S.I. Baseball is a quick and easy simulation of the grand old American game of baseball. It is assumed that the person(s) playing this game already understand the mechanics and rules of baseball. The sequence of play, quite naturally, follows the flow of a baseball game as if you were sitting in the stands or on your sofa watching a game. The major difference is that you have control over all managerial decisions.

These rules are presented in such a way that you can add as much detail as you like. The basic instructions are shown just as the previous paragraph was printed, not indented at all.

> Some rules are optional but add more realism without significant difficulty. Such rules are indented a bit, as is the case with this sentence. Incorporating these rules into your games should be quite easy after only a game or two (or, if you're familiar with tabletop sports games, you could probably use these rules from the very beginning).
>
> > *The much more advanced rules, which will add some length to your games, but will also create the utmost realism are indented even further and italicized, as is the case with this segment. Most players will probably not use these enhancements to the basic game, but they are provided for the truly fanatical baseball recreator.*

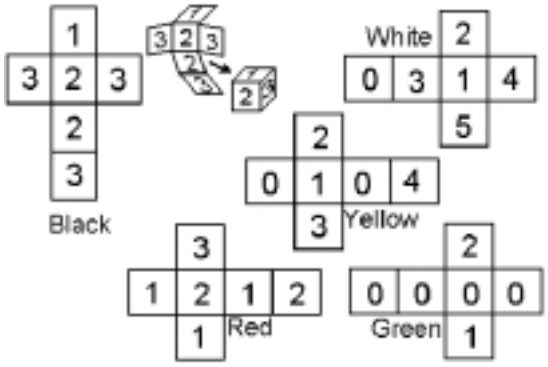
When reading through these rules, concentrate on the basic rules first, and keep in mind that the indented sections are purely optional.

Dice

Whenever the word "dice" is mentioned in these rules, the reference is to the three "10-39" dice. These dice are black, white, and yellow (one of each) and produce results between 10 and 39, hence the nickname. To read these dice, add the white and yellow dice together and add to that ten times the result of the black die. In other words, the black die represents the tens digit and the white die plus the yellow die represent the ones digit. These "10-39" dice are the heart of the S.I. Baseball system. The example (see right) would be read as "27."

> **Variant**: Some of the optional variants will refer to the "defensive dice." The defensive dice are red and green (one of each). Whenever such a roll is called for, you simply roll the red die and the green die and add their results together, producing a number between 1 and 5.

For those who do not own and do not wish to purchase sets of dice, the image at right demonstrates how to create your own dice (for all 5 dice).



Creating Lineups

Each manager should choose a team and then, just like their Big League managing counterpart, must create a lineup for the game. Each player listed on the team chart is capable of playing one or more positions, as noted under their name. For those who choose to play with the designated hitter, any player (including pitchers) may fill in at that position. Some players may have no position listed except "DH," meaning that they are only capable of being a designated hitter.

Managers should log their lineup for their complete team, noting the defensive rating for each player at his chosen position. Each player, has defensive ratings associated with his positions. In most cases, it will be a positive number or a negative number (e.g. "2B +5"). In some cases, the player has no defensive rating (e.g. "3B"). In such cases, the defensive rating for that player at that position is zero (0). After noting the defensive ratings for each player at each position (make sure to add the pitcher's defensive rating), sum these values to determine the team's **total defensive rating**. This grand total indicates the fielders' combined ability to generate more outs than an average baseball team. High numbers don't necessarily mean fewer errors, but higher numbers will generate more "exceptional plays" where a batter is robbed of a potential hit.

Consult the **team defensive rating chart** for each team to find the additional "out numbers" which are available to this team due to their defensive totals. For instance, if the total defensive rating is +42, the team defensive rating chart indicates that dice rolls 12 and 14 will generate extra outs for the team. This is a good rating. In the rare event of a negative number, the dice rolls noted will generate extra hits rather than extra outs, due to the fielders' poor range.

After the preliminaries are out of the way and the lineups are noted and defenses calculated, it's time for the first pitch. Do remember, though, that whenever a player is replaced during the course of the game, the team defensive total will likely change, which could mean that the defensive dice combinations change. It's a simple matter, but keep aware of this potential.

Flow of the Game

The flow of the game mimics the flow of "real" baseball. Each half inning, the defensive manager's pitcher will "throw pitches" to the offensive manager's batters, who will often have the opportunity to swing away at the pitches. This continues, per the rules of baseball, until each team has completed 9 innings.

Pitcher Takes the Mound

Optional Rule: Whenever a pitcher takes the mound in an inning, he must roll the dice to determine his current level of stamina. This applies to starting pitchers on their first inning of pitching and every subsequent inning. It also applies to relief pitchers when they come into a game or when they start a subsequent inning. The rule is rigid—before pitching to any batter in any inning, a pitcher must roll to check his stamina.

Each pitcher has a **"Tire"** rating on his chart. To see if a "fresh" pitcher is feeling a little bit tired, roll the dice. If the resulting roll is **less than** the pitcher's "Tire" rating, then the pitcher is fatigued for this inning. If the resulting roll is **greater than or equal to** the pitcher's "Tire" rating, the pitcher is fine and uses his chart per normal rules.

When a pitcher is fatigued, he pitches as usual, however, all results of "G" or "F" are treated as though the result had been "swing" (this will make more sense when you read about pitchers' charts). Also, a fatigued pitcher who rolls a result of "SO" will have that roll treated as though the result had been "K." Finally, a fatigued pitcher who rolls a result of "D" which does not result in an automatic out (exceptional fielding play) will have that result interpreted as "1+". Here's a list of how each result can be changed for fatigued pitchers:

Original Result	Fatigued Result
G	swing
F	swing
SO	K
D (not out)	1+

A pitcher who was fatigued in his prior inning sometimes has a chance to "regain his stuff" at the outset of his next inning on the mound. In other words, a pitcher will always throw the dice exactly once prior to facing his first batter each inning—either to see if he becomes fatigued or if he regains his composure. If an already-tired pitcher comes to the mound, he rolls the dice and compares them not to his "Tire" rating, but to his **"2nd Wind"** rating. If the dice roll is **less than** his "2nd Wind" rating, then he is back to normal, with no penalties. If the roll is **greater than or equal to** his "2nd Wind" result, then he continues this inning as a fatigued pitcher, suffering no further degredation. A pitcher with a "2nd Wind" rating of 10 has no chance to roll less than his rating and will not regain his stamina (unless some future optional rules are used, which will add to his "2nd Wind" rating). A pitcher with a "2nd Wind" rating of "-" can never regain his stuff.

So, the first thing a pitcher normally does when he reaches the mound is to throw a pitch. Of course, this being baseball, he could intentionally walk the batter (by simply stating so), but usually he pitches. To pitch to the batter, first ask the offensive manager if he wishes to invoke any special situation strategies (bunt or steal a base or pinch hit). If the manager at-bat indicates that he's ready, the pitcher's manager rolls the dice and consults the pitcher's "Pitching Chart." Below are all possible results of the pitcher's dice roll:

Chart Reads	Result
blank	Batter's manager rolls on batter's chart to determine outcome of play
BB	Batter walks
H	Batter is hit by a pitch
1+	Batter is credited with a base hit, runners on 2nd and 3rd score
G	Batter grounds out, consult Ground Out-Force table
F	Batter pops out, all runners hold
SO	Batter strikes out
X	Roll again on "Pitcher X Chart." If PB, WP, or injury, pitcher rolls again (after X result)
K	Batter rolls, if result is not a base hit of any type, treat as a Strike Out
(HR)	Batter rolls, if result is a home run, treat as a result of "1+" instead
HR	Batter rolls, if result is any base hit, treat as a home run instead
D	Consult defensive rating; if this roll is a "defensive out," treat as G, if this roll is a "defensive hit," treat as 1+, otherwise batter swings

Optional Rule: The HR and (HR) results are actually non-standard rules, but they are so easily incorporated and allow for extra depts of each pitcher's capabilities that they are used almost universally.

A color coding system is in place for all pitchers' charts. Any red or blue result (G, F, and SO) is an automatic out. Yellow results usually indicate problems for the pitcher (most often, a walk). And green results almost always mean that the batter will roll his dice (the lone exception being a result of "D", which may indicate an automatic out, but usually means the batter swings away). Obviously, this color coding system does not apply to black-and-white charts.

Batter takes his cut

Most often, the result of a pitcher's roll will lead to the batter rolling dice and consulting his batting chart. All position players (any batters other than pitchers) have two separate batting charts. One is listed as "vR" (used when facing right-handed pitchers) and the other as "vL" (used when facing left-handed pitchers). When a batter swings, the manager simply rolls the dice and consults the appropriate batting chart for the hitter. There are many possible results, but they too are color coded for easy of reference. Red and blue results are outs. Yellow results are free passes to first base (walks or hit by pitch). White results are fielding errors. And green results

are base hits.

Chart Reads	Result
1	Single, baserunners advance one base
1*	Single, baserunners advance two bases
1+	Single, runners on 2nd and 3rd score; runner on 1st advances to 2nd
(1+)	Same as 1+, plus runner originally on 1st can try for 3rd on Managers Decision Chart
(1)	Same as 1, plus baserunners (not batter) may attempt an extra base on Managers Decision Chart
2	Double, runners advance two bases
2*	Double, all runners score
(2)	Same as 2, plus runner originally on 1st can attempt to come home on Managers Decision Chart
3	Triple, all runners score
HR	Home Run
G	Ground out-Force; consult Ground-out Force table
G*	Ground out, batter out at first, other runners advance 1 base
DP	If runner(s) are forced, double play possibility; consult Double Play table
F	Batter pops out
(F)	Batter flies out, runner on 3rd may try for home on Managers Decision Chart
SF	Batter flies out, runner on 3rd scores
(SF)	Same as SF, plus other runner(s) may attempt to 1 base via Managers Decision Chart
SO	Strike Out, all runners hold
H	Batter hit by pitch, advances to first base
BB	Batter walks, advances to first base
E	Batter save on a one-base error

Note that several of these results could be modified by the pitcher's roll (e.g. when the pitcher's result is "K", "HR", or "(HR))

This back-and-forth action (pitcher rolls, batter rolls) continues per the normal rules of baseball.

Special Situations

During the course of a game, special instances arise wich require the managers' intervention. When these issues come to be, a special chart is referenced. Each situation is noted below.

Bunting

When the offensive manager wishes to bunt, he simply states so and rolls the dice (and the pitcher **does not** roll dice). If a runner is on third base, the offensive manager must refer to the **Suicide Squeeze** chart. Otherwise, the offensive manager refers to the **Safety Squeeze** chart. In both cases, the manager refers to the particular section for the current batter's bunting ability. All batters are rated as either good bunters ("A") or average bunters ("B"). So, after determining the batter's rating (A or B), the offensive manager simply rolls the dice and refers to the appropriate chart to determine the result of the bunt.

Stealing Bases

When the offensive manager wishes to steal a base (or bases), he states his intentions (noting all runners who will attempt to steal). The defensive manager may either concede the base(s) or attempt to throw out one of the runners. If an attempt to throw out the runner is made, the offensive manager will roll the dice. Each base has a separate chart for stealing—**Steal of Second Base** chart, **Steal of Third Base** chart, and **Steal of Home** chart. Each of these charts is further divided into six separate divisions, based on the runner's speed. Each runner is rated from 0 (slowest) to 5 (fastest). The appropriate chart and running rating is consulted, along with the dice roll, to determine the outcome of the attempted stolen base. Note that when the **runner is attempting to steal second or third** base and the defensive **catcher has a defensive rating which includes the letter "I"**, the runner's rating is reduced by 1 level due to the excellent throwing arm of the catcher, but the net running rating cannot fall below 0.

> ***Optional Rule****: Some managers feel that stealing bases is too simple in* SI Baseball*, so this option can be used to simulate "getting a good jump." After determining which runner will attempt to steal, roll the white die (the one with one face each showing the digits 0 through 5). If the roll is* ***greater than*** *the runner's unaltered running rating, then reduce his rating by one level. Then, if the catcher is rated as an "I" defensively, the rating will be reduced yet again.*

Advancing an extra base via Manager's Decision Chart

Many chart results will include an option to have a baserunner or baserunners advance an extra base via use of the **Manager's Decision Chart**. Such results are typically bracketed by parentheses [e.g. "(1)", "(1+)", "(2)", "(F)", "(SF)"]. In these cases, the offensive manager decides which runner(s) will attempt to gain an extra base, followed by the defensive manager deciding which, if any, base to throw to in an attempt to get an extra out. The Managers Decision Chart is very similar to a base stealing chart, as it is broken down by the baserunner's running rating. There are no adjustments to this rating, as there are no "I" ratings for outfielders' throwing arms.

Threatening Weather and Rain

Optional Rule: If you would enjoy the random element of weather (and are playing in an open-air stadium), roll the dice before

starting the game. A result of 11 means the game is rained out. A result of 31 means that you should roll the dice each half-inning to see if the skies open up. If you roll an 11 on any of the half-inning checks, the rains have come, ending the game.

Relief Pitchers and Pinch Hitters

Relief pitchers are brought into the game per the normal rules of baseball. Note, though, that a relief pitcher must make a "Tire" check roll (if using that rule) before his first pitch in the inning he enters. As is the case in major league baseball, a pitcher must face at least one batter before being removed from the game.

Further (Optional) Rules

Rules in this section are all optional, but are included to create more possibilities and realism, for those who wish to use them.

Defensive Statistics

One area where the *SI Baseball* system has been criticized is in the area of fielding. While the results of games are defensively accurate, there is no way to calculate defensive stats from the game as designed. Outs are simply outs, with no idea of what fielder makes each play.

When a play results in some sort of error, you may roll on the **Error Chart** to determine which player has booted the ball. This chart is subdivided into five sections, one each for the following error situations:

Batted Ball	Manager's Decision Chart	Steal of Second or Third
Bunts		Steal of Home

Simply roll the dice and read the result to determine which fielder made the error.

More accurate error rates*: When using the optional fielding error assignment rule (previous paragraphs), you may also wish to use this refinement of fielding errors. Some fielders simply make fewer errors than others at the same position. This is not a function of their plus-or-minus defensive rating (that's based mostly on fielding range), but is based on how frequently each fielder makes errors.*

Thus, whenever a specific player is noted as making an error, consult that player's "e rating" for that position. An example of an "e rating" would be **"e145" or "(145)"***. If the "e rating" is e12345, there is no need to check, as the fielder has made the error. Otherwise, roll the* ***defensive dice*** *and compare that result (a number from 1 to 5) with the "e rating." If the number rolled is included in the fielder's "e rating," then the error occurs. Otherwise, the error does not happen and an out is recorded instead.*

Recording fielding outs: *For those desiring complete defensive statistics on routine outs (e.g. F, G*, etc), a* ***Fielding Position Outs*** *chart is included. Whenever any type of ground out or fly out is the result of a play, roll the dice and consult the appropriate line of this chart (one line for fly outs and one for ground outs) to determine which fielder recorded the out. For instance, if the result of a play were "G," you would roll on the ground out chart. Say a 35 were rolled (result = "2B"), then the grounder was to the second baseman. Use common baseball sense to determine the result of the play (e.g. 4-3 with no one on base, 4-6 with a runner on first base).*

Batter Effects on Walks and Strike Outs

Each batter's chart includes, at the far right (or bottom of card), a ***BB number*** *and a* ***K number*** *(pitchers charts show these two numbers in small print, with the BB number listed above the K number). These numbers are used to represent how "free swinging" each batter is. The numbers for these ratings range from 10 to 40.*

When using this advanced rule, if the pitcher's chart result was "BB," the offensive manager rolls the dice to see if the batter was patient enough to take the walk. If the roll is ***less than*** *the batter's "BB number," then the walk takes place. Otherwise, the batter swings away and rolls the dice consulting his batting chart, as though the pitcher's result has been "swing." Needless to say, if the batter's "BB number" is 40, no roll is necessary, as it is impossible to roll 40 or higher. Intentional walks cannot be avoided in this manner.*

When using this rule and the pitcher's chart results in "SO," the offensive manager rolls the dice to see if the batter made contact (avoiding the strike out). This is necessary to lessen the effects of overpowering pitchers when facing very good contact hitters. If the roll is ***less than*** *the batter's "K number," the batter goes forward with his batting dice roll, as though the pitcher's chart result had been "swing." As with the "BB number," a rating of 40 means that the batter will always strike out on a pitching chart result of "SO."*

The inclusion of these two ratings will add a few dice rolls to the game, but will also more accurately reflect the walk and strike out tendancies of individual batters. It also allows a manager to determine who are his contact hitters fairly easily.

Ballpark and Time Period adjustments

Advanced Rule *For those who seek the ultimate in realism, wishing to mimic conditions of certain ballparks (e.g. Coors Field or Fenway Park) and certain eras of baseball (e.g. Dead Ball or Juiced Ball), this option allows you to alter the final results of a pitcher/batter confrontation.*

To use this optional rule, first complete the entire play as usual (pitching roll, batting roll), but do not resolve any error results at this time. After determining the "tentative" result of the play, consult the ***Ballpark/Period Charts****. These charts combine the effects of each park with the effects of several time periods of baseball's history (or, in the case of individual teams, they indicate the ballpark's effects for that single season). For instance, Coors Field in the current slugger-happy era would be more of a power hitter's paradise than would Griffith Stadium situated in the earliest days of professional baseball (suspending the fact that Griffith Stadium wasn't even built in the 1870s).*

To use this feature, check the play's "tentative" result to see if any of the following results occurred:

BB SO 1* 2* 3 HR E

If so, check the Ballpark/Period Chart to see if the result has a value for that particular result. If a dash (' - ') is shown, then the "tentative" result remains the same. If a number is present, though, then roll the dice again. If that roll is ***less than*** *the number on the chart, then the "tentative" result has been changed, as noted on the chart (BBs, 1*s, and 3s are changed to "G*," while SOs, 2*s, and HRs would be changed to "SF"; Es could change to either F or G*, as noted on the chart).*

It's not over yet. If the "tentative" result (which may have been altered by the above checks) is now either a ***G**** *or contains the term "SF" [****SF*** *or* ***(SF)****], then one final roll is necessary to see how the play is affected. Simply roll one last time on the appropriate Ballpark/Period Chart entry (either the SF section or the G* section) to find the "final" result of the play. If the roll indicates a blank result, then the "tentative" result stands. Otherwise, the value on the chart stands.*

While this may seem overly cumbersome (no denying that it's more than the basic game), it should be noted that these rolls occur fairly infrequently. Not all pitcher/batter results are even checked (only BB, SO, 1, 2*, 3, HR, E, SF, (SF), and G*) and often, there is no further check, as the chart indicates no chance of the play's result changing.*

Note, too, that the Ballpark/Period Chart also ***includes modifications to the pitcher's Tire and 2nd Wind ratings and all players' running ratings****. For instance, if the chart indicates a Tire modification of +2 and 2nd Wind modification of -5, then a pitcher with Tire/2nd Wind numbers of 15/33 would be adjusted, for this game in this ballpark and time period, to a rating of 17/28. If that chart also indicated a running rating of +2 (because the time period was prone to base stealing), then a runner with a rating of 1 would be a 3 for the duration of this game.*

This rule allows leagues to play with home field conditions factoring into the outcome. For instance, building a slugging team to compete in the dead ball era at a spacious playing field would not be such a wise managerial option. It would be better to field a team of slap-hitters.

Handicapping Teams: Some charts for SI Baseball include team handicap ratings (usually a rating ranging from -5 to +10, though some outside those ranges do exist). This is a useful tool for noting teams of disperate calliber. In tournament play, it is often desirable to use these figures to equalize the teams, though use of these ratings is not suggested for league play. Further ratings for batting, pitching, and fielding are provided for comparison only.

To use the handicap feature, simply determine the difference between the higher-rated team's handicap and the lower-rated team's. The difference is the number of outs the higher-rated team must forfeit at the outset of the game. For instance, if the "better" team is rated at 9 and the other team is rated at 5, then four outs must be given up by the 9-rated team. This is done by having the 9-rated team skip their turns at bat in the first inning (accounting for 3 forfeited outs) and then, when they come to bat in the second inning (with their leadoff hitter), they would have one out already registered (the 4th forfeited out).

Pitcher between-game Fatigue: For those who play short seasons or league schedules, some rules must be implemented to avoid overuse of pitchers. This is handled by modifying the pitchers' Tire and 2nd Wind ratings after each pitching appearance.

Starting pitchers, regardless of innings pitched, cannot pitch in either of the two games following their start. If they start in either of the next two games after the mandatory 2-day rest, their Tire and 2nd Wind ratings are adjusted as follows:

Pitching in 3rd game after a start +5 Tire, -5 2nd Wind
Pitching in 4th game after a start +2 Tire, -2 2nd Wind

Pitchers appearing in relief should adjust their Tire and 2nd Wind ratings according to how many innings they pitch:

0-2/3 innings	Next game, +2 Tire, -2 2nd Wind
1-1 2/3 innings	Next game, +4 Tire, -4 2nd Wind
2-3 2/3 innings	Next game, +8 Tire, -8 2nd Wind
4-5 2/3 innings	Next game, cannot pitch. Game after, +3 Tire, -3 2nd Wind
6 or more innings	Next game, cannot pitch. Game after, +8 Tire, -8 2nd Wind

Player Usage: For those who prefer to recreate seasons by using players in a somewhat historical fashion, for individual seasons, a player's adjusted, normalized plate appearances are provided in parentheses to the right of a batter's name. For pitchers, a notation of their historical usage (e.g. S1=Starting Pitcher #1, R1=Reliever #1, XP=Extra Pitcher). This is purely for information and has no effect on play.

Example of Play

This example will be played through both in the most elementary method (basic game) and then with all the bells and whistles of the park adjustments.

The setting: A summer day in Pittsburgh, in the year 1902 at Exposition Park
Home team: Pittsburgh Pirates (1902)
Visiting team: Minnesota Twins (1991) [time travel is a great thing]
Situation: Bottom of the second inning; Twins ahead 1-0 (Puckett driving in Knoblauch in the top of the first); Jack Morris on the mound.

Basic game example:

Pitcher Fatigue check: Morris (Tire rating = 15) rolls 33, so he's still quite fresh and ready to pitch.
First batter, Bransfield.
Morris rolls 33 (swing) and Bransfield rolls 23 (1*), single with a man on first
Second batter, Davis.
Morris rolls 22 (SO) so Davis strikes out
Third batter, O'Connor.
Morris rolls 14 (defensive check—team defense totals 10, resulting in no great play, so batter swings)
O'Connor rolls 32 (G*), Bransfield advances to second, two out
Fourth batter, pitcher Jack Chesbro.
Morris rolls 38 (X chart check; then rolls 26 WP, runner advances, ball 1), then Morris rolls 30 (G), inning over.

Same example with all extra rules and ballpark effect (you may choose not to use some advanced rules):

Pitcher Fatigue check: Morris (Tire rating = 15) rolls 33, he's fresh.
First batter, Bransfield.
Morris rolls 33 (swing), Bransfield rolls 23 (1*). Park effect for '1*' is '-' so no alteration. Man on first.
Second batter, Davis.
Morris rolls 22 (SO). Davis' SO rating is 38, so a roll is made to see if he whiffed, result 35 is less than 38, K stands. But now consulting park/time period effect card shows that strikeouts were rare in 1902 (SO -> SF rating is 22). Roll is 21. So, the strikeout is altered to an SF. And all SFs and G*s must be checked for the park effect, too. So a subsequent roll is made on the SF chart for 1902 Exposition Park. Roll is 13, no change, it's still a fly out. But which fielder gets the putout. Roll on the fly out defensive chart (15 indicates CF), so the final result is not a K, but F-8. 1 out, 1 on.
Third batter, O'Connor.
Morris rolls 14 (defensive check—team defense totals 10, batter swings). O'Connor rolls 32 (G*).
But all SFs and G*s must be checked when using park effects. Park effect roll is 24—a single (there were a **lot** of singles in 1902). So instead of grounding out, the ball made its way through the infield for a single. 2 on, 1 out.
Fourth batter, pitcher Jack Chesbro.
Morris rolls 38 (X chart check; then rolls 26 WP, runners advance, ball 1), then Morris rolls 30 (G). No park effect checks on "G" result. With runners on 2nd and 3rd (due to WP), the chart says that for a "G" result, runners hold. Checking to see who fielded the ball (roll: 18) says "P". So, ground out 1-3 (pitcher to first). 2 outs, runners on 2nd and 3rd.
Fifth batter, Beaumont.
Morris rolls 35 ("no home run—(HR)"). Beaumont rolls 32 (G*). Checking G* on park effect (roll: 35) indicates an error (there were a **lot more** errors in 1902, too). Now we can use the advanced error determination rule. So, we roll to see which fielder made the error (37 indicates the first baseman). The Twins first baseman is Kent Hrbek, whose defensive rating is +3 (e12). So, rolling the defensive dice results in a result of "1". As 1 is included in Hrbek's "e numbers" (1 and 2), the error stands. Result of the play is **E3** and the runners advance. Bransfield scores, men on 1st and 3rd, still 2 outs.
Sixth batter, Clarke.
Morris rolls 33 (swing). Clark rolls 10 (1*). For 1902 Exposition Park, the '1*' check indicates '-', so all 1* results stand. O'Connor scores, Beaumont to third. 1st and 3rd, still 2 outs.
Seventh batter, Wagner.
Morris rolls 35 ("no home run"). Wagner rolls 35 [(F)]. Defensive out check roll is 33 (OF - which indicates that the batter pulled the ball; Wagner bats right handed, so the fly ball goes to left field). Reulst: F-7. Inning over, two runs in.

Difference between two methods

So, the basic game yielded an inning's result of: 1*, K, G*, WP, G and no runs. 9 dice rolls.
And the advanced rules yielded: 1*, F-8, 1, WP, G 1-3, E3, 1*, F-7 and two runs. 25 dice rolls.

Admittedly, you won't often see so many special park effect checks during a single inning, but this example attempted to show an extreme case of dice rolling. Often, the only extra checks are BB/K batter checks and defensive outs for optional fielding statistics.

So, what's up with this "normalization?"

A key feature of my charts is the fact that all players' statistics are "normalized." That is, an attempt was made to project each player's statistics if they were to all play at the same time, under the same rules, in the same ballpark. Sort of a "field of dreams" scenario.

Some people do not agree with this philosophy and there are arguements to be made on both sides of the issue. That is why the park effect charts are included to attempt to partialy "undo" the effects of normalization.

But for those who wish to understand the concept of normalization a little more, consider how we compare players. Most people look at basic statistics—batting average, home runs, maybe even on base percentage or even slugging average. And when one does this amongst contemporaries (players from the same season), there is little danger. For instance, it's fairly easy to argue Barry Bonds (.863 slugging average - 73 HR) was a better slugger in 2001 than was Sammy Sosa (.737-64). It's even easier to say he was a better slugger than Kevin Millar (.557-20) was that year. One could argue that even these comparisons aren't perfect due to the fact that these players played their home games in different ballparks, some more conducive to home runs than others. But we'll keep it fairly simple here.

So what happens, though, when we compare players' statistics from different seasons. For instance, how would Barry's 2001 feat stack up against all sluggers best seasons throughout history? There is no absolute way to compare, but there are methods to assist us. First off, let's look at a favorite toy of statistics guru Bill James. He devised a computation known as "Similarity Scores." It's just a way to compare one player's offensive statistics against another player's. A score of 1000 indicates a perfect match. The lower the number goes, the less similar the two players' stats were.

So whose season is most like Bonds' 2001 year? If you look only at the actual statistics, the answer would be Babe Ruth in 1920.

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
BARRY BONDS	2001	153	476	129	156	32	2	73	137	13	177	93	411	.328	.863	1000
BABE RUTH	1920	142	458	158	172	36	9	54	137	14	150	80	388	.376	.847	926

Their slugging percentages were quite similar, along with RBI. It's not a terribly good fit (926 isn't a strong similarity score), but it's the closest we can fine. But who would you rather have on your team, the 1920 version of the Babe or the 2001 version of Barry? It's a tough decision and you can pick either and be quite happy. But consider the fact that Bonds played in the era of the "juiced ball" and "bandbox ballparks," where home runs are quite a bit more common. Consider that in the National League in 2001, the average player batted .261 and the top five home run totals were 73, 64, 57, 49, and 49. In the AL in 1920, those figures were .284 (hits were cheaper) and 54, 19, 17, 14, and 12 (home runs were much, much rarer). So, one could argue that Ruth's .376 batting average was propped up by the fact that Average Joe could hit .284 back then, whereas Bonds had to face tougher pitching (or played in a time when the rules made batting averages drop). But you'd also have to argue that Ruth's feat of hitting more than twice as many homers as his nearest competitor was a much more significant undertaking than Barry edging out Sammy Sosa by 9 dingers. But the argument could rage forever.

What happens when we compare players from seasons that were even more disperate? Well, 1968 saw the end of an era dominated by pitching. The mound was higher, the strike zone bigger, and the batting averages lower. In fact, the entire American League that year batted only .230. Thus, ol' Average Joe couldn't even average 1-for-4. Carl Yastrzemski led the league by barely breaking the .300 plateau (.301, in fact). So, how did that season of his compare with others?

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
CARL YASTRZEMSKI	1968	157	539	90	162	32	2	23	74	13	119	90	267	.301	.495	1000
WALLY MOON	1959	145	543	93	164	26	11	19	74	15	81	64	269	.302	.495	990

Wally and Carl has near identical averages, total bases, and homers. Their RBI were the same, along with their slugging percentages. Hence, a 990 similarity score, a great fit. But is it really? In 1959, batters hit 30 points higher than they did in 1968, so Moon only exceeded his league's average by .042, whereas Yaz hit .071 points over his peers' level. League slugging averages were similar—.339 for the '68 AL and .400 for the '59 NL. I would wager that most managers would prefer Yastrzemski's abilities in 1968 to Moon's more modest ability in 1959 (not to say he wasn't a fine player). But Yaz dominated his league much moreso than did Moon. In fact, Moon wasn't in the top 5 in batting average, and missed that level by .053 points. Yaz **was** the league leader.

For one more shining example, let's look at the big season of noted slugger Brady Anderson (1996).

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
BRADY ANDERSON	1996	149	579	117	172	37	5	50	110	21	76	106	369	0.297	0.637	1000
WILLIE STARGELL	1973	148	522	106	156	43	3	44	119	0	80	129	337	0.299	0.646	984

The raw numbers would have us believe that in 1996, Anderson was the equivalent of vintage 1973 Pops Stargell. But in 1973, with batting averages having inched their way up to .254, Stargell led his league in homers and slugging and was .039 points out of the race for the batting crown. Anderson played in a league with a batting average of .277 and slugging average of .445 (compared with .376 for Stargell's league). And Anderson was .061 points behind the top hitter and didn't lead in either homers or slugging. I'll take Stargell.

So, if a person really wanted to pit these players (and countless others) against one another to see who is "really" better, adjustments would have to be made to put all the players on a "level playing field." That is what normalization does. The league's top slugger from

one season should be about as power-dominant as the league's leading slugger from another season. Same thing for pitchers. A pitcher who keeps batters off base, relative to the league average, at the same rate as another pitcher from a different era should be of about the same calliber. Just because Average Hurler in 1968 kept the opponent's batting averages down to .230 doesn't mean he's a better pitcher than Average Hurler in 1996, who could only keep averages down to .277. Nope, they're pretty much the same pitcher, only pitching in different eras, with different rules, different equipment, different umpires, and different external stresses surrounding the game. Hence, the mission, to me, is to migrate every player's statistics to a common ground.

And that's what I did. I adjusted every player's individual statistics towards the average of all players numbers for the 20th century. I also made adjustments for the fact that some players played in hitters' parks and others played in parks more favorable to pitchers'. The end result, to many, is "revisionist history." But for tabletop sports gaming, it's my idea of the best way to compare teams or players across eras.

So, when you see statistics I publish for the teams I create, keep in mind that these are not the historic figures. These are the stats when migrated to that theoretical common ground, the field of dreams. If you're a die-hard for realism, you can always use the ballpark/period effects charts I supply to make 1909 baseball work like 1909 baseball (fewer homers, for instance) or make 1996 baseball work like 1996 baseball, where Anderson will be able to hit 50 dingers. That's all up to you.

To finish off this disertation, I'll now show the three earlier batters' examples using migrated statistics. For instance, you'll see that on a historic scale, Bonds' 73 homers are no more valuable than the average 20th century player's 36 homers (but on a historic scale, that's very impressive). And you'll see which player each is most similar to when comparing the migrated statistics—apples to apples, so to speak.

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
BARRY BONDS	2001	153	475	106	137	24	3	36	90	19	154	73	274	0.288	0.576	1000
BARRY BONDS	1992	140	480	111	140	31	4	33	102	28	122	62	280	0.291	0.582	986
JIMMIE FOXX	1939	131	479	105	143	24	7	32	89	5	73	115	277	0.298	0.577	980

It's heartening to know that Barry Bond's normalized 2001 season is most like, well, his own normalized 1992 season. Next in line is old-time slugger Jimmie Foxx. These comparisons, I believe, are more accurate. And for the record, the 1920 Ruth season, when normalized, measures out at only a similarity score of 867.

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
BRADY ANDERSON	1996	147	559	90	150	28	8	24	74	23	63	84	265	0.268	0.474	1000
BILL DAHLEN	1894	145	552	95	148	28	6	25	87	12	71	100	263	0.268	0.476	994
BING MILLER	1922	149	558	75	151	25	7	25	84	9	23	84	264	0.270	0.473	992

Personally, I see Brady Anderson as much closer in talent level to Bill Dahlen and Bing Miller than I do to Willie Stargell. The original comparison to Stargell drops to a 939 score.

	Year	G	AB	R	H	2B	3B	HR	RBI	SB	BB	SO	TB	AVG	SLG	Sim
CARL YASTRZEMSK	1968	157	555	106	174	37	4	21	76	15	118	78	281	0.313	0.506	1000
WILL CLARK	1989	159	596	105	190	35	10	19	104	5	69	93	302	0.318	0.506	985

And Yaz' season of 1968 looks a little better when moved to the common playing arena (his average jumps to a more Hall-of-Fame-worthy .318). In fact, using this method, a .300 average really means something. Note that only Yaz and Clark's great season of 1989 even reach that magic level.

One final, and controversial, note should be made about these migrated statistics used to generate my charts. In addition to normalizing stats based on ballpark effect and league tendancies, I also made (lesser) adjustments based on the talent pool of the day. One could argue that players today have a tougher road to the big leagues than players did at the turn of the last century. After all, today the game takes talent from the entire globe and all races. In the past, some Major Leaguers got their position more as a birthright than due to any talent.

So, I took each season's stats and checked the numbers for all "regular" players (those with a decent number plate appearances). From that, I computed standard deviations of the batting statistics (determining what the "average" player's ability was for each season in comparison others in the middle of the pack—sort of looking for how wide the talent gap was without including the very best and very worst). This allowed me to determine which seasons had the largest talent gap and which had the smallest. Needless to say, as the years approached current seasons, the gap between "best average player" and "worst average player" grew smaller and smaller, indicating that today's players, on the whole (not just looking at superstars) are better athletes, baseball players in particular, than those in days of old. This factored into the statistics as well. As a result, for equivalent players who played in 1920 and 1990, the one in 1990 will have the slightly better chart.

Hopefully this explains a little bit about these "revisionist history" charts.