# Shuffleboard Scoring Triangle Making Your Hammer Count 

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## Playing the Odds

While these statistics hold throughout the game, they are most helpful when taking the last shot of a frame, known as the Hammer. The shuffleboard mantra is "score your hammer"! Placing a disc in scoring position without a hide is not a good strategy for success. It is easy to remove and may enhance your opponent's chance for scoring.
When you have the last shot and at least half of the court has no discs, what should you do?

## Actual Areas of Scoring Triangle

The actual visible areas of the shuffleboard scoring triangle with lines of zero width. The numbers indicate the area of each cell relative to half of the 10 cell. The 7 and 8 cells have been divided into triangles equal to the right triangle formed by half of the 10 cell. The 10 -off cell value has been rounded up to get 3 .


## Relative Scoring Areas

The actual areas occupied by the centers of good discs. This requires that the center of a $6^{\prime \prime}$ disc be at least $3^{\prime \prime}$ from any of the boundary lines. The boundary lines are $3 / 4 \prime \prime$ wide. The white areas must be occupied by the center of a disc to count as a good disk. The integers are the relative areas with the area of the 10 cell $=1$.
(Computed values are $1: 2.0: 4.2$ : 4.1)


## Real Scoring Areas to Scale as Squares

Real scoring areas shown to scale as squares.
Think about blind shooting squirrels or droppings from a passing flock of sea gulls instead of human shufflers.
(Maybe there is not much difference!)


## Point Conversion: Do the Math!

Given the point value for each cell and the relative area of that cell, if you are equally competent in putting your disc on a given point on the court, how many points are you likely to score? (Assume you have to call your shots and you don't get accidental scores!)

This assumes 10 shots ( 10 hammers per team in 10 rounds of doubles), a 50\% success rate of placing the disc at a given point, and integer relative cell areas.

| Cell <br> Point <br> Value | Area <br> of <br> Cell | Points <br> Scored |
| :---: | :---: | :---: |
| 10 | 1 | 50 |
| 8 | $2^{*}$ | 80 |
| 7 | $4^{*}$ | 140 |
| -10 | $2^{*}$ | -100 |

*Assume no shots score on the "wrong" side of the center line beyond the 10 .

## Errors in Distance Resulting in Scores

Since the scoring areas are near each other, attempts to score in one area may result in a score in another area. Shots for a 10 may result in an 8 or a 7 . Shots for an 8 may produce a 10 or a 7 , or in some instances a -10 . Shots for a 7 may end up in the 8 if short, or in the kitchen if long and result in a-10. These unintended shots count as much as intended shots. They will improve the outcomes in the table above when shooting for an 8 rather than a 10 or a 7 as described below. While the 7-8 center line precludes scoring in the middle, that limitation does not exist in the 10-off cell.

## Shooting for a 10

Short Shots: If a shot is short when shooting for a 10 , you get no points.

Long Shots: The high end of the triangle is narrower making it more difficult to score unless the shot is along the center line. If the shot is long and along the center line, it is more likely to end on the center line between the 8 cells resulting in no score. There is a small chance of any score if you miss a 10.


## Shooting for an 8

Short Shots: If you are short when shooting an 8 , there is a small chance you may get a 10 .

Long Shots: If you are long when shooting an 8 , you may score a 7 . Since the 7 cell is larger than the 8 , this is a reasonably likely outcome. Very long shots may stop in the 10 -off cell. Clearly this is not a good outcome, but the probability is low unless the shot is very long.


## Shooting for a 7

Short Shots: If you are short when shooting a 7 , you may get a 10 or an 8 . A 10 is highly unlikely due to the small area and the large distance from the 7.

Long Shots: If you are long when shooting a 7 , you may score a -10. Since the -10 cell on a given side is about the same size as the 8 , this probability is not insignificant. A deep 7 shot is clearly risky, but sometimes warranted.


## Shooting Distance Errors



## When Kitchen Shots Count +10 Instead of -10

In the beginning of the horse collar game or in some shootouts, a disc in the kitchen counts +10 instead of -10 . In these situations, shots for the 7 are much more advisable than otherwise. A long 7 shot may produce a +10 and improve your score rather than the alternative. While most experienced shufflers attempt shoot an 8 with the hammer, shots for the 7 can be very productive and lead to much higher scores due to the sizes of the 7 and 10-off cells.

## Other Discs and Systematic Considerations

The general guidelines above are appropriate for a flat court (no drift) and with no other discs on the court. If a court has a pronounce drift and/or a variable drift, then that must be taken into consideration. If there are other discs on the court, they can be used to improve your chances of scoring. Mastering these different and varying circumstances make shuffleboard the very challenging game that keeps people involved for years.

Track S is $5 \%$ longer than Track $\mathbf{T}_{1}$.
Track T1 has about the same

## Track S Track $\mathrm{T}_{1}$




## Maximum Score Simulation

What is the theoretical maximum score for a single frame of shuffleboard?

40 for each color. All eight discs will fit into the " 10 " cell as shown at the right.

Obviously, this is not a likely outcome from real shooting. Better to play the PowerBall!


## Shooting Positions at the Head (as seen by players at the head)

At the head of the court yellow discs are on the right and black discs are on the left. The disc closest to the center line is in the " 1 " shooting position. The disc farthest from the center line is in the " 4 " shooting position. It is most common to shoot from the 1 position. When trying to hide behind a Tampa or St Pete hide, it is most common to shoot from the 4 position.


## Shooting Positions at the Foot (as seen by players at the foot)

At the foot of the court yellow discs are on the left and black discs are on the right. As at the head, the disc closest to the center line is in the " 1 " shooting position. The disc farthest from the center line is in the " 4 " shooting position.


## Overall Dimensions

Given the low probability of scoring a 10 by design, combined with the low probability of scoring something else by accident, one should only attempt a 10 when it is essential to tie or win the game, or when there is no other reasonable option. This may be the case if the other scoring areas are blocked by opponent's discs and the 10 area is not.


