On Base Gameplay

If you'd like to wath a full game check out these videos on YouTube that show the different game pieces and a full game between the 2019 Braves and 2019 Dodgers:

On Base Full Game, Video 1
On Base Full Game, Video 2

Needed to play

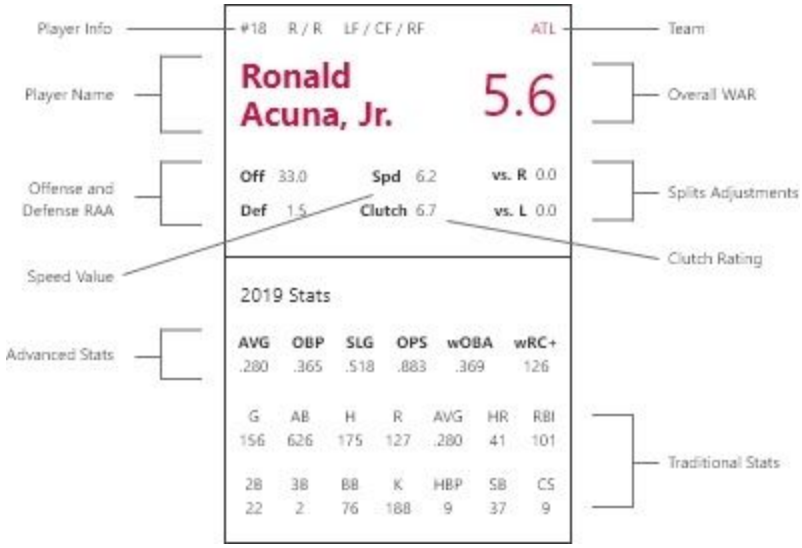
- On Base player cards
- Dice roller application
- Game engine / Outcomes chart

Player Cards

Batter Cards

Each team comes with 15 position player cards and one quick setup card. The quick setup card shows the player at each position with the most games played for the given season. You can consider this the starting lineup for the team and quickly set your lineup. The quick setup card shows the batter's overall WAR and splits against right- and left-handed pitching (used in the advanced gameplay).

Here is a look at the position player card and its values:



Let's unpack each of these sections of the position player card a little more.

Player Info
The player information includes the player's jersey number, handedness, and positions played that season. The handedness of the player always follows: Bats/Throws. If a player has a generic *IF/OF* he can play all the infield and outfield positions except catcher. If the player logged innings as a catcher that will be noted specifically.

Team
The team is self explanatory. It is possible that if a player played for multiple teams he will be included in multiple roster sets.

Player Name
The player's name.

Overall WAR
The overall WAR is the player's WAR (Wins Above Replacement) for that season. WAR is a single number that takes into account the player's full contribution to the team in wins. It answers the question, How many wins better is this player than a bench/AAAA player? In the basic game WAR is all you need to determine the outcome of the roll.

Splits Adjustments
If you choose to make adjustments to the player's WAR value based on how he performed against right- and left-handed pitching that season. Simply add or subtract the adjustment from the overall WAR value when facing the appropriately handed pitcher.

Off and Def
These two numbers represent the player's offensive and defensive runs above average (RAA). Essentially, how many runs better than the league average was the player on offense and

defense. A value of zero is league average. This can be used in place of WAR to get a better sense of the player's value only on offense. If you want to include defense into the game then Def is the number you would use to determine team or individual outcomes.

Speed
The Spd value is a simplified (and a little outdated) value that shows how fast the player is on the basepaths. This value is used for baserunning plays (steals, tagging up, and taking extra bases).

Clutch
The clutch value measures the player's performance in clutch situations. The player's actual clutch value has already been added or subtracted from the overall WAR. Therefore, if you are playing with clutch situations, simply use this number as the adjusted WAR for the situation. To use this value with splits simply adjust the Clutch value with the appropriate split adjustment.

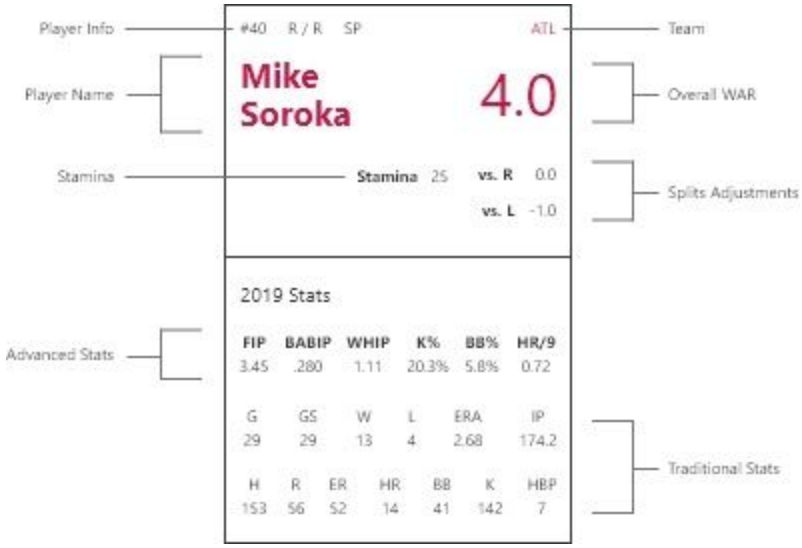
Advanced Stats
The On Base game engine is based on advance statistics. This line of stats might be a little foreign at first but they represent variations on the traditional stats we know. They attempt to figure out how valuable is the individual player by removing team or outside variables (such as era or ballpark). You can read more on the Fangraphs glossary section: https://library.fangraphs.com/getting-started/.

Traditional Stats
These are the player's traditional statistics, including the counter statistics that make up the more advanced percentages. Advanced statistics are based

Pitcher Cards

Pitcher cards are similar but slightly different than position player cards. Because advanced statistics uses the DIPS (Defense Independent Pitching Statistics) for calculating player value, many of the traditional statistics used to evaluate pitchers have been discarded.

Here is a look at the pitcher card and its values:



Let's look at the different values on the pitcher card.

Player Info
The only difference for the pitcher card is regarding positions. Pitchers are starters (SP), relievers (RP), or closers (CL). Some pitchers are hybrid starter/relievers. If he has started a significant number off games in the season a player could qualify as a hybrid pitcher. There is no hard and fast rule for using relief pitchers (just as in real life). Relievers can close games and closers can come in in non-save situations.

Stamina
Each pitcher has a stamina value. This is based on the average batters faced over the course of the season. If a player is a hybrid pitcher there will be a starter and reliever stamina.

Splits Adjustments
Like the position player cards, pitchers also have adjustments based on splits. To use these splits adjustments add or subtract the adjustment value to the overall WAR value when facing right- or left-handed batters.

Advanced Stats
The advanced stats for pitchers is heavily influenced by the DIPS (Defense Independent Pitching Statistics) model. Emphasis is on FIP (Fielding Independent Pitching), BABIP (Batting Average on Balls in Play), strikeout percentage, and walk percentage. These stats more accurately reflect a pitcher's individual contribution to the game.

Getting Started

There are only a few basic elements that you'll need to play a game using the On Base engine:

- On Base game engine chart
- Dice roller application
- Scorecard

The best way to play the game is to use our dice roller application to roll all the dice for the game. You can access the app free online: https://brianhaferkamp.github.io/onbase/dice/

Lineups

If you have downloaded sets of player cards you can use them to set up a lineup for each team. The quick setup cards for hitters and pitchers can help you quickly identify which players were the "starters" for that season--those who had the most at-bats or innings pitched at each position.

Determining Control of the At-Bat

We've made determining control of each at bat very easy. Using the dice roller application, look first at the blue die. If the value of the die is 1-3 then the batter controls the at-bat. If the value is 4-6 then the pitcher controls the at-bat. You will use this to look at either the batter or pitcher side of the game outcomes chart.

On Base Game Outcomes Chart

The heart of On Base is the game chart that lists the outcomes of each at-bat. The chart is really a matrix of values that need to be cross-referenced to find the result of each at-bat. The player will combine the values from the 2 white d6 dice. Starting with the lowest number first, read the numbers separately (do not find the sum of the values). For example, if the lowest die value is 1 and the highest die is 6 the number should be read as 16, not 7. Look on the side of the player who controls the at-bat (batter or pitcher), then go to the 16 row on the chart. You'll then cross-reference this row with the controlling player's WAR range. The result at this intersection is the play result. All hitter-pitcher outcomes can be found on the game chart with only one roll. See this example:

The Roll:

Blue die = 2
White dice = 5, 1
D9 = 7

The batter has a WAR value of 4.6 and controls the at bat. Combine the first 2 white d6s to make 15 (the smaller number comes first when you combine them). The number from the d9 will not come into play for this example. Here is the outcome on the chart:

	BATTERS (1-3)				
	WAR Range				
	0-2	2-4	4-6	6+	0-2
11	Triple	Double Play * / Strikeout	Ground Out †	Strikeout	Line Out
12	Ground Out	Ground Out	Strikeout	Strikeout	Triple
13	Ground Out	Ground Out	Home Run	Single	Ground Out
14	Line Out	Line Out	Ground Out	Line Out	Ground Out
15	Fly Out	Single	Single	Double	Single
16	Fly Out, Runners Advance	Fly Out, Runners Advance	HBP 1 / Walk 2-9	Fly Out, Runners Advance	Fly Out, Runners A
22	Single	Double	Double	Single	Double
23	Double Play * / Strikeout	Single	Single	Ground Out †	Single
24	Strikeout	Strikeout	Single	Double Play ** / Strikeout	Strikeout
25	Fly Out	Walk	Walk	Walk	Walk
26	Ground Out, Runners Advance	Ground Out, Runners Advance	Ground Out, Runners Advance	Ground Out, Runners Advance	Ground Out, Runners
33	Strikeout	Foul Out	Triple	Triple	Strikeout
34	Walk	Fly Out	Foul Out	Fly Out	Fly Out †
35	Fly Out †	Fly Out †	Fly Out	HBP 1 / Walk 2-9	Home Run
36	Ground Out	Fly Out	Fly Out	Fly Out	Double

Go to the batter's side of the chart then locate the roll (15) down the left side. The batter's WAR value is 4.6, which is between 4 and 6, so you would cross-reference the roll with the third column. The result of the at-bat is a single.

"What about the d9?," you might ask. That die comes into play when outs are made. The d9 controls which fielder makes the play. Fielding rules are covered later in this guide. Feel free to also bring your own rules and preferences to the game.

Keeping Score

There are many ways to score a game.

You can use the On Base scorecard that features both teams on one page and areas to input On Base-specific values like WAR (and WAR splits), Spd, and Stamina. You can also download any good scorecards online. We recommend this scorecard freely available on Wikipedia.

If you're playing with splits adjustments it can be helpful to note those directly on the scorecard. The same goes for the player's stamina and speed ratings. It's sometimes easier to have those at hand right on the scorecard.

Basic Gameplay

WAR

The On Base game engine is based primarily on each player's WAR value to determine the outcome of each play. WAR is a complex calculation that takes into account everything a player does on the field and combines it into one number.

What does that number mean? WAR is how many wins better a player is than a bench player or minor leaguer at that position. It seeks to answer the question, "If this player got injured and their team had to replace them with a freely available minor leaguer or a AAAA player from their bench, how much value would the team be losing?"

For example, a player with a WAR value of 2.0 accounts for 2 more runs than an end of the bench player at the same position. Each win is roughly 10 runs. So in our example the player with a WAR of 2.0 would create 20 more runs than a player on the end of the bench (or minor league player).

For position players and starting pitchers, here is a good rule-of-thumb chart (via Fangraphs.com):

Scrub	0-1 WAR
Role Player	1-2 WAR
Solid Starter	2-3 WAR
Good Player	3-4 WAR
All-Star	4-5 WAR
Superstar	5-6 WAR
MVP	6+ WAR

Fielding

For all fielding, refer to the d9 value on each roll.

*Ground Out*s

If the rolled value is 1-6, the play is made by the fielder whose number is on the die. If the value is 7-9 then the play defaults to a ground out to the highest numbered infielder (shortstop).

*Fly Out*s

1-3 is a fly to LF
4-6 is a fly to CF
7-9 is a fly to RF

*Line Out*s

Line out to any fielder. If the number is 2, change to a pop out to C (2).

*Foul Out*s

No fielder assigned to a foul out

Strikeouts

If the outcome is a strikeout check the d9 to see what type of strikeout.

1-6 Swinging
7-9 Looking

Walks

If the outcome is a walk check the d9 to see if the hitter was hit by a pitch.

1 Hit By Pitch
2-9 Walk

The manager can call for an intentional walk without rolling for an outcome.

Baserunning

With less than 2 outs, baserunners move up as many bases as the batter on a hit. For example, with less than two outs and a runner on second base, a single will move the runner at second base to third base. You can try to take an extra base using the rules below but the runner does not automatically score from second base on a single with less than 2 outs.

If there are 2 outs in an inning, baserunners move up 1 extra base on a base hit. In our previous scenario, there are now 2 outs and a runner on second base. If the batter hits a single then the runner from second will score with 2 outs.

There is a lot of freedom in the game to come up with your own baserunning mechanisms. The batter's Spd value is an easy number for determining baserunning and steals. The highest player Spd values from year to year are 8.0 or less, which works well with the 1 d9 to determine out or safe on baserunning plays.

Feel free to make your own baserunning rules. For example, any runner on base with a Spd value of 7+ automatically takes an extra base regardless outs or situation. Or you can use the extra base rules below to attempt an extra base.

Steals

To steal the manager must call it out before the play and roll the d9 to determine the steal result. The batter's Spd value is the value evaluated against the dice roll. If the roll result is higher than the runner's Spd value then the runner is caught stealing. If the roll result is lower than the runner's Spd value then the steal is successful.

To steal third subtract 1.0 from the player's Spd value then roll the d9. So if the runner has a Spd value of 7.0 the value would change to 6.0. Then roll the d9 and evaluate the steal opportunity as normal against the dice roll.

To steal home subtract 1.0 from the player's Spd value then roll the d9. If you want to steal home with player whose Spd value is 7.0 the value would change to 5.0. Then roll the d9 and evaluate the steal opportunity as normal against the dice roll.

To attempt a double steal use the Spd value of the slowest runner to evaluate the d9 roll. If the play results in an out, the lead runner will be considered out on the play.

Tagging Up

With runners on and less than 2 out the manager can ask the runner(s) to tag up on a fly ball. Call out the intention to tag and which runners will tag. Then roll the d9. The batter's Spd value is the value evaluated against the dice roll. If the roll result is higher than the runner's Spd value

then the runner is out. If the roll result is lower than the runner's Spd value then the tag is successful.

To have multiple runners tag, use the Spd value of the slowest runner to evaluate the d9 roll. If the play results in an out, the lead runner will be considered out on the play.

Extra base

After a hit a runner on base can attempt to take an extra base. Call out the intention to take an extra base and which runner will make the attempt. Then roll the d9. The batter's Spd value is the value evaluated against the dice roll. If the roll result is higher than the runner's Spd value then the runner is out. If the roll result is lower than the runner's Spd value then the batter is safe and is awarded the extra base.

To have multiple runners attempt to take an extra base, use the Spd value of the slowest runner to evaluate the d9 roll. If the play results in an out, the lead runner will be considered out on the play.

Pitcher Fatigue

The Stamina rating of each pitcher is based on the average number of batters faced in the year printed on the card. If you want to include pitcher fatigue into the game allow the pitcher to finish the inning in which he gets to, or passes, his stamina rating. The next inning subtract 1.0 from the pitcher's WAR (including splits if you're playing with them). For each inning past the pitcher's Stamina rating subtract 1.0 from all WAR values (the overall value and the splits values).

For example, suppose the pitcher's Stamina is 24 and he reaches the 24th batter faced in the 6th inning. If you elect to send him out for the 7th inning you would subtract 1.0 from his WAR values and use those values until the inning is over or the pitcher is replaced with a new pitcher. If you send the same pitcher out for the 8th inning, you would subtract 2.0 from his initial WAR values because he is now 2 innings past his stamina rating.

Watch a Game

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