

## EXTRA INNINGS BASEBALL ... Pre-Game Business

There are many table baseball games out there. Many are excellent, to be sure. But there's only one *Extra Innings*. This is my version of the classic 1970s creation of Jack Kavanagh which I stumbled upon all those years ago. Feel free to do with this as you wish. Change it around, add to it, remove, etc.

### Umpires

Three dice are rolled for the umpire crew (HP, 1B, 3B).

1-2 - 'A' rated, well respected ... 3-4 - 'B' rated, somewhat respected ... 5-6 - 'C' rated, young/poorly respected.

(This could come into play on noted 2nd roll grounders, BBs/Ks at P rating limits, and SBs. See instructions later in this package.)

### Teams on a Roll / on a Slide (Optional)

A slight edge for a team which has won 3 straight (or more):

During the game, an out made can be ignored and a full re-roll done for that at-bat.

A slight edge for a team whose opponent has lost 3 straight (or more):

During the game, an opponent's batter reaching base can be ignored and a full re-roll done for the opponent's at-bat.

### The "Sunny/Stormy" Charts

Refer to the charts .. take the current win/loss streak, include it in the D6 roll to determine if the clubhouse is 'sunny' (even rolls and rolls <= the streak) or 'stormy' (odd rolls and rolls <= the streak). For example, a team with a 2-game win streak would be 'sunny' on D6 rolls of 1-2-4-6, 'stormy' on D6 rolls of 3-5. Teams with 6-game streaks need no roll.

### Pitcher Adjustments, Fatigue (Optional)

I'm a fan of some other engines which test the "stuff" of a starting pitcher on any given day. There are days he has it and days he's missing the zip in the fastball or the crispness of the breaking pitch. Same for relief pitchers.

Roll 2D6 for each starter and any reliever who enters:

If 1-1, a great warm-up; -5 singles, -3 for HRsA, , -3 for BR 2Bs, -6 for BBs, +12 for Ks. No other adjustments.

If 2-2, good stuff evident; -3 singles, -1 for HRsA, -1 for BR 2Bs, -3 for BBs, +6 for Ks. No other adjustments.

If 5-5, just missing the sharpness; +3 singles, +1 for HRsA, +1 for BR 2Bs, +3 for BBs, -6 for Ks. No other adjustments.

If 6-6, just plain flat; +5 singles, +3 for HRsA, +3 for BR 2Bs, +6 for BBs, -12 for Ks. No other adjustments.

I tend to use the option of "tiring" pitchers by runs, hits, and walks allowed; "stressful" innings because of added base runners and runs scored. So, starters get fatigued after the *dirty dozen* (a total of a combined 12 runs/hits/walks), while relievers get fatigued after half of that (a total of a combined six runs/hits/walks).

Once that has been reached, use the following adjustments:

A +5 singles adjustment, +3 HRsA, +3 BR 2Bs, +6 BBs, -12 Ks. This is done once.

### Injuries

Roll a D6 ... that's the length of injury (games). If it's a '6' - keep rolling, add the next d6 to the 6 games already rolled. And so on...

### 'Defensive' Injuries

Note that when playing players with "DEF" ratings, it's assumed their effectiveness has been reduced. Their defensive rating has been weakened. Hits to any outfielders result in automatic two-base advances on singles and R1s **always** scoring on doubles.

### Error Designations (Optional)

Because it has no bearing on decision-making among "EI managers", errors will be assigned to teams and not individual players. The error roll is a team roll, though it can be altered by positional player ratings. The game does not allow for individual player ratings for error frequency, thus no need for assigning errors to fielders. I found that by using the Second Roll to assign errors wasn't "fair" to some positional players. For me, the player 'D' ratings guide the decisions for rosters and lineups. You can do what you wish. Thus, the beauty of E-I Baseball.

# FIRST ROLL

1-1-1 to 1-6-6	Walks — Pitcher Ratings ... if the roll is at the rating limit, see Umpire Chart; if 1-1-1, automatic BB, next batter!
2-1-1	HBP — if this follows a HR, benches clear, pitcher, batter ejected (if a 2D6 roll is a 5-5 or 6-6, batter injured)
2-1-2, 2-1-3	HBP — IF LHB v LHP or RHB v RHP <b>and</b> runner(s) on base (if P rated hbp, it's automatic; if nhbp, ignore)
2-1-4	Pick-off P — R1/R2 out, x-1-1 to x-2-4 ... if LHP or h-, R1 out, x-1-1 to x-3-3 ... x-6-3 to x-6-6, error, 1 base .. (refresh, FRC)
2-1-5	Pick-off C — LR out if x-1-1 to x-2-2 ... if -arm C, LR out if x-1-1 to x-3-1 ... x-6-3 to x-6-6, error, 1 base .. (refresh, FRC)
2-1-6	PB — all runners advance .. (refresh, FRC)
2-2-1	PB — all runners advance ... if a SD C, R3 does not score, others do advance .. (refresh, FRC)
2-2-2	BALK — all runners on base
2-2-3	BALK — F, F! runner(s) on base
2-2-4	Catcher Interference — if a grounder with R1 or R1/R2 and new 2D6 roll are doubles; enforce book rule
2-2-5, 2-2-6	HOME TEAM EDGE — if a D6 even, the at-bat becomes either an infield single or an auto out (D6 1-4, liner; D6 5-6, K)
2-3-1 to 2-3-6	WP — check P's rating with a runner(s) on base (a 4 WP rating would be a WP from 2-3-1 to 2-3-4, etc.) .. (refresh, FRC)
2-4-1, 2-4-2	RARE EVENT — re-roll for the First Roll, use the situational rare event chart
2-4-5, 2-4-6	EXTREME RARE EVENT — check for the event, re-roll for the First Roll
2-5-1, 2-5-2	RAIN — 1st time, rain has started; 2nd time, long delay, pitchers removed; 3rd time, game called
2-6-1 to 2-6-6	Automatic DP if R1 — LHB (4-6-3), RHB (6-4-3) ... (does not apply with the infield in nor if a safe hit follows)
3-1-1 to 3-2-6	DP RATING — only if R1 and no safe hit ... NOTE: if Infield is in, no DP on these rolls; see below
3-3-1 to 3-4-4	DP RATING — any runner(s) on and no safe hit ... NOTE: if Infield is in, DP ONLY if 3-3-1 to 3-3-3
3-4-5, 3-4-6	TRIPLE PLAY — if R1/R2, and 2nd roll is between 4-1-1 and 4-3-6
3-5-1 to 3-5-6	ERRORS — continue with 2nd roll; if an out, the error replaces the out; if a hit, the error id added on; +2 if new D6 is 6. 3-5-1 = ALL fielders .. 3-5-2 to 3-5-6 (team rating) = all except SD fielders (on 3-5-6 roll, Ps with a K rating of 5-4-6 or better get the K; ignore the error check)
3-6-6	"Veteran Advantage" — <i>next AB</i> when a Y1 P vs. Y4/Y5 BR, auto single (+2) ... a Y4/Y5 P vs. Y1 BR, auto pop out
4-1-1	Auto Steal Attempt — any AVG, F, F! R1 <b>must</b> go ... when a game is not 'close', the batter HBP next pitch, warnings issued
4-4-4	Auto Successful Steal by R1! — exceptions: no R1 with a SB rating < 65% or 5-run differential
4-6-6	Auto Steal Attempt — any AVG, F, F! R1 <b>must</b> go, thrown out ... if new D6 is 6, dropped tag, INF error; if new 2D6 of 1-1 to 6-6 (doubles), any R3 scores on delayed steal of home
5-1-1	Injury? — Pitcher ... IF a new D6 is odd, time missed; if even, only defence reduced a grade (current, next 4 games)
5-1-2	Injury? — Catcher ... same as above, time missed or defensive reduction
5-1-3	Injury? — First Baseman ... see above
5-1-4	Injury? — Second Baseman ... see above ...
5-1-5	Injury? — Third Baseman ... see above ...
5-1-6	Injury? — Shortstop ... see above ...
5-2-1	Injury? — Left Fielder ... see above ...
5-2-2	Injury? — Centre Fielder ... see above ...
5-2-3	Injury? — Right Fielder ... see above ...
5-2-4	Injury? — Batter ... IF a new D6 odd ... foul ball off ankle/shin, etc., (removed at the end of the team's at-bats)
5-2-5	Injury? — Runner ... IF a new D6 odd ... check a D6, distribute rolls if more than one runner
5-5-5	Auto Successful Steal! — R2 and/or R1 ... exceptions: no runner(s) with a SB rate < 70% or 5-run differential
6-1-1 to 6-6-5	PITCHER HIT RATING — if a D20 <= rating, a single, check runner(s) for advance(s) ... if same D20 1, infield single; if 2, double, R1 scores ... if D20 > rating, an out ... 1-17, R1, odd/DP, even/FC ... 1-17, no R1, infield pop ... 18-20, K
6-6-6	AUTOMATIC STRIKEOUT — if the P's raw rating is 5-x-x; consecutive Ks if L2O; otherwise, one batter; no carry-over

## SECOND ROLL — OUTS

(NOTE: 1-x-x outs are all K's)

2-1-1	53	3-1-1	7	4-1-1	4	5-1-1	13/164?	6-1-1	13/13
2-1-2	3u	3-1-2	8	4-1-2	2f	5-1-2	23/24+	6-1-2	23/23
2-1-3	43/46	3-1-3	8	4-1-3	3f	5-1-3	3u/36	6-1-3	3u/3u
2-1-4	53/54	3-1-4	8	4-1-4	4	5-1-4	43/46	6-1-4	43/43
2-1-5	63/64	3-1-5	9	4-1-5	5f	5-1-5	53/54	6-1-5	53/53+
2-1-6	13/16	3-1-6	9	4-1-6	6	5-1-6	63/64	6-1-6	63/63
2-2-1	31/36	3-2-1	7	4-2-1	4+	5-2-1	63/64	6-2-1	13/13+
2-2-2	uc 43	3-2-2	7	4-2-2	2f+	5-2-2	43/46	6-2-2	63/63+
2-2-3	uc 63	3-2-3	8	4-2-3	3+	5-2-3	3u/36	6-2-3	31/31+
2-2-4	7+	3-2-4	8	4-2-4	4	5-2-4	43/46	6-2-4	43/43+
2-2-5	8+ (R3R2)	3-2-5	9	4-2-5	5+	5-2-5	53/54	6-2-5	9
2-2-6	9+	3-2-6	9	4-2-6	6+	5-2-6	63/64	6-2-6	9
2-3-1	7	3-3-1	7	4-3-1	13/16	5-3-1	13/13+	6-3-1	7+
2-3-2	8 (R3)	3-3-2	7	4-3-2	43/46	5-3-2	43/43	6-3-2	8+
2-3-3	9 (R3)	3-3-3	8	4-3-3	31/36	5-3-3	3u/3u+	6-3-3	8
2-3-4	8 (R3)	3-3-4	8	4-3-4	43/46	5-3-4	43/43+	6-3-4	8
2-3-5	4	3-3-5	9	4-3-5	53/54	5-3-5	53/53+	6-3-5	9+
2-3-6	6	3-3-6	9f	4-3-6	63/64	5-3-6	63/63+	6-3-6	9
2-4-1	7+ (R3)	3-4-1	7f	4-4-1	13/16	5-4-1	13/16	6-4-1	53
2-4-2	8+ (R3R2)	3-4-2	8	4-4-2	43/46	5-4-2	63/64	6-4-2	3u
2-4-3	8 (R3R2)	3-4-3	8	4-4-3	3u/36	5-4-3	3u/36	6-4-3	43/46
2-4-4	8 (R3)	3-4-4	8	4-4-4	43/46	5-4-4	43/46	6-4-4	53/54
2-4-5	9+ (R3)	3-4-5	9	4-4-5	53/54	5-4-5	53/54	6-4-5	63/64
2-4-6	9 (R3R2)	3-4-6	9	4-4-6	63/64	5-4-6	63/64	6-4-6	13/16
2-5-1	7+ (R3R2)	3-5-1	7	4-5-1	13/16	5-5-1	43/46	6-5-1	31/36
2-5-2	8+ (R3)	3-5-2	8	4-5-2	43/46	5-5-2	63/64	6-5-2	43
2-5-3	8 (R3)	3-5-3	8	4-5-3	3u/36	5-5-3	31/36	6-5-3	63
2-5-4	8 (R3)	3-5-4	8	4-5-4	uc 43/46	5-5-4	43/46	6-5-4	7
2-5-5	9 (R3R2)	3-5-5	9	4-5-5	uc 53/54	5-5-5	53/54	6-5-5	8 (R3)
2-5-6	9+ (R3)	3-5-6	9	4-5-6	uc 63/64	5-5-6	63/64	6-5-6	9 (R3R2)
2-6-1	7 (R3R2)	3-6-1	7 (R3a?)	4-6-1	63/64	5-6-1	13/13	6-6-1	7
2-6-2	7 (R3)	3-6-2	7+	4-6-2	63/64+	5-6-2	43/46	6-6-2	8 (R3)
2-6-3	8 (R3R2)	3-6-3	8 (R3a?)	4-6-3	31/36+	5-6-3	3u/3u	6-6-3	9 (R3)
2-6-4	8+ (R3)	3-6-4	8+	4-6-4	43/46+	5-6-4	43/46	6-6-4	8
2-6-5	9 (R3R2)	3-6-5	9 (R3a?)	4-6-5	53/54+	5-6-5	53/54	6-6-5	4
2-6-6	9 (R3)	3-6-6	9+	4-6-6	63/64+	5-6-6	63/64	6-6-6	6

(Grounders indicate results with "normal depth" defence, 1B open or 1B occupied; if play to 1B, all runners advance a base)

(If 54, 36, or 16 grounders with R1/R3, L2O — roll D6 ... 1 safe at HP ... 2 R3 holds ... 3-4-5 R3 out, rundown ... 6 ERROR, dropped tag!)

(If 53, 3u, 13 grounders with R2/R3, L2O — roll D6 ... same as above)

**LD FIELDER ADJUSTMENT:** A + sign — an LD fielder changes out to a 1-base error (D6 1-4), 2-base error (D6 5), or 2-base single (D6 6).

(uc grounders, see Umpire Chart) (if K matches pitcher range, see Umpire Chart; if 6-6-6 K, automatic K, next batter!; no inning carry-over)

## SECOND ROLL — HITS

INFIELD HITS ... x-1-1 ... to P ..... x-3-3 ... to 1B ..... x-4-4 to 2B ..... x-5-5 ... to 3B ..... x-6-6 ... to SS  
 x-2-2 ... to P if D6 is 1 ... to C if D6 is a 2 ... to 2B if D6 is 3, 4 ... to SS if D6 is 5, 6

### "On The Button" Hits

**HOMER** — (not on any 1-1-1) IF on the button and a new D6 is 6, a CATCH by an OF, range of 4 or better ... R3/R2, +1.

**TRIPLE** — IF on the button, and IF new D6 is odd, an OF, range of 5 or better (or -1 arm), reduced to a 2B (+3 runners).

**DOUBLE** — IF on the button, and IF new D6 is odd, an OF, range of 5 or better (or -1 arm), reduced to 1B (+2 runners).

**SINGLE** — IF on the button, and IF new 2D6 is odd, a CATCH by a fielder, range of 4 or better (INF, Rs 0; OF, R3, +1).

IF the single roll is within ONE roll of the batter's 2B range, and IF the hit roll is *not* doubles (ie., 1-4-4, infield hit), BR gunned trying to stretch it (+2 runners); SAFE if OF has a range of 12 or worse, or +1 arm. BR with an S running rating can't attempt.

### Defence Checks

#### FRC is 6-1-1 to 6-2-6 ... range check

... 1/11 P .. 2 C .. 3/13 1B .. 4/14 2B .. 5/15 3B .. 6/16 SS .. 7/17 LF .. 8/12/18 CF .. 9/19 RF .. 10 SS .. 20 SS (even) C (odd).  
 ... if the D20 <= rating, single (+2) ... if P/C checked, infield single (+1).

#### FRC is 6-3-1- to 6-3-6 ... error check

... 1/11 P .. 2 C .. 3/13 1B .. 4/14 2B .. 5/15 3B .. 6/16 SS .. 7/17 LF .. 8/18 CF .. 9/19 RF .. 10/12/20 SS.

#### FRC is 6-4-1- to 6-4-6 ... error check

... 1/11 P .. 2 C .. 3/13 1B .. 4/14 2B .. 5/15 3B .. 6/16 SS .. 7/17 3B .. 8/18 2B .. 9 3B .. 19 3B (even) C (odd) .. 10/12/20 SS.  
 ... both error checks, if an error, +1 .. if a new D6 is 6, +2.

**All cases** ... if no hit or error ... D20 odd (DP with R1) / even (FC with R1) ... otherwise, liner caught, no advance(s).

## ADVANCE OF RUNNERS — HITS

### SINGLES

- 1        infield hit, 1 base
- 2 (LF)   2 bases unless SLOW runner (+1)
- 3 (CF)   1 base unless FAST!/FAST runner (+2)
- 4 (CF)   2 bases (if R1, to 2nd only)
- 5 (RF)   1 base unless 2 outs (+2)
- 6 (RF)   2 bases
- 7 (LF)   1 base unless LF 12 or worse or +1 arm (+2)
- 8 (CF)   1 base unless CF 12 or worse or +1 arm (+2)
- 9 (RF)   1 base unless RF 12 or worse or +1 arm (+2)
- 10 ..    IF D6 is 5-6, R1/R2 **must try to go!**

- 11 (LF)   1 base
- 12 (LF)   2 bases unless SLOW runner (+1)
- 13 (CF)   1 base unless FAST!/FAST runner (+2)
- 14 (CF)   2 bases (if R1, to 2nd only)
- 15 (RF)   1 base unless 2 outs (+2)
- 16 (RF)   2 bases (if R1, to 2nd only)
- 17 (LF)   2 bases unless LF 5 or better or -1 arm (+1)
- 18 (CF)   2 bases unless CF 5 or better or -1 arm (+1)
- 19 (RF)   2 bases unless RF 5 or better or -1 arm (+1)
- 20 ..    R1/R2 **must try to go!**

### DOUBLES

- 1 (LF)   2 bases
- 2 (LF)   3 bases unless SLOW runner (+2)
- 3 (CF)   2 bases unless FAST!/FAST runner (+3)
- 4 (CF)   3 bases unless SLOW runner (+2)
- 5 (RF)   2 bases unless 2 outs (+3)
- 6 (RF)   2 bases unless FAST! runner (+3)
- 7 (LF)   2 bases unless LF 12 or worse or +1 arm (+3)
- 8 (CF)   2 bases unless CF 12 or worse or +1 arm (+3)
- 9 (RF)   2 bases unless RF 12 or worse or +1 arm (+3)
- 10 ..    same as with singles

- 11 (LF)   2 bases
- 12 (LF)   3 bases unless SLOW runner (+2)
- 13 (CF)   2 bases unless FAST!/FAST runner (+3)
- 14 (CF)   3 bases unless AVG or SLOW runner (+2)
- 15 (RF)   2 bases unless 2 outs and NO SLOW runner (+3)
- 16 (RF)   2 bases unless FAST! runner (+3)
- 17 (LF)   3 bases unless LF 5 or better or -1 arm (+2)
- 18 (CF)   3 bases unless CF 5 or better or -1 arm (+2)
- 19 (RF)   3 bases unless RF 5 or better or -1 arm (+2)
- 20 ..    same as with singles (**R1 must try to go!**)

### For the 10, 20 rolls:

D20 for OF (1-6 LF, 7-14 CF, 15-20 RF) ... -1 arm, OUT 8-20; average arm, OUT 13-20; +1 arm, OUT 17-20 ... (with 2 out, -1)

If the D20 is 1 or 2, all trail Rs +1 ... if 17, all trail Rs +1 ... if 18, the lead trail runner is gunned, possible DP if L2O. If the D20 is 19-20 ... a possible throwing error.

On a single .. check the OF error rating .. it's a lousy throw to 3rd, all Rs score, the BR to 3rd.

On a double .. check the INF error rating (SS handles the relay from CF-LF, 2B from RF) .. it's a muffed relay, all Rs score, BR stays as 2nd.

## Hit & Run Events

To be announced only after First Roll - not if an error or double/triple play rolled. Batter's hit rating reduced by 12 rolls.

BATTER HITS SAFELY:

Runner(s) +1 base further than he/they would normally advance.

BATTER FLIES OUT:

A roll of 3-6-2, 3-6-4, or 3-6-6, the LR doubled off - unless OF rated + arm.

BATTER POPS/LINES OUT TO INF:

Lead runner doubled off if new 2D6 roll is 6-2 to 6-6.

BATTER GROUNDS OUT:

Runner(s) +1 base; apply result as though 1B unoccupied.

BATTER STRIKES OUT:

Lead runner handled as a SB; reduce rating by 50% of the SB rating.

## Double Plays

	<u>R1, R1/R3</u>		<u>R1/R2</u>		<u>R1/R2/R3</u>		<u>R2/R3</u>		<u>R2 only</u>		<u>R3 only</u>	
	0	1	0	1	0	1	0	1	0	1	0	1
to 3-6-6	643	643	643	643	643*	643*	65	65	6u	64	65	65
to 4-6-6	463	463	463	463	463*	463*	45	4u	4u	46	45	45
to 5-5-6	543	543	543	543	543*	543*	5u	54	54	54	5u	5u
to 5-6-6	143	163	154	153	123	123	15	16	14	16	15	15
to 6-1-6	243	263	254	253	523	523	25	25	24	26	25	25
to 6-6-6	3u	363	3u	363	323	363	35	34	36	34	35	35

### Adjustments:

R3 always scores when out is made at 1B; (\*) in effect if "Infield In" – 1st force is to HP.

## Sacrifice Flies - Advances

Flies with (R3) (R2) on the Second Roll Chart advances runners from those bases without a challenge.

Flies with (R3a?) (361, 363, 365), **R3, FI, F, AVG runner** attempts to score; 1-1 to 4-4, safe (1-1 to 1-6, R2 +1); 4-5 to 6-6, out.

## Infield In - Grounders

	d6 1	d6 2	d6 3	d6 4	d6 5	d6 6
1B plays	3-2	3-2	3-2	3-2	(FC*) 3-2	FC* .. (5-) 3u*
2B plays	4-2	4-2	4-2	(FC*) 4-2	(FC*) 4-3* .. (5-) 4-2	FC* .. (5-) 4-3*
SS plays	6-2	6-2	6-2	(FC*) 6-2	(FC*) 6-3* .. (5-) 6-2	FC* .. (5-) 6-3*
3B plays	5-2	5-2	5-2	(FC*) 5-2	(FC*) 5-2	FC* .. (5-) 5-3*
P plays	1-2	1-2	1-2	1-2	(FC*) 1-2	FC* .. (5-) 1-2

### Adjustments:

Fielders with ranges 5 or better reduce some opportunities to score as noted on the chart.

(Example: a D6 roll of 5 to 2B becomes a put-out, 4-2, and not a score on a FC or a grounder to 1B.)

Fielders with ranges 12 or worse increase the possibilities of some scoring situations as noted by brackets (FC\*).

(Example: a D6 roll of 4 to 3B becomes a score on a FC, and not a put-out, 5-2).

An asterisk means R3 scores.

## Stolen Bases

### Adjustments

- \* Pitcher hold and catcher arm ratings reduce/add to a SB rating (based upon 2D10s). Adjust accordingly.
- \* Steal of 2nd ... On any single of 1-6-6, 2-1-1 — a batter-runner with a 72% or more raw rating AUTO steals 2nd!
- \* Steal of 3rd ... Reduce the runner's success rating (-20%), and do not use the pitcher adjustment.
- \* Steal of HP ... Only runners rated 78% or higher. It's successful from 1-8. No adjustments.

Catcher defensive ratings determine throwing errors.

If a -arm C, it's an error if the result is 1-2; if a 0 arm C, 1-8; if a +arm C, 1-12 .. if the result is 1, runner scores on 2-base error.

If the result is 94-96 .. it's a CS, but possible dropped tag error by the fielder (94 if SD, 94-95 if AVG, 94-96 if LD)

If the result is 97-99 .. it's a rundown, the P picked off R2 or R1. Check the rating of the INF covering (use logic) .. SD, out if a D6 is odd, otherwise returns to the original base .. AVG, the runner is safe if D20 1-9 (odd D20 returns, even D20 moves up a base) .. LD, safe if D20 1-14.

If the result is 22 or 33, it's a possible blown call by the umpire. Roll a 2D6. If 5-5 or 6-6 results, close play ruled OUT. Roll a 2D6 again. If 5-5 or 6-6 results, the runner's ejected.

If the result is 77 or 88, it's a possible blown call by the umpire. Same procedure as previous, but ruled SAFE and the fielder's ejected. Use the logical 2B-SS coverage on the steal.

## Sacrifice Bunts

E bunter, F!/F runner ... successful SAC if from 1-1-1 to **5-3-6** (2 strikes = **3-3-6**)

E/Avg bunter, Avg runner or Avg bunter, F!/F runner... successful SAC if from 1-1-1 to **5-1-6** (2 strikes = **3-1-6**)

P bunter or S runner ... successful SAC if from 1-1-1 to **2-5-6** (2 strikes, no attempt)

Good SACs ... E bunter / F!/F runner      1-1-1 to 1-4-6 — Single, all safe ..... 1-5-1 to 6-3-6 — SAC, batter out.  
6-4-1 to 6-4-6 — SAC + error (+1) ... 6-5-1 to 6-5-6 — HBP ... 6-6-1 to 6-6-6 — WP.

Good SACs ... E/Avg bunter / Avg runner      1-1-1 to 1-3-6 — Single, all safe ..... 1-4-1 to 6-4-6 — SAC, batter out.  
Avg bunter / F!/F runner      6-5-1 to 6-5-6 — SAC + error (+1) ... 6-6-1 to 6-6-3 — HBP ... 6-6-4 to 6-6-6 — WP.

Good SACs ... P bunter or S runner      1-1-1 to 1-1-6 — Single, all safe ..... 1-2-1 to 6-6-6 — SAC, batter out.

Failed SACs ... E bunter / F!/F runner      1-1-1 to 3-6-6 — Foul ball ..... 4-1-1 to 5-3-6 — Popped up, runner(s) hold.  
5-4-1 to 6-4-6 — Forced, lead runner ..... 6-5-1 to 6-5-6 — Popped up, DP!  
6-6-1 to 6-6-6 — Missed pitch; pick-off, lead runner if new 2D6 are doubles.

Failed SACs ... E/Avg bunter / Avg runner      1-1-1 to 3-6-6 — Foul ball ..... 4-1-1 to 5-1-6 — Popped up, runner(s) hold.  
Avg bunter / F!/F runner      5-2-1 to 6-4-6 — Forced, lead runner ..... 6-5-1 to 6-5-6 — Popped up, DP!  
6-6-1 to 6-6-6 — Missed pitch; pick-off, lead runner if new 2D6 are doubles.

## Squeeze Bunts

Decided upon before the first roll. Because of the number of variables, it's a random, unpredictable play without bunting or running ratings.

### Safety Squeeze:

1-1-1 > 1-4-1	All Rs advance, batter credited with single.	1-4-2 > 2-3-2	All Rs advance, batter out at 1B (Sac).
2-3-3 > 3-1-1	R3 holds; if R1, safe advance to 2B, batter out at 1B (Sac).		
3-1-2 > 3-6-6	R3 out on FC, batter reaches 1B.	4-1-1 > 5-2-6	Foul Ball; no advance.
5-3-1 > 5-5-1	HBP.	5-5-2 > 6-1-6	Pitch-Out, R3 picked off.
6-2-1 > 6-5-6	All runners hold, batter out on 2PF.	6-6-1 > 6-6-6	All runners hold, batter out on FC.

### Suicide Squeeze:

1-1-1 > 1-5-1	All Rs advance, batter reaches 1B, credited with sacrifice.		
1-5-2 > 2-6-1	All Rs advance, batter out at 1B (Sac).		
2-6-2 > 4-2-5	R3 out on FC, batter reaches 1B.	4-2-6 > 5-5-6	Foul Ball; no advance.
5-6-1 > 6-1-1	HBP.	6-1-2 > 6-3-1	Pitch-Out, R3 tagged at HP.
6-3-2 > 6-4-5	All runners return, batter out on 2PF.	6-4-6 > 6-6-6	Pop Up, DP (2-6).

## Umpire Adjustments

If the separate **2D20 are identical 20s** ... the umpire crew has become involved in the **next play**.

A walk is negated by a tight strike call and the at-bat continues. A strikeout is negated by a questionable ball call and the at-bat continues. A ground ball out is botched and a safe call made. A liner, pop fly, or fly ball out is ruled "no catch" on a sliding catch due to a poor angle. A hit is incorrectly ruled foul.

If subsequent 2D6 are 6-6, ejections are likely. Use a D6 odd/even for choices.

### "On the Button" Rolls, Outs

If "on the button":

Bbs: 'A' misses the ball-4 call if 2D6 are 6-6; 'B' misses the call if 5-5/6-6; 'C' misses the call if 1-1 to 4-4. Re-roll.

Ks: 'A' misses the strike-3 call if 2D6 are 6-6; 'B' misses the K call if 5-5/6-6; 'C' misses the call if 1-1 to 4-4. Re-roll.

#### GROUNDERS:

Only on rolls of 2-2-2, 2-2-3, 4-5-4, 4-5-5, 4-5-6.

'A' kicks the out call if 2D6 are 6-6; 'B' kicks the out call if 5-5/6-6; 'C' kicks the out call if 1-1 to 4-4.

Batter-Runner and all runners are safe. Manager ejected. Fielder at point of force also ejected if new 2D6 are doubles.

#### STEALS:

'A' kicks the safe call if 6-6; 'B' kicks the safe call if 5-5/6-6; 'C' kicks the safe call if 1-1 to 4-4.

## RUNNER ADVANCE CHART (Optional)

This could be used as a replacement to the chart found earlier in this package. I've used both. This is a quicker resolution.

#### SINGLES:

If a new D6 is:	1	L2O	F! / F ... +2 ... others ... +1.
		2 OUT	all +2 except SL runners (+1).
	2 & 4		all runners +2 except SL runners on the '2' roll.
	3 & 5		all runners +1.
	6	L2O	+2 if SL runners up to 1-5-6 / AVG up to 3-3-6 / F up to 4-3-6 / F! up to 4-5-6.
		2 OUT	+2 if SL runners up to 2-5-6 / AVG up to 4-3-1 / F up to 5-2-6 / F! up to 5-4-6.

#### DOUBLES:

If a new D6 is:	1	L2O	F! / F ... +3 ... others ... +2.
		2 OUT	all +3 except SL runners (+2).
	2 & 4		all runners +3 except SL runners on the '2' roll.
	3 & 5		all runners +2.
	6	L2O	+3 if SL runners up to 1-5-6 / AVG up to 3-3-6 / F up to 4-3-6 / F! up to 4-5-6.
		2 OUT	+3 if SL runners up to 2-5-6 / AVG up to 4-3-1 / F up to 5-2-6 / F! up to 5-4-6.

For both singles/doubles on the '6' roll ...

If a -1 arm >	lead runner gunned if 6-1-1 to 6-5-6
If an average arm >	lead runner gunned if 6-1-1 to 6-3-6
If a +1 arm >	lead runner gunned if 6-1-1 to 6-1-6

## MASTER NUMBERS

1-1-1: .0046	2-1-1: .1713	3-1-1: .3380	4-1-1: .5046	5-1-1: .6713	6-1-1: .8380
1-1-2: .0093	2-1-2: .1759	3-1-2: .3426	4-1-2: .5093	5-1-2: .6759	6-1-2: .8426
1-1-3: .0139	2-1-3: .1806	3-1-3: .3472	4-1-3: .5139	5-1-3: .6806	6-1-3: .8472
1-1-4: .0185	2-1-4: .1852	3-1-4: .3519	4-1-4: .5185	5-1-4: .6852	6-1-4: .8519
1-1-5: .0231	2-1-5: .1898	3-1-5: .3565	4-1-5: .5231	5-1-5: .6898	6-1-5: .8565
1-1-6: .0278	2-1-6: .1944	3-1-6: .3611	4-1-6: .5278	5-1-6: .6944	6-1-6: .8611
1-2-1: .0324	2-2-1: .1991	3-2-1: .3657	4-2-1: .5324	5-2-1: .6991	6-2-1: .8657
1-2-2: .0370	2-2-2: .2037	3-2-2: .3704	4-2-2: .5370	5-2-2: .7037	6-2-2: .8704
1-2-3: .0417	2-2-3: .2083	3-2-3: .3750	4-2-3: .5417	5-2-3: .7083	6-2-3: .8750
1-2-4: .0463	2-2-4: .2130	3-2-4: .3796	4-2-4: .5463	5-2-4: .7130	6-2-4: .8796
1-2-5: .0509	2-2-5: .2176	3-2-5: .3843	4-2-5: .5509	5-2-5: .7176	6-2-5: .8843
1-2-6: .0556	2-2-6: .2222	3-2-6: .3889	4-2-6: .5556	5-2-6: .7222	6-2-6: .8889
1-3-1: .0602	2-3-1: .2269	3-3-1: .3935	4-3-1: .5602	5-3-1: .7269	6-3-1: .8935
1-3-2: .0648	2-3-2: .2315	3-3-2: .3981	4-3-2: .5648	5-3-2: .7315	6-3-2: .8981
1-3-3: .0694	2-3-3: .2361	3-3-3: .4028	4-3-3: .5694	5-3-3: .7361	6-3-3: .9028
1-3-4: .0741	2-3-4: .2407	3-3-4: .4074	4-3-4: .5741	5-3-4: .7407	6-3-4: .9074
1-3-5: .0787	2-3-5: .2454	3-3-5: .4120	4-3-5: .5787	5-3-5: .7454	6-3-5: .9120
1-3-6: .0833	2-3-6: .2500	3-3-6: .4167	4-3-6: .5833	5-3-6: .7500	6-3-6: .9167
1-4-1: .0880	2-4-1: .2546	3-4-1: .4213	4-4-1: .5880	5-4-1: .7546	6-4-1: .9213
1-4-2: .0926	2-4-2: .2593	3-4-2: .4259	4-4-2: .5926	5-4-2: .7593	6-4-2: .9259
1-4-3: .0972	2-4-3: .2639	3-4-3: .4306	4-4-3: .5972	5-4-3: .7639	6-4-3: .9306
1-4-4: .1019	2-4-4: .2685	3-4-4: .4352	4-4-4: .6019	5-4-4: .7685	6-4-4: .9352
1-4-5: .1065	2-4-5: .2731	3-4-5: .4398	4-4-5: .6065	5-4-5: .7731	6-4-5: .9398
1-4-6: .1111	2-4-6: .2778	3-4-6: .4444	4-4-6: .6111	5-4-6: .7778	6-4-6: .9444
1-5-1: .1157	2-5-1: .2824	3-5-1: .4491	4-5-1: .6157	5-5-1: .7824	6-5-1: .9491
1-5-2: .1204	2-5-2: .2870	3-5-2: .4537	4-5-2: .6204	5-5-2: .7870	6-5-2: .9537
1-5-3: .1250	2-5-3: .2917	3-5-3: .4583	4-5-3: .6250	5-5-3: .7917	6-5-3: .9583
1-5-4: .1296	2-5-4: .2963	3-5-4: .4630	4-5-4: .6296	5-5-4: .7963	6-5-4: .9630
1-5-5: .1343	2-5-5: .3009	3-5-5: .4676	4-5-5: .6343	5-5-5: .8009	6-5-5: .9676
1-5-6: .1389	2-5-6: .3056	3-5-6: .4722	4-5-6: .6389	5-5-6: .8056	6-5-6: .9722
1-6-1: .1435	2-6-1: .3102	3-6-1: .4769	4-6-1: .6435	5-6-1: .8102	6-6-1: .9769
1-6-2: .1481	2-6-2: .3148	3-6-2: .4815	4-6-2: .6481	5-6-2: .8148	6-6-2: .9815
1-6-3: .1528	2-6-3: .3194	3-6-3: .4861	4-6-3: .6528	5-6-3: .8194	6-6-3: .9861
1-6-4: .1574	2-6-4: .3241	3-6-4: .4907	4-6-4: .6574	5-6-4: .8241	6-6-4: .9907
1-6-5: .1620	2-6-5: .3287	3-6-5: .4954	4-6-5: .6620	5-6-5: .8287	6-6-5: .9954
1-6-6: .1667	2-6-6: .3333	3-6-6: .5000	4-6-6: .6667	5-6-6: .8333	6-6-6: 1.0000



## Pitcher Adjustments

Until recently, I used the ERA Adjustment Chart below. After reading several articles - including an opinion piece from game's founder from many moons ago - I have had a change of heart.

I now agree that a pitcher's ability to alter a hitter's results come from his limiting hits over the course of his performances. This is not simply through earned runs allowed. At times, a pitcher has no control over his earned runs surrendered (relievers not getting the job done). So, I'm going to rate (70%) pitchers based upon their 'Opponent Batting Average' in relation to the league's batting average with some (30%) ERA adjustment. Same for home runs.

No adjustment will be made for doubles or triples. It's argued that a pitcher has little or no control over those two hit types. Speed and defence do. Other areas of the charts address this.

### Steps:

**SINGLES:** Find the league BA *without the pitcher's team included*. Find the pitcher's OBA (what hitters batted against him). Subtract them. Take the result (positive or negative) and multiply it by 216 (all possible dice rolls). This will be the adjustment for the entire appearance (fatigue ratings would be added in).

**HOMERS:** Find the league HR total *without the pitcher's team included*, divide into total AB. Find the pitcher's HR total, divide into his total AB. Subtract them. Take the result (positive or negative) and multiply it by 216 (all possible dice rolls). This will be the adjustment for the entire appearance (fatigue ratings would be added in).

(Example)

2010 AL teams (minus the Yanks) averaged .259 and 154 HR in 5531 AB. NYY's Sabathia held AL teams to a .239 average with 20 HR in 874 AB. To find his adjustment,  $.239 - .259 = -0.020 \times 216 = -4.32$  rolls. Hitters ratings are reduced 4 rolls for singles. For homers? The league average is  $154/5531 = 0.0278$  ... Sabathia's is  $20/874 = 0.0229$ . So,  $0.0229 - 0.0278 = -0.0049 \times 216 = -1.06$  rolls. He reduces all hitters' HR ratings by one.

*IF YOU WOULD PREFER TO USE THE CHART BELOW, FEEL FREE TO DO SO! The beauty of E-I.*

## E.R.A. ADJUSTMENTS

	1B	2B	3B	HR		1B	2B	3B	HR
0.00 - 1.84	-23	-5	-3	-3	4.83 - 4.97	+4		+1	
1.85 - 1.92	-22	-5	-2	-3	4.98 - 5.12	+5		+1	
1.93 - 2.01	-21	-5	-2	-3	5.13 - 5.28	+6		+1	
2.02 - 2.10	-20	-4	-1	-2	5.29 - 5.44	+7		+1	
2.11 - 2.19	-19	-4	-1	-2	5.45 - 5.61	+8		+1	
2.20 - 2.28	-18	-3		-2	5.60 - 5.77	+9		+1	
2.29 - 2.38	-17	-3		-2	5.78 - 5.95	+10		+2	
2.39 - 2.47	-16	-3		-2	5.96 - 6.12	+11	+1	+2	
2.48 - 2.57	-15	-3		-2	6.13 - 6.30	+12	+1	+3	
2.58 - 2.68	-14	-2		-2	6.31 - 6.48	+13	+2	+3	
2.69 - 2.78	-13	-2		-2	6.48 - max	+14	+6	+3	+3
2.79 - 2.89	-12	-2		-2					
2.90 - 3.00	-11	-2		-2					
3.01 - 3.11	-10	-2		-1					
3.12 - 3.23	-9	-1		-1					
3.24 - 3.34	-8	-1		-1					
3.35 - 3.46	-7	-1		-1					
3.47 - 3.59	-6	-1		-1					
3.60 - 3.71	-5	-1		-1					
3.72 - 3.84	-4	-1		-1					
3.85 - 3.97	-3	-1							
3.98 - 4.10	-2	-1							
4.11 - 4.24	-1								
4.25 - 4.38									
4.39 - 4.52	+1								
4.53 - 4.67	+2								
4.68 - 4.82	+3	+1							

  

BB	ERA	BB	ERA	BB	ERA
111	+1.00	131	+0.37	151	-0.36
112	+0.95	132	+0.31	152	-0.42
113	+0.90	133	+0.25	153	-0.49
114	+0.85	134	+0.19	154	-0.56
115	+0.80	135	+0.14	155	-0.63
116	+0.74	136	+0.08	156	-0.70
121	+0.69	141	+0.02	161	-0.77
122	+0.64	142	-0.04	162	-0.84
123	+0.59	143	-0.11	163	-0.91
124	+0.53	144	-0.17	164	-0.98
125	+0.48	145	-0.23	165	-1.05
126	+0.42	146	-0.29	166	-1.13