

ON BASE
B A S E B A L L

On Base Advanced (OBA) is the advanced version of the sabermetric-driven game, *On Base Baseball*. In the advanced version the outcome of every at bat is determined by the preceding outcome.

Dice

OBA uses 2 D10 dice of different colors. The dice are always rolled together. The game is built on a base 10 system with roll results ranging from 1-100. It is necessary to designate one die as the die you will read first and the other you will read second. That is a matter of personal choice for the gamer. There is no right or wrong color to designate as the first die.

How to Play

There are 6 possible rolls that need to be made for an at bat to be resolved. Not every at bat will need all 6 rolls, but the majority will. Don't worry, you'll begin to recognize when the different events occur and things will move more quickly than it does at the beginning. Let's take a look at each roll.

Roll 1

The first roll of the 2 D10 dice determines if the pitcher throws a ball or a strike. We determine this by looking on the pitcher card:

Max Fried				L
F-Str	Ball	Strike	Sta	SP
64	35	65	21	#54

Each pitcher card has a ball and strike value. If the result of Roll 1 is 1-35 then the result of the pitch is a ball and the sequence begins again. The gamer must perform Roll 1 again. If the result of Roll 1 is 36-100 then the pitch is a strike and the gamer moves onto Roll 2.

Note: Balls and strikes should be noted on the scorecard. Keep track of them because there are only a limited number of automated outs. Also, each change of the count on the batter affects

the batter's contact rating. If the pitcher throws four balls then the result is a walk for the batter. If the batter gets three strikes then he is out.

Each catcher has what is called a Frame value. It is the FRM value on each catcher card.

Def	ARM	dSB	FRM	BsR
60	0	-5	7	38

The Frame value measures how well catchers are able to help get strike calls for their pitchers. Therefore, the FRM value in *OBA* is added to or subtracted from the pitcher's ball/strike ratio. If the catcher above were catching for Max Fried, Fried's strike % would increase by 7 and his ball % would decrease by 7. He would have a better chance with this catcher to get strikes called. This leads to more auto strikeout chances and opportunities to affect the count.

If a catcher has a negative FRM value then that number would be added to the balls % and subtracted from the strike %. That catcher was worse than average at getting calls for his pitchers which will lead to more walk chances.

Roll 2

If the result of Roll 1 is a strike the gamer rolls a second time. This roll determines whether or not the batter made contact. Look at the result of roll 2 (always rolling 2 D10s) and compare it to the Contact value on the batter's card.

Freddie Freeman				L/R
Cont	FB	GB	LD	1B
77	34	38	28	#5
1B	2B	3B	HR	
17	6	0	6	
Pull	Cent	Oppo		
41	31	29		

If the result of Roll 2 is *equal to or lower than* the Cont number on the card then the result is that the player made contact. If the result of Roll 2 is *higher than* the Cont number on the batter card then the result is a strike. The batter did not make contact with a pitch that was a strike. The gamer marks the strike then goes back to the beginning and starts again with Roll 1.

The pitch count can change the contact number. Every strike on the batter *decreases* the Cont number by 5 and every ball *increases* the Cont number by 5. If the count is 1-2 then the Cont number on the card above would be 72, not 77. There is one more strike than balls so the equation is $5 + (-10) = -5$. If the count were 3-0 then the Cont number would be 92. The equation is $15 + 0 = 15$.

Why change the count? In real baseball, a hitter's ability to make contact improves or decreases depending on the count. This is mimicked in *On Base Advanced* and creates a subtle nuance in the game. It also provides a way to evaluate pitchers as you bring them in.

If the batter makes contact with the pitch then the gamer moves forward to Roll 3.

Roll 3

Roll 3 determines what type of contact the batter has made with the ball. There are three types of contact: Fly Ball, Ground Ball, and Line Drive. Each of these types of hits is self explanatory. There are 3 chances to get a hit with both fly balls and ground balls, but 4 chances to get a hit with a line drive. Generally, you want players who hit a lot of line drives. The best hitters in baseball have always hit a large amount of line drives. Because every hit type can be a line drive you want to try and get line drive hitters.

Reading the outcomes for hit types can be a little tricky at first but you'll get the hang of it. Let's look at Freeman's card again:

Freddie Freeman				L/R
	FB	GB	LD	1B
Cont	34	38	28	#5
77				
1B	2B	3B	HR	
17	6	0	6	
Pull	Cent	Oppo		
41	31	29		

We take the result of Roll 3 and compare it against the FB, GB, and LD values. These numbers represent the actual percentages for the hitter that season.

Note: The three values should add up to exactly 100. If they do not (which occasionally happens because of rounding) then adjust the LD value so that the total equals 100. Do not adjust the FB or GB values.

For Freeman's card above, if the result of Roll 3 is 1-34 then the type of contact is a fly ball. If the result of the roll is 35-72 then the outcome is a ground ball. Finally, if the result of roll 3 is 73-100 then the outcome is a line drive. It might help to envision the three numbers on a line or as a pie chart. The first 34 possibilities are fly balls. The last 28 possibilities are line drives. Every possibility between is a ground ball. Take note of this. Many of the other rolls employ the same thinking.

If the batter has gotten to Roll 3 then the at bat will resolve with more rolls. The next roll is Roll 4.

Roll 4

Roll 4 determines whether the contact that the batter made will result in a safe hit or a play made by a fielder. The gamer evaluates the result of Roll 4 with this set of numbers on the batter card:

Freddie Freeman				L/R
Cont	FB	GB	LD	1B #5
77	34	38	28	
1B	2B	3B	HR	
17	6	0	6	
Pull	Cent	Oppo		
41	31	29		

These numbers represent the percentage of at bats the player has hit each type of safe hit. The types of hits are:

1B = Single
2B = Double
3B = Triple
HR = Home Run

The tricky part here is that not all safe hit types (1B, 2B, 3B, HR) are available for all contact types (FB, GB, LD). For instance, you cannot hit a ground ball home run. Technically, you might be able to get an inside the park HR on a ground ball, but that sort of one in a million possibility does not exist in *On Base Advanced*. We stick with conventional HRs over the outfield fence.

The safe hit types for a **FB** are: **2B**, **3B**, and **HR**.

The safe hit types for a **GB** are: **1B**, **2B**, and **3B**.

The safe hit types for a **LD** are: **1B**, **2B**, **3B**, and **HR**.

Let's say that Freeman hit a FB and the result of Roll 4 was a 03. We begin with the 2B because that is the first safe hit type available for a FB. 6% of Freeman's at bats went for doubles, so a roll of 1-6 would give him a double. He had no triples so that is not a possibility. Therefore, the next possibility would be a HR, which he hit in 6% of his at bats for that season. In total he has a 12% chance to get a hit on a fly ball. 1-6 is a 2B, 7-12 is a HR. For our example he hit a 2B.

If the result of Roll 4 was a 76 then Freeman would fly out because that number is higher than his 1-12 possibility for a hit. Anything higher than 12 would be an out if the hit type was a fly ball. The gamer can then move on to roll 5 and determine where the double was hit or simply write down "2B" on the scorecard and move to the next batter.

If the type of contact was a GB, then the gamer starts at the value for 1B. Our initial roll for Roll 4 was 03. Therefore, if the contact type was a GB, then 03 would be within the range for a 1B. For Freeman, he has a possibility for a single on a 1-17 roll and a 2B on an 18-23 roll. He has no triples so that is not a possibility with him. If the result of roll 4 was higher than 23 then the outcome would be a ground ball out.

For a line drive, all safe hit types are in play. For Freeman, a roll of 1-17 is a 1B, 18-23 is a 2B, and 24-29 is a HR. Any line drive higher than a 29 is an out.

After determining whether the batter is safe or out, we must find out where the ball was hit to. That leads us to Roll 5.

Roll 5

As mentioned, the result of Roll 5 will help us to determine what part of the field the ball was hit to. Each batter has tendencies to pull the ball, hit the ball up the middle, or hit to the opposite field. Those percentages are represented in the last set of numbers in the gray box.

Freddie Freeman				L/R
Cont	FB	GB	LD	1B
77	34	38	28	#5
1B	2B	3B	HR	
17	6	0	6	
Pull	Cent	Oppo		
41	31	29		

Freeman pulled the ball's he made contact on 41% of the time this season. He hit it up the middle 31% of the time, and hit to the opposite field 29% of the time. Recognize that these directions are relative to the hitter. For Freeman, pulling the ball is to hit it to right field. For a right-handed batter pulling the ball is hitting it to left field.

Just like figuring out the contact type (FB, GB, LD) we need to employ the visual of a pie chart. For Freeman, if the result of Roll 5 is 1-41 then the ball is pulled (right field for this batter). If the result of Roll 5 is 42-72 then the ball is hit up the middle. If the result of Roll 5 is 73-100 then the ball is hit to the opposite field (left field in his case).

Note: These three numbers should add up to 100. If they do not (as is the case with Freddie Freeman's card above) then adjust the Oppo value so that the three numbers equal 100. In this case, we would adjust his Oppo value to 28.

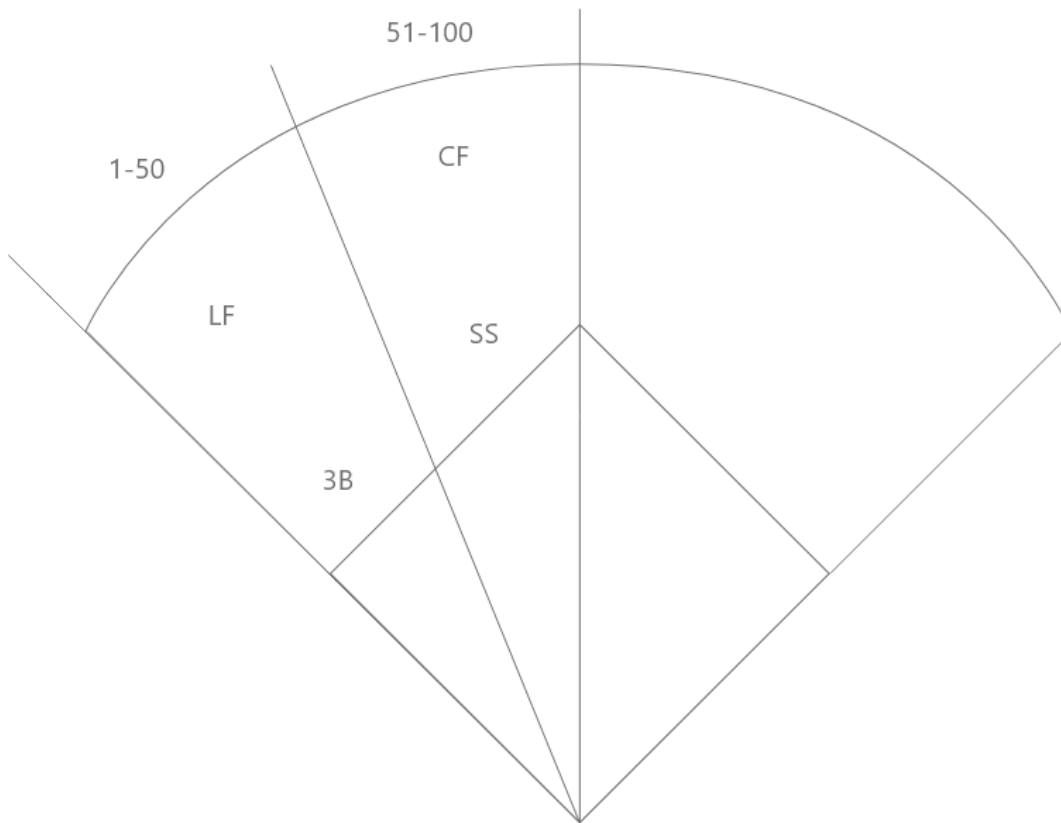
Once the direction of the hit is settled then we move on to the final roll, Roll 6, to determine who made the play and if there is an error check.

Roll 6

The final roll of the at bat is Roll 6. It will let us know which player made the play, where on the field the ball was caught, and if there is a need for an error check.

Each side of the baseball field is divided into two sections. Here is the field divided for a pull hit to left field (or an oppo hit to left field).

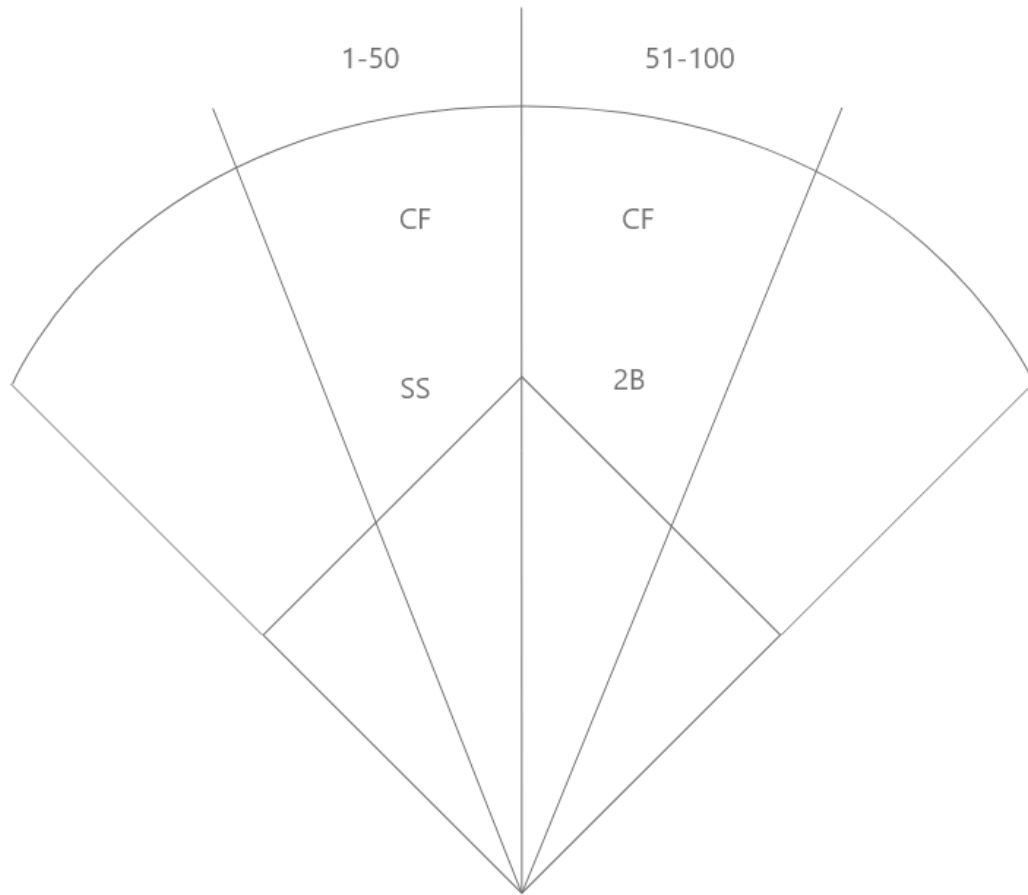
Pulled to LF
Oppo to LF



It might be best to explain this with an example. Let's say our batter, Freeman hits an opposite field fly ball. We would consult this chart to see which player makes the play. The result of our Roll 6 is a 48. For a fly ball, only the outfielders are available to make the play. So a roll of 48 means that the left fielder makes the out. You can see that a roll of 1-50 is in the zone of the left fielder. A roll of 51-100 is in the zone for the center fielder to make the play in left-center field.

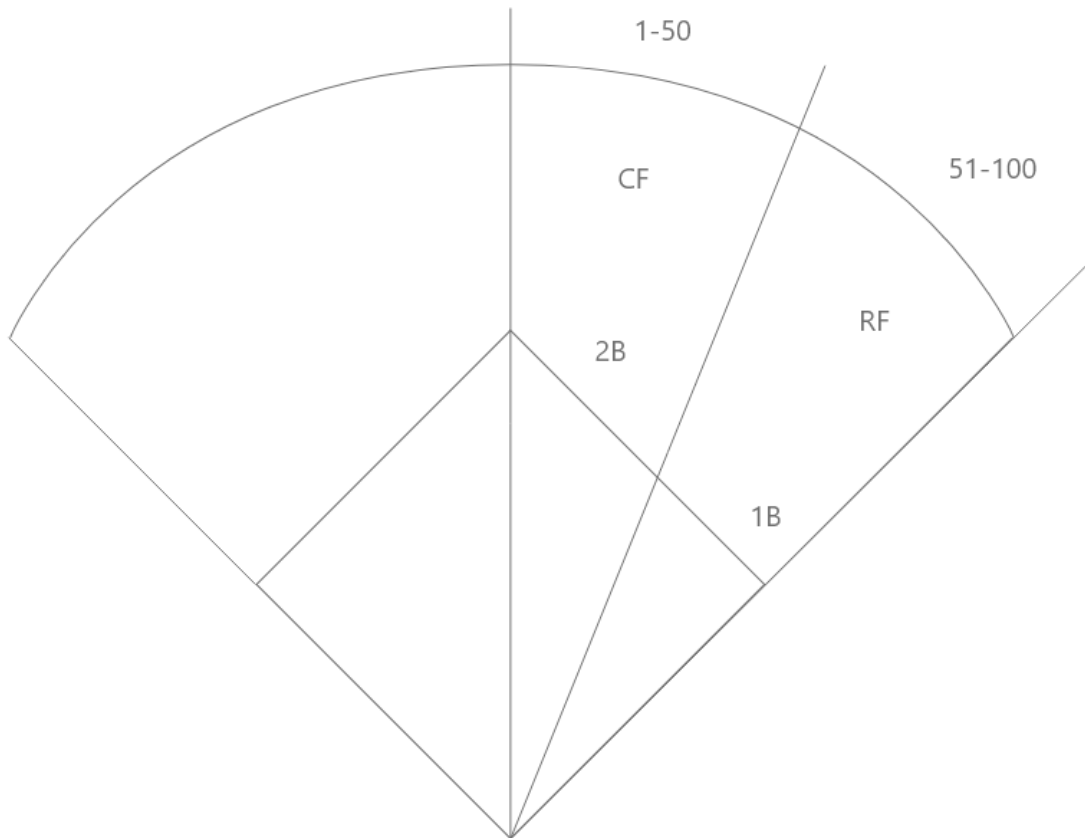
Let's take a look at a contact play up the middle.

Hit to CF



In this example, Freeman hits a ground ball out up the middle. The result of Roll 6 is a 73. The gamer consults this diagram for hits up the middle and looks to the two infielders, as they are the only ones who can make a play on a ground ball out. For a roll of 1-50 the shortstop will make the play. For a roll of 51-100 the second baseman will make the play. Our roll is a 73, so the second baseman makes the play at first.

Pulled to RF
Oppo to RF



Our final example is Freeman hitting a line drive pulled to right field. The result of our Roll 6 is a 12. For line drives, all four position players are eligible to make the play. So we need to figure two different dimensions. First, we'll check to see with side of the field the play was made on. You're already familiar with this. Our roll of a 12 means that the line drive is hit to the zone with the CF and 2B in it. But was it a liner to second or a liner to center field? To find out the depth of the hit we look at the second number of our roll. For Roll 6 it was a 2. If the second number is 1-5 then the play is made by the infielder. If the number is a 6-10 then the play is made by the outfielder. For our example the second baseman makes the play on the liner and Freeman is out.

Errors are a part of baseball and we have a way to check for errors that is simple and easy to remember. If you roll a double on Roll 6 then that will be an error check on the appropriate

fielder. In our previous example we rolled a 12. But if we had rolled a 11 instead, we would have done an error check on the second baseman.

Def	ARM	dSB	FRM	BsR
32	0	0	0	50

Each player has a Defense rating. This is a sabermetric value known as Fielding Runs Above Average. A value of 50 is an average defender at the player's position. If a player's value is above 50 he is a better defender than the average at his position and if it is lower then the player is a worse defender than the average defender at his position. Here, we see that this player's rating is 32.

To check for an error, simply roll 2 D10s and compare them with the defender's Def value. For our example, the error check roll is a 62. The second baseman in this example makes an error. If the roll had been 1-32 then he would have made the play. Anything greater than 32 is an error for this fielder.

Once all 6 rolls have been resolved the at bat is resolved. If there are three outs then the teams change sides. If not then the next batter begins his at bat with Roll 1.

Baserunning

Stealing Bases

The stolen base mechanism is fairly unsophisticated in *On Base Advanced*. To steal a base, the gamer must declare his intention to steal and roll 2 D10s. The gamer will compare the roll result with the BsR value on the batter card:

Def	ARM	dSB	FRM	BsR
32	0	0	0	50

The BsR value is a baserunning metric created by Fangraphs that takes into account multiple aspects of baserunning and stealing and condenses that down to one number. The number is called Baserunning Runs Above Average. League average is 50. Any number higher than that means the player is a better than average baserunner. Anything below means he is a below-average baserunner. Our example runner here is an average baserunner.

To steal with this player, roll 2 D10s and compare the number to this BsR value. If the roll result is *lower than* the BsR value then the player successfully steals the base. If it is *higher than* the BsR value then the batter is out.

Two other values have an effect on the baserunner's ability to steal bases. The first is the catcher's dSB value. This represents how well the catcher controls the running game, including figuring in caught stealing. To use this number you will add or subtract it from the baserunner's BsR value.

Def	ARM	dSB	FRM	BsR
60	0	-5	7	38

This catcher's dSB rating is -5, which means he is worse than average at controlling the running game. Therefore, 5 is *added to* the baserunner's BsR value. A catcher who does not control the running game well should give the baserunner an advantage. If the dSB had been +5 then 5 would be *subtracted from* the baserunner's BsR value. This catcher controls the running game better than the average catcher so the baserunner should have less of a chance to steal the base.

Pitchers also have an opportunity to affect the running game. If a pitcher has a dSB rating that is not equal to 0 then that should also be added to or subtracted from the baserunner's BsR. These additions and subtractions should happen before the roll is made to determine the stolen base. The final BsR value is one that has been adjusted according to the pitcher's and catcher's dSB ratings.

Extra Bases and Tagging Up

Like stolen bases, taking extra bases and tagging up is straightforward. The gamer must declare his intention to take an extra base or tag up. The gamer will then roll 2 D10s.

There are two metrics to look at with regard to tagging and up and extra bases: the baserunner's BsR value and the outfielder's ARM value. The gamer will compare the roll result against the *higher* value. So if the outfielder has a 60 ARM value and the baserunner has a 49 BsR value then the roll should be compared to the ARM value, not the BsR. For this example, if the roll result is 1-60 then the baserunner is out. If the value is 61-100 then the batter is safe.

In another example, the baserunner has a BsR value of 72 and the outfielder has an ARM value of 51. The roll result will then be compared with the baserunner's BsR value since it is the higher value. If the roll result is 1-72 then the baserunner is safe. If it is 73-100 then the baserunner is out.

Double Plays

Double plays are not automatic in *On Base Advanced*. We have the BsR value that will help gamers turn double plays. When there is a double play situation (a force out) and a ground ball is hit to an infielder then the first force out can be assumed while the batter BsR must be rolled against to see if he beats out the throw to first base.

For example, if a ground ball has been hit to shortstop with a runner on first base then the out at second base can be assumed. At the very least the play will result in a 6-4 fielder's choice. However, we can try for a double play by rolling the 2 D10s again and comparing them with the batter's BsR value. If the roll result is *less than or equal to* the batter's BsR value then the runner is safe. If the roll result is *greater than* the batter's BsR value then the runner is out. The faster the batter the more difficult it will be to double him up.

Pitcher Stamina

There are multiple ways to handle pitcher stamina. Each pitcher card has a Stamina value.

F-Str	Ball	Strike	Sta
64	35	65	21

The value there is the pitcher's average batters faced for that season. It is figured as Total Batters Faced / Games. All starting pitchers should have a stamina value of at least 20.

If a pitcher begins an inning below his stamina value but goes over his stamina rating in that inning he can continue to pitch that inning without being pulled. He must be replaced if he will start the next inning *over* his stamina value.

Gamer Feedback

On Base Advanced is a brand new game. There are no doubt holes and things that can be improved in the game play. Please provide feedback about the game so those holes can be closed up and it can be made more complete.

You can email the game designer at:
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