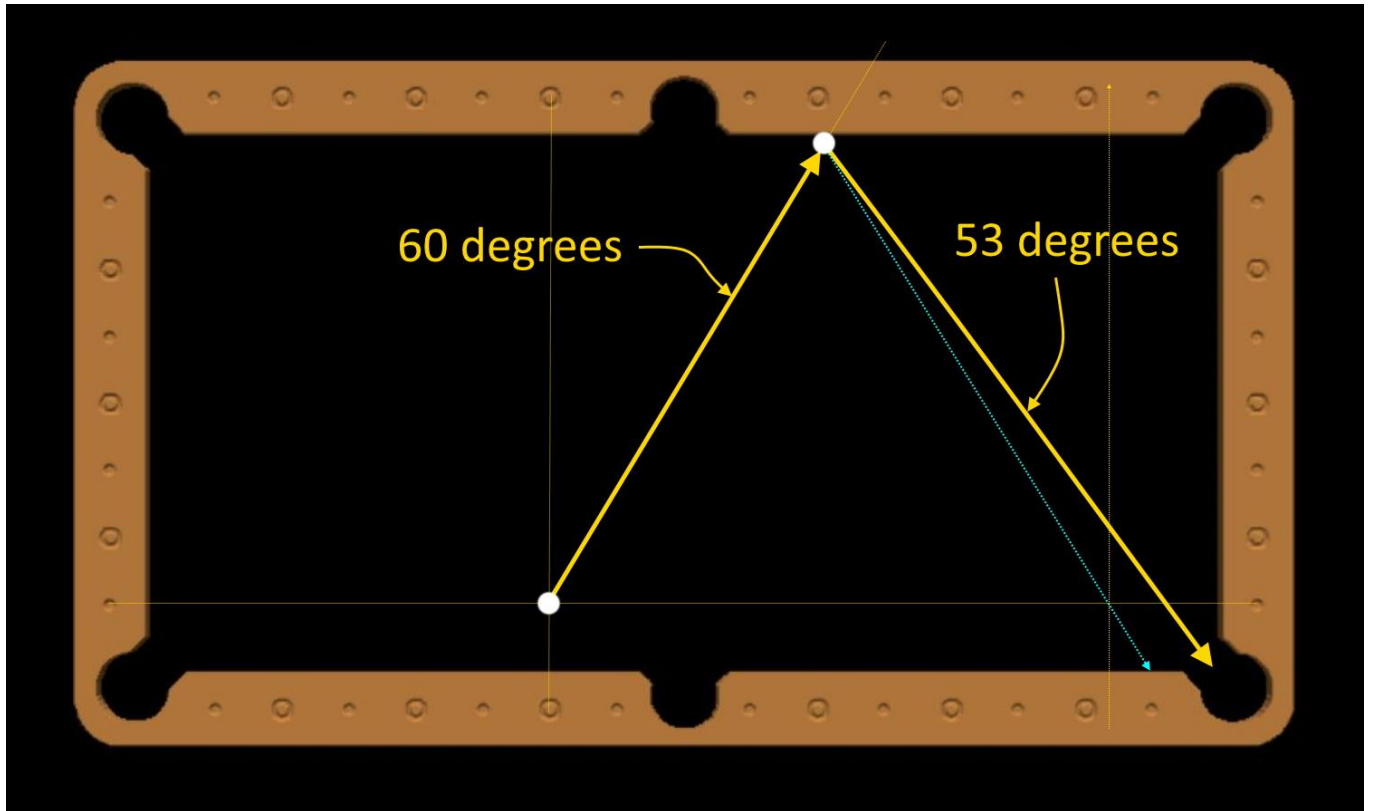


Illustration 25: Example bounce angle deviation for 60 degree strike angle

Basic improvements (*common sense*)

Using English.

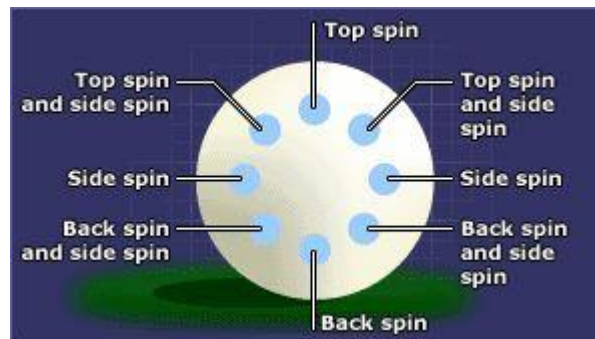


Illustration 26: Spin

If your cue tip hits the cue ball left or right of center, the ball will spin along that axis - this is "left or right English". When this spinning ball strikes a surface, the spin will cause it to rebound further to the left or right than a ball with no English.

Strike the cue ball above center to cause top spin. Increasing top spin increases how far the cue ball travels after striking the object ball. It also increases the angle of deflection off the object ball.

Strike the cue ball below center to cause draw. Increasing draw reduces how far the cue ball travels after striking the object ball. It also decreases the angle of deflection off the object ball. Draw and top spin effects increase with increased power. Very little effect when ball is hit softly.

When shooting object balls frozen to the rail, aim to hit the rail about a credit-card's width in front of the ball and using top spin. If more than a 45° angle, Gearing English will be needed to add spin to object ball to follow rail (described later).

Stop shot. Prevent cue ball from continuing forward after striking object ball by using draw (low English) and medium to high power.

Using sight spots (diamonds).

Sight spots are 18 physical inlay markers (sometimes shaped as diamonds) on the perimeter of the pool table used as a scale defining 32 equal segments of the playing surface (4 x 8).

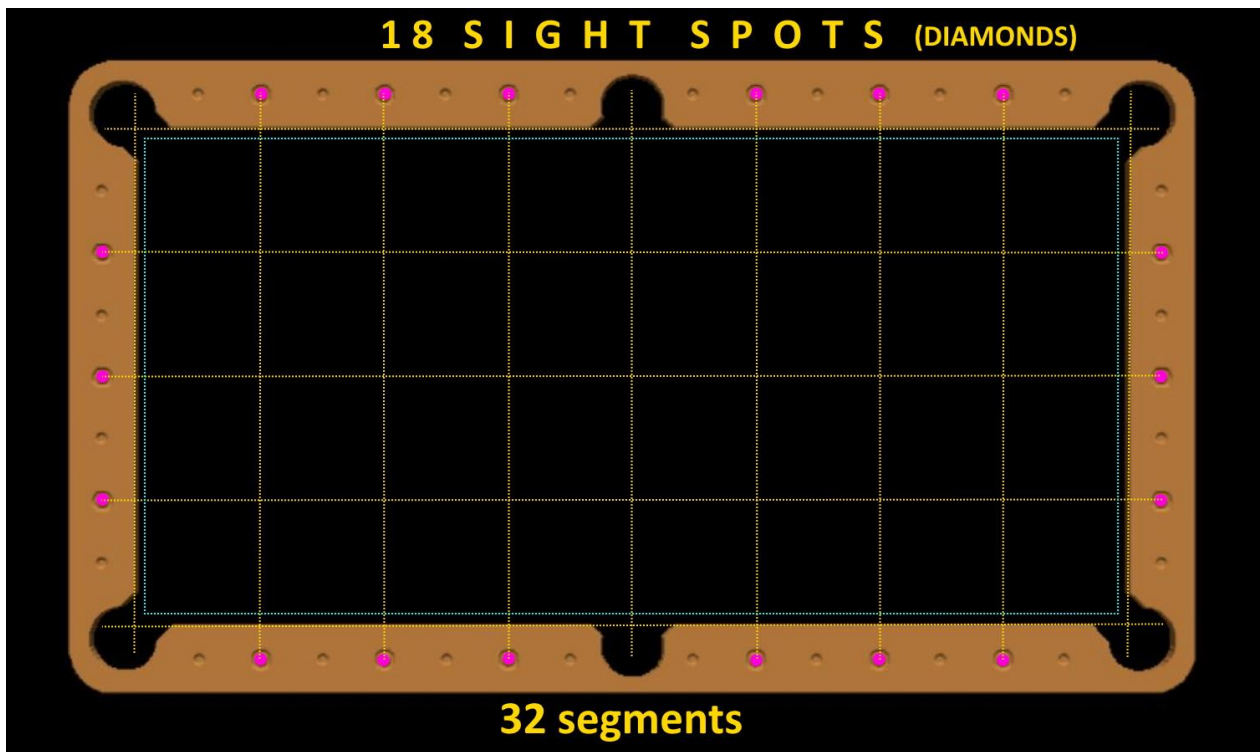


Illustration 27: Sight spots

The system works by identifying segment distance for the cue, target and aim points. All points are constrained to the playing surface within $\frac{1}{2}$ ball diameter (1.125 inches) of the cushions.

In the illustrations below the dotted green line represents typical table adjustment.

The aim point is usually determined using a rule, such as:

- a) **One cushion bank**– the segment distance between cue and target point is divided by 2. $A = Y / 2$ In the example, 6 divided by 2 equals 3. The aim point is one half the cue ball diameter ($1 \frac{1}{4}$ inches) from cushion perpendicular to the 3rd segment diamond.

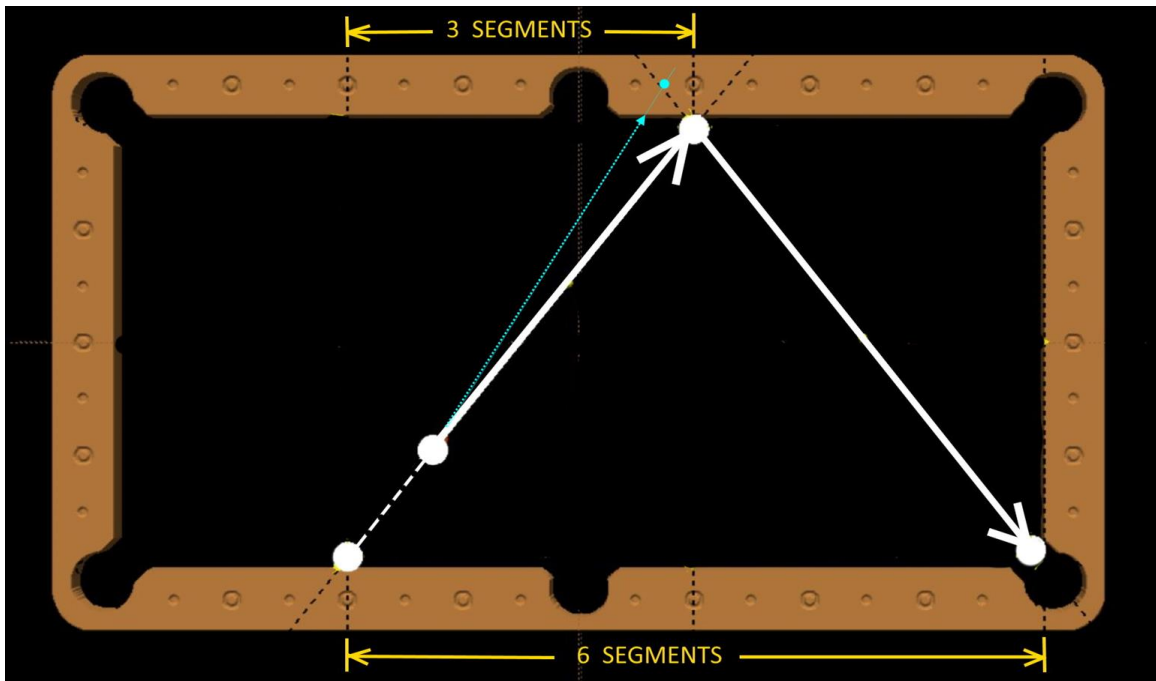


Illustration 28: One cushion bank

- b) **Two cushion bank – using adjacent rail.** Segment distance between cue and target point minus 1, divided by 2 (approx). Measure segment distance (from far corner), perpendicular to diamond scale and 1.125 inches from cushion, for aim point. For example below: $A = (4 - 1)/2 = 1.5$

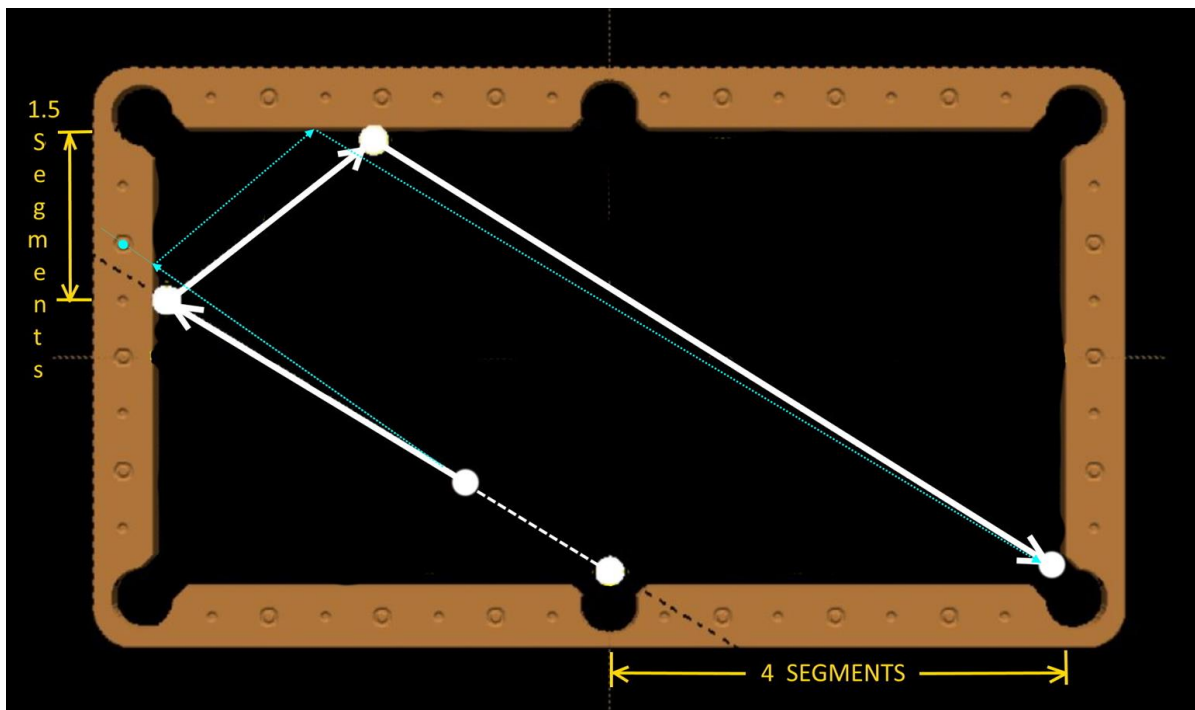


Illustration 29: Two cushion bank using adjacent rail

The actual formula is: $A = 4 - (64 - 8X)/(16 - X)$ where A is aim point in segments from far corner, and X is segments between cue ball and target.

- c) **Two cushion bank - when using parallel rails.** Multiply the segments between cue and target point by the vertical cue segment, then divide by vertical cue segment + 8. $A = (X * Y)/(X + 8)$.

For example below: $(7 * 2)/(2 + 8) = 1.4$

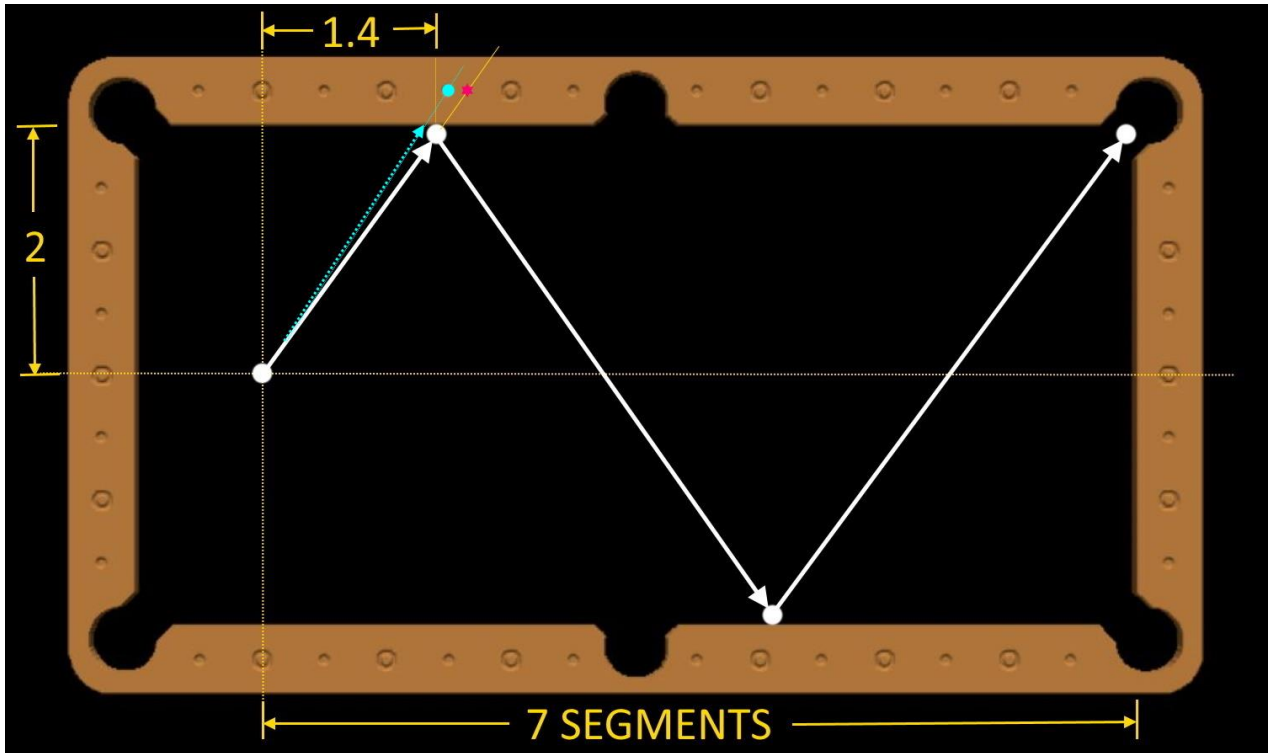


Illustration 30: Two cushions with parallel rails

Reflections

A simple (no math) technique to aid cushion shots (banking). Visualizing an adjacent ghost pool table (reflection), then aiming at the ghost target position.



Illustration 31: Reflections aid

Use the reflections aid to simulate the needed shot. The reflection technique is mathematically accurate (if laser beams and actual mirrors). When applied to a

pool cue bouncing off of cloth covered rubber cushions there are many influencing factors effecting accuracy (especially speed, spin and cushion condition). Generally the aim point needs to be adjusted to increase the cushion angle when less than 60 degrees (about 3 degrees at 60, increasing to about 5 degrees for 40). Depends upon table age and condition.

1. Place the simulated cue ball magnet on the assist pool table (lower left felt lined area) approximating the physical table position. The other 8 table rectangles represent reflections. The labeling VxHx shows the Vertical and Horizontal reflections (shown as mirror images).
2. Stretch the elastic line associated with the simulated cue ball to the desired target position on the assist board. Each time the elastic string crosses a reflection table edge it corresponds to a cushion contact. The adjacent reflections, for example, are single cushion.
3. The theoretical aim point is where the elastic line crosses the sight spot scale. Use the assist pool table sight spot to convey the aim position to the physical pool table. Then adjust for physical table characteristics.

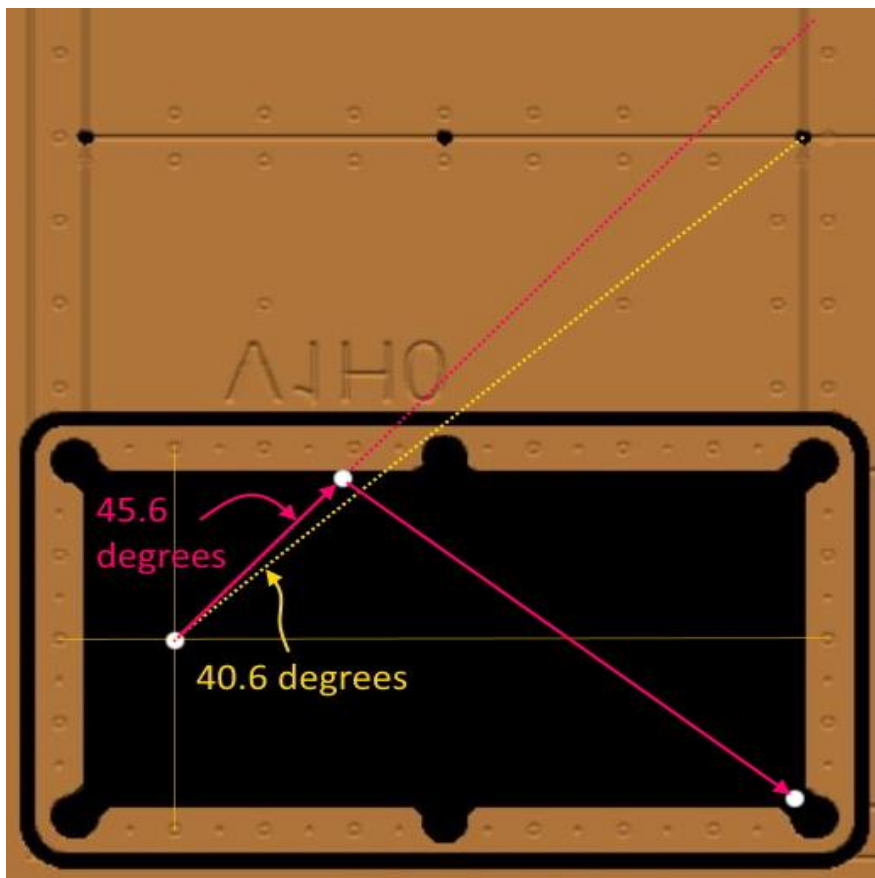


Illustration 32: Example aim point adjustment

In this example the aim point is adjusted 5 degrees or about $\frac{1}{2}$ segment left. In the following 4 reflection illustrations the table adjustment is shown with green dotted line.

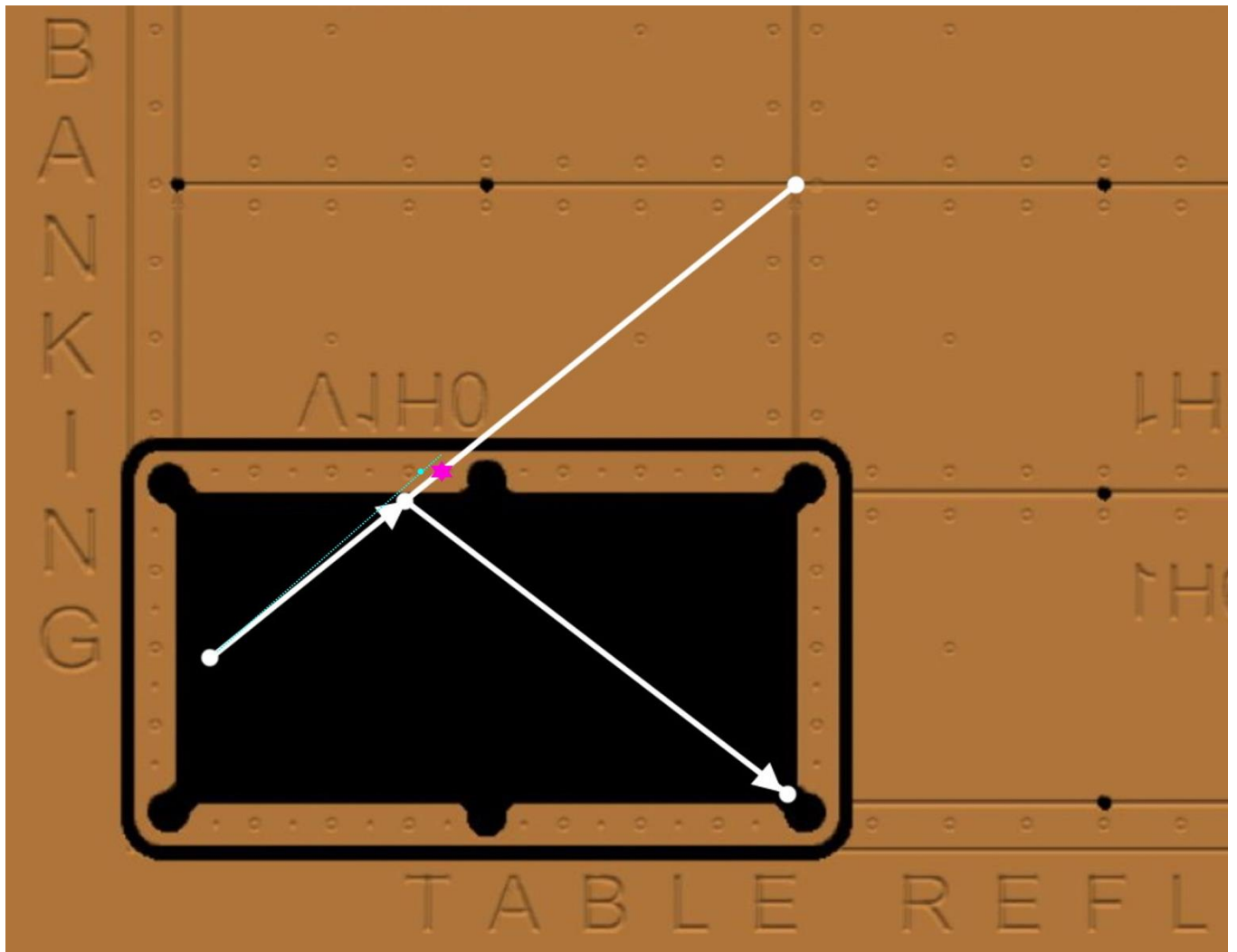


Illustration 33: Single cushion bank using adjacent vertical reflection

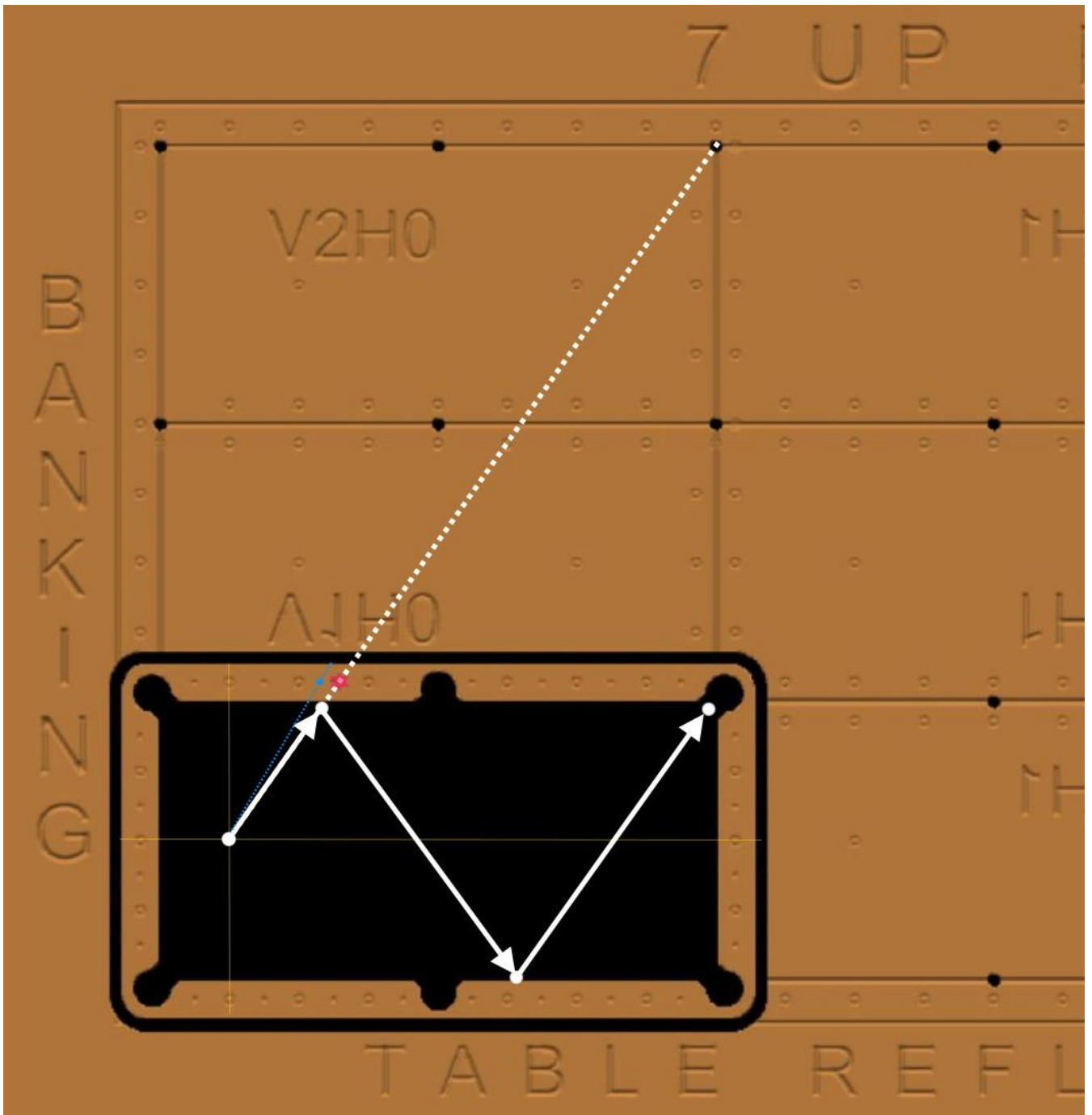


Illustration 34: Two cushion bank using second vertical reflection

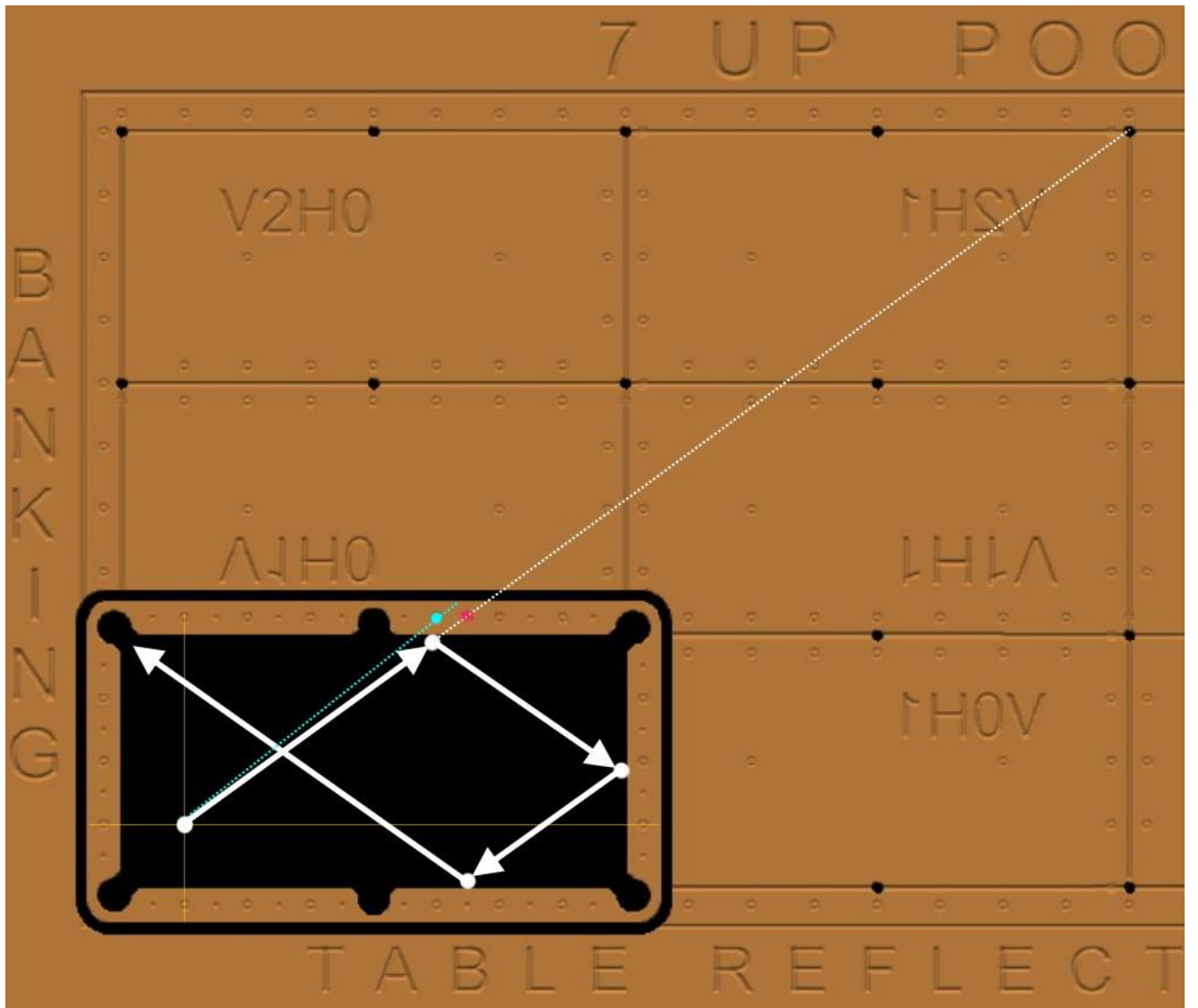


Illustration 35 Three cushion bank using 2nd vertical with horizontal reflection

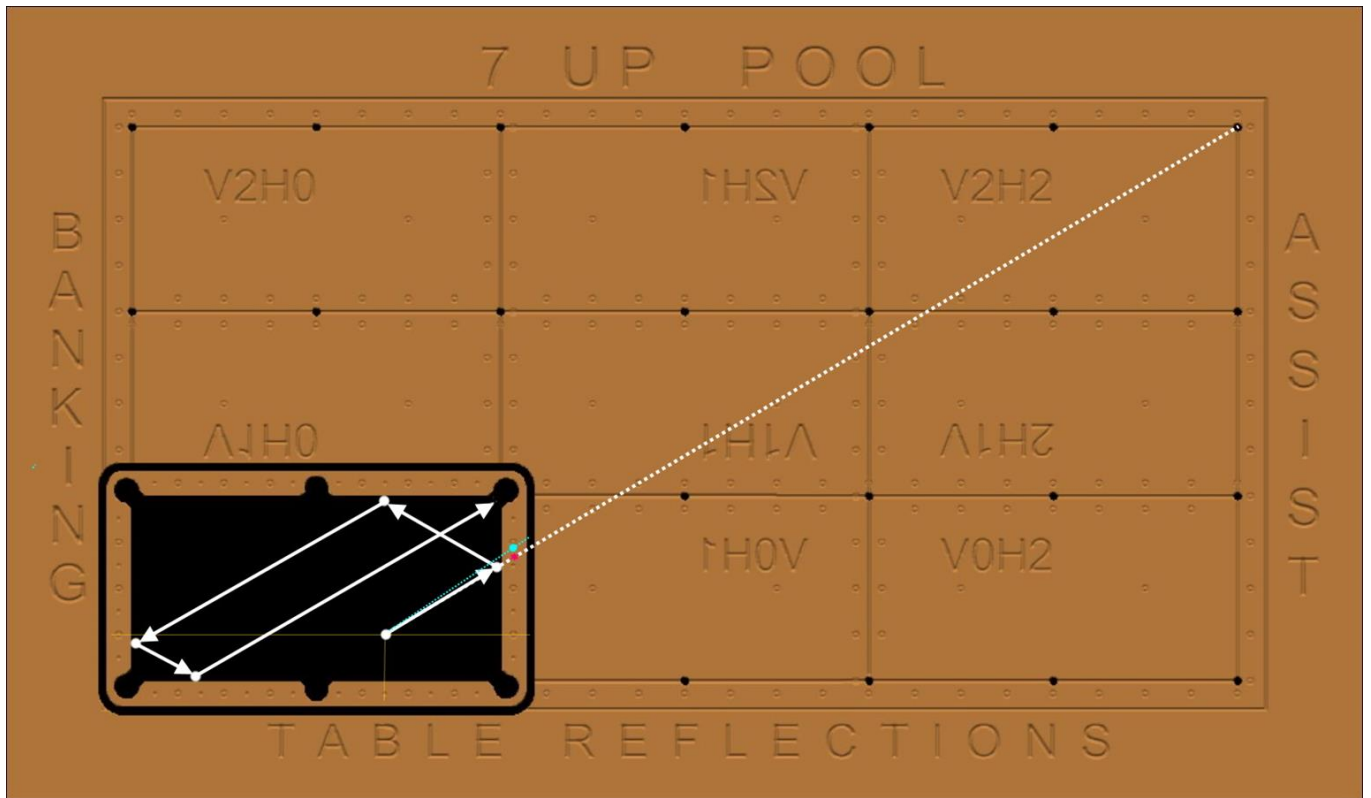


Illustration 36: Four cushion bank using 2nd vertical, and 2nd horizontal reflection

Parallels

When using two cushions, the cue ball will leave the second cushion on a path nearly parallel to the path made toward the first cushion. The table error on the first cushion is compensated by similar opposite error on the second cushion. **Green dotted line shows actual path for typical table.**

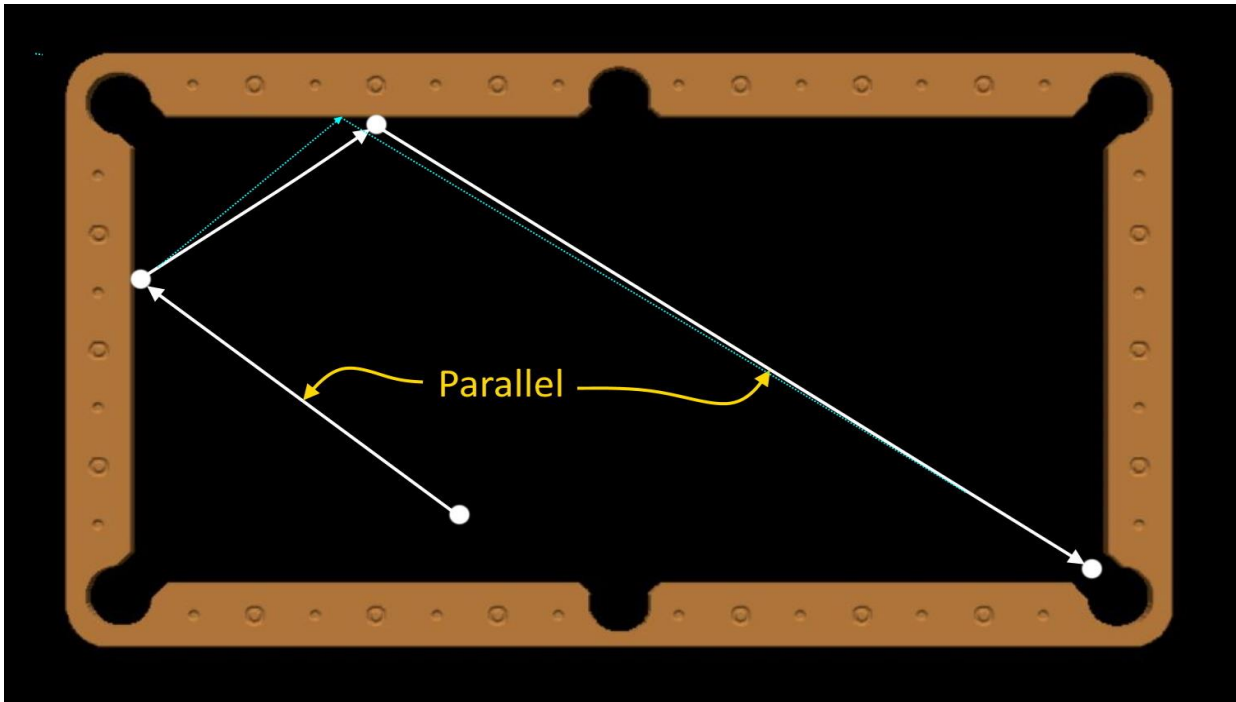


Illustration 37: Parallel path from perpendicular cushions

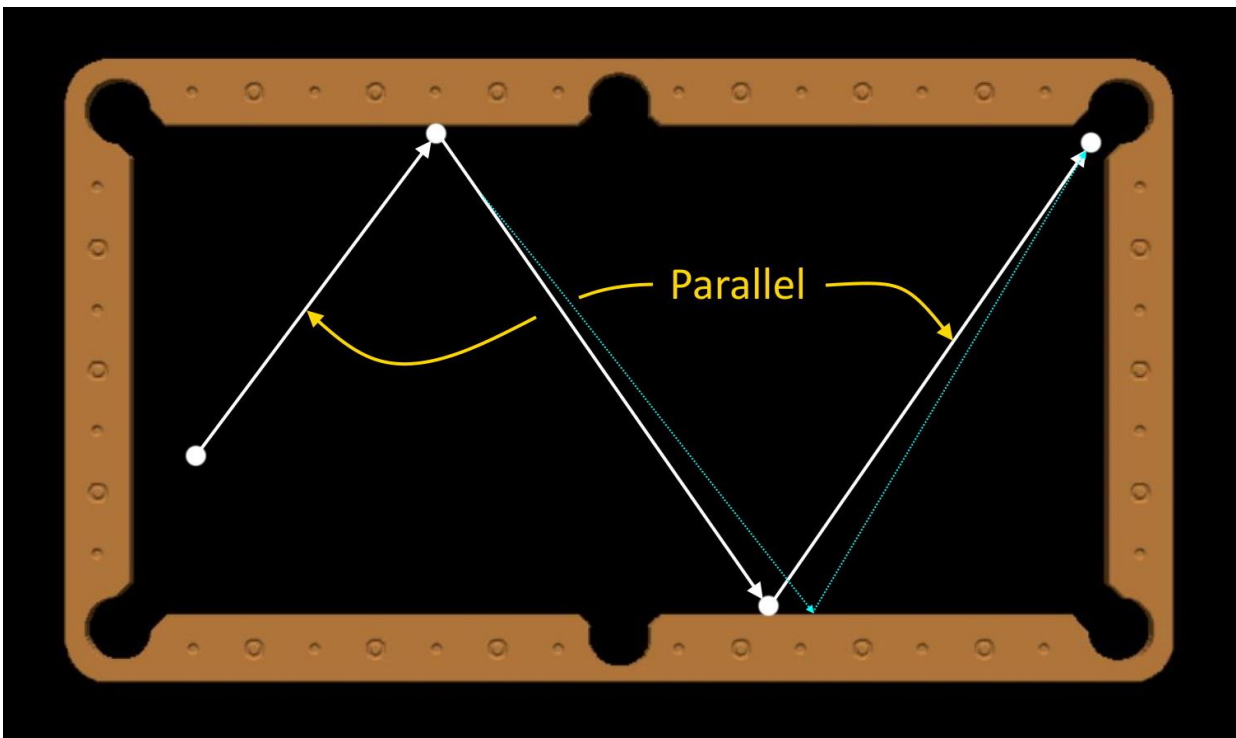


Illustration 38: Parallel path from horizontal cushion

Technical improvements (*not so intuitive or common sense*)

Two finger rule

Useful when the object ball is near a pocket, and some other ball is in the way. The **Two Finger Rule** is essentially a way of creating a visual reference for your **eye** to follow so that you can shoot the **cue ball** in the **right place** to make your ball off the cushion.



Illustration 39: Two fingers rule measurement

Using your two fingers (thumb and forefinger) measure the distance from normal contact if shot was made directly (w/o a ball in the way). Then double that distance onto the table frame and visualize the end point.

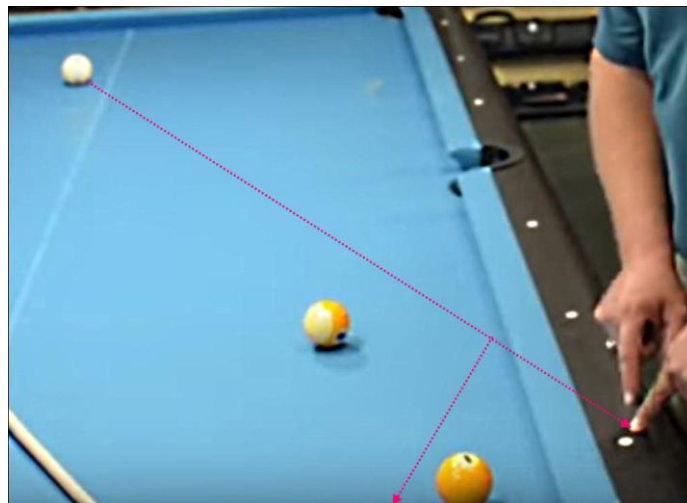


Illustration 40: Two finger rule aim point

This becomes the aim point.

This simple rule becomes less accurate as the object ball gets closer to the cushion.

The actual aim point (harder to estimate) measures twice the distance from edge of a ghost ball minus ball radius (1.125 inches).

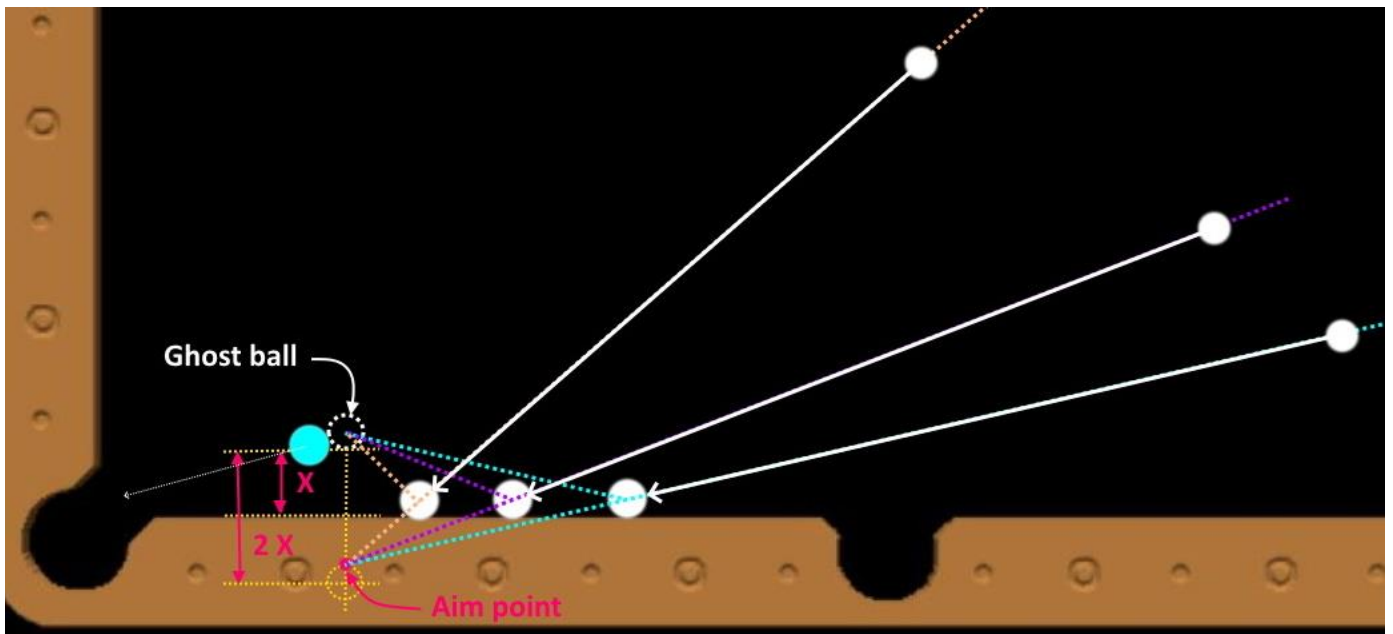


Illustration 41: Advanced two fingers rule

When using this technique, remember the banking rule for primary object balls requires the cushion strike to be at least two sight spots from pocket.

Cut angle

The cut angle is the angle between the cue ball's original path and the path of the object ball.

Some rules of thumb:

- a) $\frac{3}{4}$ object ball strike (aim $\frac{1}{4}$ in from object ball edge) produces 15 degree cut angle.
- b) $\frac{1}{2}$ object ball strike (aim at object ball edge) produces 30 degree cut angle.

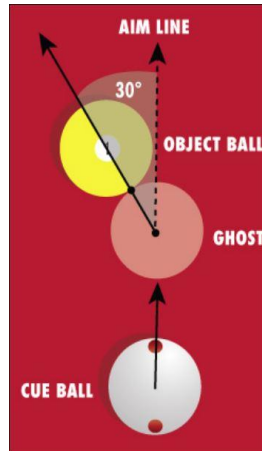


Illustration 42: 30 degree cut angle

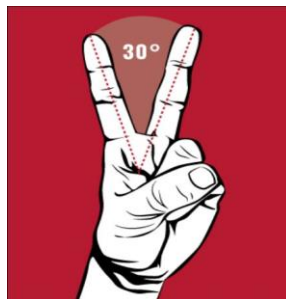


Illustration 43: Piece sign

- c) $\frac{1}{4}$ object ball strike (aim $\frac{1}{4}$ out from object ball edge) produces a 45 degree.

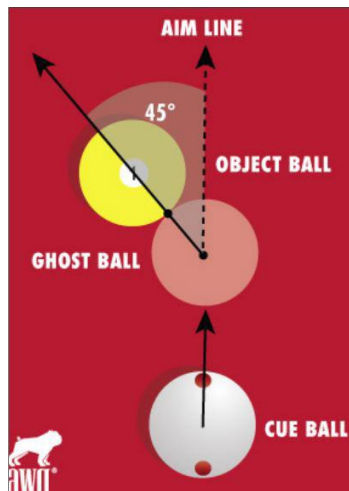


Illustration 44: 45 degrees

Understand

When two balls collide, the object ball starts rotating around a particular axis, determined by the cut angle and the amount of cue ball spin. If you achieve "gearing," this rotation occurs along the axis of movement, and the object ball's motion is not affected by spin. Adjust your English to achieve gearing for any cut shot.

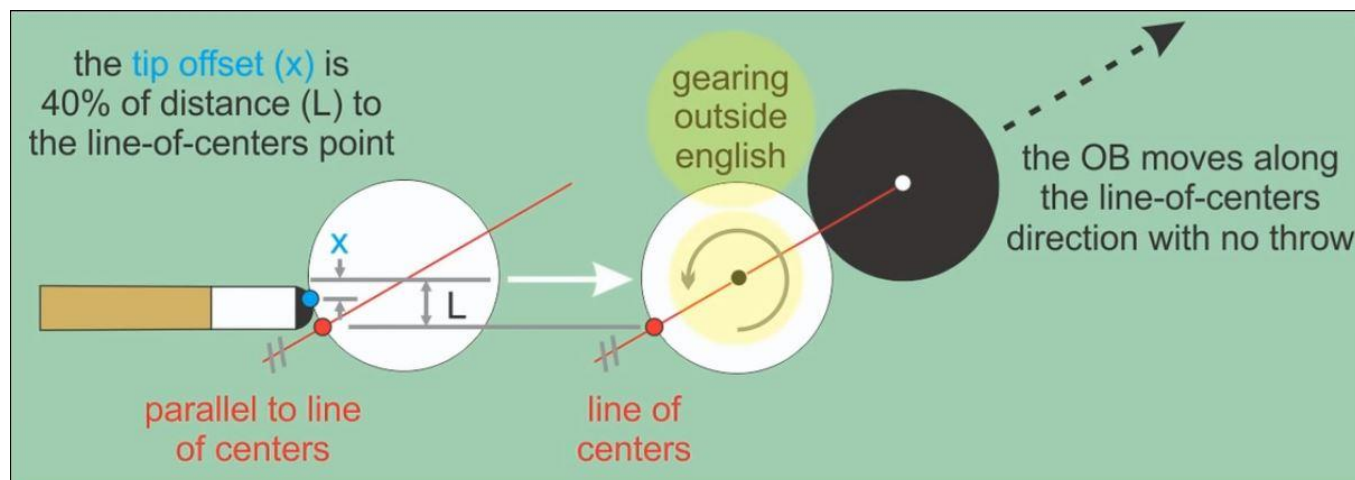


Illustration 45: Gearing (outside English)

Use the cue to visualize a line through the object ball to the pocket, that gives the “line of centers”. Then parallel-shift this to the cue ball (the red line in the diagram), that defines the “line-of-centers” point on the cue ball (the red dot in the diagram). The tip contact point should be 2/5 (or 40%) of the distance from center ball to the “line-of-centers” point to create “gearing” outside English.

The suggested English is for average distance from object ball. The amount of English should be reduced slightly for shorter shots (or increased for longer shots).

90 degree path

When object ball is stun hit. A stun hit is when the cue ball strikes the object ball without forward spin. The forward spin is controlled by applying draw (small amount for close shot, increased amount as distance increases).

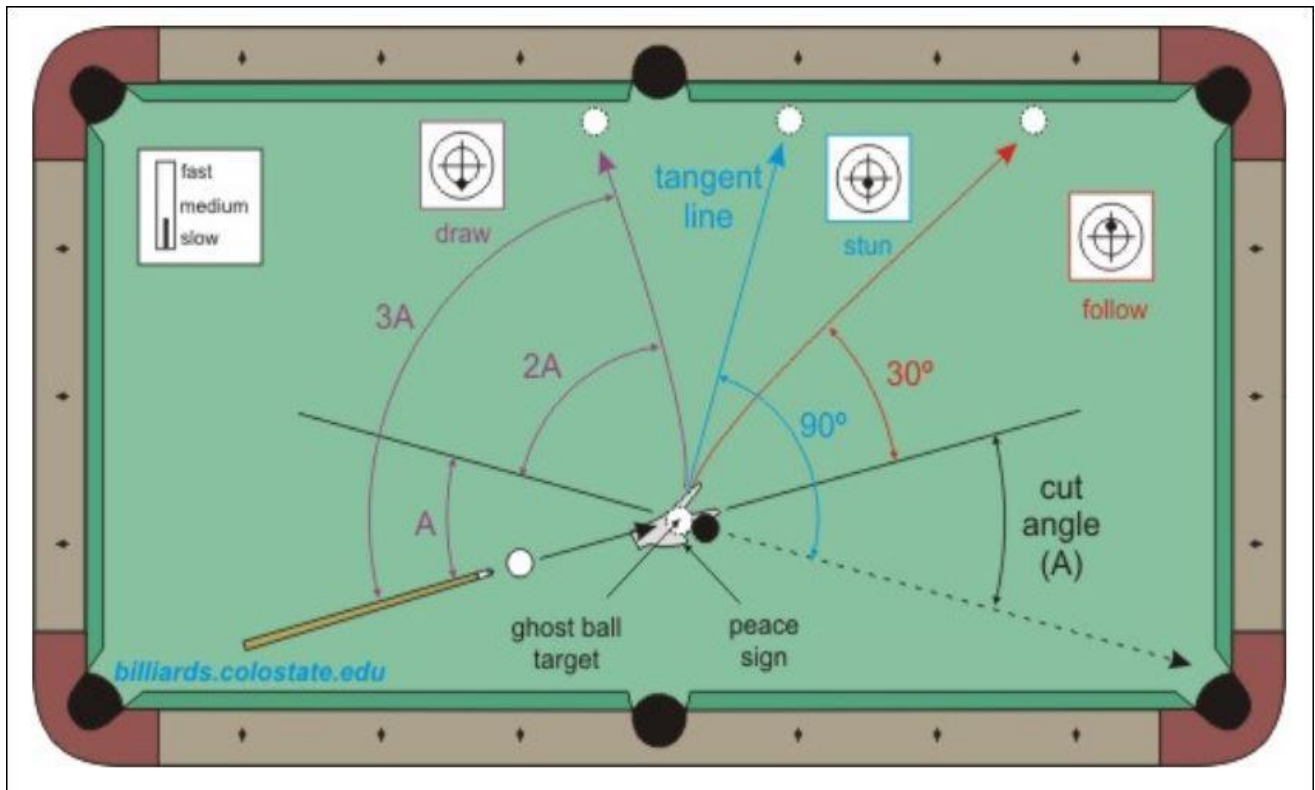


Illustration 46: Cue ball path

Miscellaneous rules of thumb

1. **3x rule:** principle stating that, with a full hit (greater than a $\frac{3}{4}$ -ball hit), the cue ball will deflect by about 3-times the cut angle.
2. **$\frac{3}{4}$ -ball hit:** a shot where the cue ball inside edge is aimed to pass through three quarters of the object ball, resulting in a cut angle of about 15° .
3. **$\frac{3}{8}$ " rule:** when the gap between two object balls is $\frac{3}{8}$ " (9.5mm), the 2nd ball heads very straight over a fairly wide range of 1st-ball angles, regardless of ball conditions.
4. **30° rule:** principle stating that a rolling cue ball's path deflects by approximately 30° after impact with an object ball for a cut shot between a $\frac{1}{4}$ -ball and $\frac{3}{4}$ -ball hit.
5. **45° rule:** principle stating that if the cue ball rolls into the short rail at roughly a 45° angle, it will head fairly close to the center of the table after contacting the long rail.
6. **7x rule:** principle stating that the cue ball will roll forward by about $\frac{1}{7}$ of the distance the object ball rolls forward with a straight-on roll shot.
7. **70% rule:** principle stating that, with a thin hit (greater than $\frac{1}{4}$ -ball hit), the cue ball will deflect by approximately 70% of the angle from the initial direction to the tangent line.

Glossary

Break - The first shot of a pool game where the cue ball is hit from the “kitchen” into the racked balls.

Cue – A long tapered stick with a leather tip used to strike the cue ball in pool.

Cue ball – The white ball that is propelled with the cue in pool.

Object ball – The ball in pool that a player intends to hit first with the cue ball.

English – Refers to spin applied to the cue ball by adjusting the cue tip point of contact.

Fizz ball – Balls 9-15 (stripes)

Foul – Committing a violation of game rules.

Ghost ball - The imaginary position the cue ball must be, at contact with the object ball, to make a shot.

Kitchen - Area of the table between the head rail and head string.

Lithium – a salt originally added to 7up to enhance mood. References 8 ball future option using reflection frame banking assist.

Miscue - A bad hit resulting from the cue tip sliding off the cue ball during tip contact.

Primary object ball – Balls 1-7. Special banking rules apply.

Scratch – when the cue ball is pocketed. Old billiards tradition where opponent would “scratch” off the shooters points when the cue ball was pocketed.

Sight spot - One of the 18 markers inlaid into the table frame for scaling distances to determine aim points.

Sink – same as “pocket” a ball

slop shot - a shot with no clear objective, usually hit hard in the hopes that something might go in.

7up The Making of a Legend

The Seven-Up Company's roots go back to 1920, when C. L. Grigg banked on his 30 years of experience in advertising and merchandising to form The Howdy Corporation in St. Louis, Mo. Although he named the company after the Howdy Orange drink he pioneered, his goal was to create a wholesome and distinctive soft drink that would prove irresistible to the nation's consumers.

Grigg spent more than two years testing 11 different formulas of lemon-flavored drinks. He settled on one that fulfilled the characteristics he sought: refreshing and thirst-quenching. Grigg introduced his new soft drink two weeks before the stock market crashed in October 1929. It was a caramel-colored, lithiated lemon-lime soda, which he positioned as a drink with a "flavor wallop" to market alongside the already-successful Howdy Orange drink. The 85-year-old citrus soft drink, once went by the less-catchy name "Bib-Label Lithiated Lemon-Lime Soda" — and it was packed with **mood-enhancing lithium**. Lithium, a salt found in groundwater, has long been used to treat bipolar disorder and depression. An essay by psychiatrist and Cornell University professor Anna Fels, published in the New York Times, argued for adding low doses of the substance — mostly used to produce ceramics, glass and batteries — to drinking water in hopes of lowering rates of suicide, murder and rape.

It cost more than its competition. It also carried the burden of an unwieldy name, "Bib-Label Lithiated Lemon-Lime Soda," and it competed against more than 600 lemon-lime soft drinks already in the marketplace. In spite of all the obstacles, the new brand sold well. Shortly afterwards, Grigg changed the brand's name to 7UP.

The earliest 7UP advertising featured a winged 7UP logo and described the soft drink as "a glorified drink in bottles only. Seven natural flavors blended into a savory, flavory drink with a real wallop."

Lithium's mind-altering effects may have been an early draw for 7-Up. The drink, which contained the compound lithium citrate, started selling just two weeks before the stock market crashed in October 1929, kicking off the Great Depression.

Acknowledging the success of the 7UP trademark in 1936, Grigg changed the name of The Howdy Corporation to The **Seven-Up Company**. By the late 1940s, 7UP had become the third best-selling soft drink in the world.

The U.S. Food and Drug Administration banned the use of lithium in beer and soft drinks in 1948, and 7Up was reformulated two years later.

In 1967, The Seven-Up Company introduced the UNCOLA advertising campaign, which sent 7UP sales rocketing nationwide. Consumers endorsed 7UP as a viable, thirst-quenching alternative to colas. The UNCOLA tag immediately joined the nation's vernacular and remained synonymous with 7UP, despite subsequent campaigns that featured new slogans.

In 1970, The Seven-Up Company introduced sugar-free 7UP, which was an immediate success among the growing number of calorie-conscious Americans. It was named Diet 7UP in 1979.

In June 1978, **Philip Morris acquired The Seven Up Company**. The 7UP "No Caffeine" campaign garnered national attention for the company four years later, as it appealed to growing consumer concern and confusion about caffeine in soft drinks. The campaign launched 7UP sales into an unprecedented period of growth and forced the soft drink industry to address the caffeine issue with new products and other competitive countermeasures.

In 1986, Philip Morris sold the domestic operations of The Seven-Up Company to a private investment group for \$240 million and the company was **merged with Dr Pepper Company**. The new management team consolidated administrative functions of The Seven-Up Company at the Dallas headquarters of Dr Pepper Company. Sales and marketing staffs remained separate and, although The Seven-Up Company moved its headquarters to Dallas in 1987, manufacturing of 7UP products remained at the company's St. Louis facility.

The Seven-Up Company introduced Cherry 7UP and Diet Cherry 7UP in early 1987. Marketed to young people, the new products were designed as light, refreshing additions to the prestigious family of 7UP brand products and met with instant success across the country. To further boost awareness levels of 7UP in the nation's youth market in 1987, The Seven-Up Company introduced Spot, a character derived from the red dot in the 7UP trademark. From his inception, Spot rapidly developed into a popular cartoon character represented on licensed items throughout the nation. The character was featured in 7UP advertising and packaging until 1995.

With the March 1995 acquisition of Dr Pepper/Seven-Up Companies, Inc. by **Cadbury Schweppes** plc, 7UP became part of Cadbury Beverages North America. Shortly thereafter, the brand underwent a revitalization reaching out to a younger audience. In the fall of 1995, splash package graphics were introduced for all four flavors of the brand to create a contemporary, exciting new look.

The Spot character was eliminated with this graphics change. A 20-ounce package featuring a splash design and unique easy-to-grip bottle was designed and introduced to gain market share in a variety of single-serve purchase locations. In July 1996, the company changed its name to **Dr Pepper/Seven Up, Inc.** That same year, "7UP: It's An Up Thing" became a widely popular tagline.

New advertising creative featuring actor/comedian Orlando Jones and the slogan "Make 7UP Yours" was launched in late 1999. The popular "Make 7UP Yours Campaign" continued in 2000, introducing comedian/actor Godfrey as the bumbling 7UP guy.

In 2006, just in time for its 77th birthday, 7UP was reformulated to be 100 percent natural, removing all artificial additives and preservatives. The new 7UP also features nearly 50 percent lower sodium.

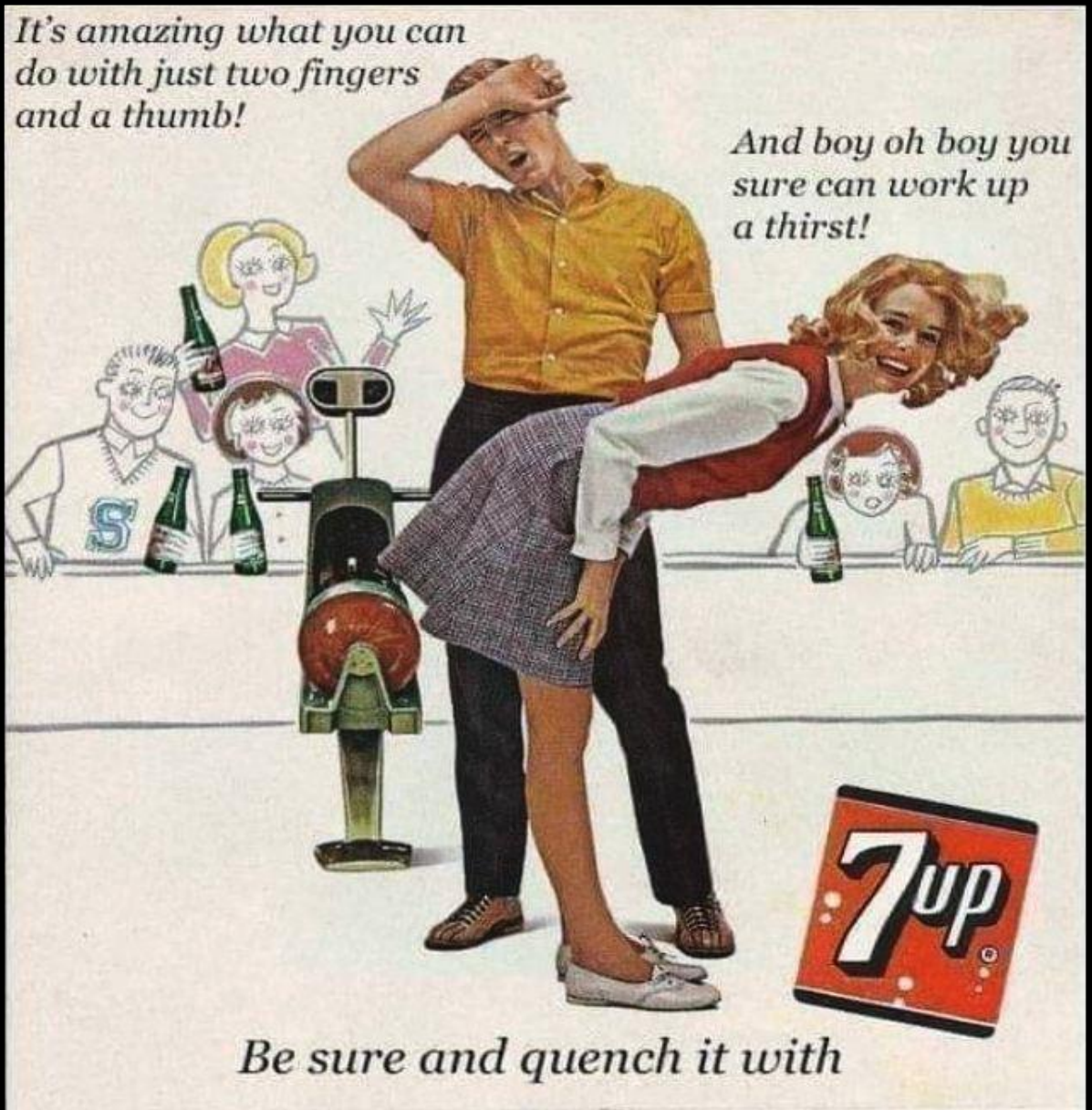
What's in a name? Although C.L. Grigg never explained the origin of the soft drink's name,

many stories abound. The most popular story is that Grigg named the soft drink after he saw a cattle brand with the number "7" and the letter "u." Other stories suggest that the name reflects the drink's seven flavors and carbonation, or that Grigg came up with the name while playing dice.

Vintage 7up ad

It's amazing what you can do with just two fingers and a thumb!

And boy oh boy you sure can work up a thirst!



Be sure and quench it with

Does that bowling ball feel heavier than it did a few minutes ago? Quick—bring on the 7-Up! Here's brand new energy for you in just 2 to 6 minutes. New roll-power to help you score bigger. New sparkle for your spirit. And a glorious, new, fresh taste for your mouth. Why, it's a bowler's dream. Or anybody's! It's *always* 7-Up time.

FOR THIRST QUENCHING, FRESH TASTE, QUICK LIFT... "FRESH UP" WITH SEVEN-UP!

Copyright 1963 by The Seven-Up Company

(the font used at the top was likely not around until the 1990's)

Index

8 ball, 5
90 degree path, 42
Banking Assist frame, 5
Benefits, 21
body mechanics, 26
Break, 9
burp, 13
chalk, 26
Cut angle, 41
English, 29
Exceptions, 15
Extra shot, 5
fizz balls, 7
Fouls, 12
Fundamentals, 26
Future options, 5
ghost pool table, 32
Glossary, 44
Keeping score, 22
Kitchen, 10
Lagging, 9
Life vs pool game, 24
lithium option, 5
Miscue, 17
Number of players, 19
Parallels, 38
Phases, 13
Pool table components, 7
primary object ball, 4
Primary Object Ball Bank shots, 12
proximity tool, 4
Rack balls, 8
Reflections, 32
Reminders, 18
required bank, 4
Rules, 4
rules of thumb, 41
Safety, 10
Setup, 7
Shooting tips, 26
sight spots, 29
solids, 4
Spotting, 10
Stop shot, 29
Strategy, 20
stripes, 7
stun hit, 42
Two finger rule, 39
Vintage 7up ad, 48
Winning, 7

Cover picture of two old guys and pool table

Prepared by:

John Wolever (*on the right as well as in the picture*)

Feedback by:

John Semo (*on the left as well as in the picture*)



Illustration 47: Pool room clock