

# Introduction

- This module introduces statistics. It will describe how to record the different types of statistics in the scorebook.
- These statistics can then be used in various formulas to generate percentages and averages.
- All statistics are recorded as a number. While they can be completed after the game has ended, some are easier to record during the game. Find what works for you with regards to which statistics to do during the game and the order that you record them in.
- For the player, pitcher and catcher statistics that can be recorded after each play, use a small mark in the required column. These can then be tallied at the conclusion of the game. Double-check against the plays to ensure they are correct – marks can be easily missed or put in the wrong place.
- Care needs to be taken when a player changes fielding positions or is substituted to ensure the statistics are recorded against the correct player.

# Scorebook

The scorebook has a number of different areas for the statistics to be recorded. Each player has separate statistics as a batter, fielder, pitcher or catcher. Some pitching statistics are also recorded per inning and others are used to balance the scorebook.

The scorebook form is divided into several sections:

- Team Information:** HOME, AWAY, VENUE, DATE, TIME START, FINISH, TOTAL.
- Fielding:** A grid for recording fielding statistics for each player in each inning. The columns represent the 11 positions: 1 (Pitcher), 2 (Catcher), 3 (First Base), 4 (Second Base), 5 (Third Base), 6 (Shortstop), 7 (Left Field), 8 (Center Field), 9 (Right Field), 10 (Pitcher), 11 (Pitcher).
- Batting:** A grid for recording batting statistics for each player in each inning. The columns represent the 11 positions: PA (Pitcher), AB (At Bat), R (Runs), H (Hits), 1 (Single), 2 (Double), 3 (Triple), HR (Home Run), RBI (Runs Batted In), S (Strikeout), SB (Stolen Base), BB (Base on Balls), IBB (Intentional Base on Balls), CI (Caught Stealing), K (Strikeout), G (Grounded Out), SF (Sacrifice Fly), CS (Caught Stealing), LOB (Left On Base).
- Pitching:** A grid for recording pitching statistics for each pitcher in each inning. The columns represent: P (Pitcher), I (Innings Pitched), H (Hits), K (Strikeouts), BB (Base on Balls), RS (Runs Scored), ER (Earned Runs), WP (Wild Pitch), BK (Base on Balls), PO (Putout), PCS (Passed Ball), BFP (Batters Faced), S (Strikeout), PIT (Pitches Thrown), M (Miscellaneous).
- Catchers:** A grid for recording catcher statistics for each catcher in each inning. The columns represent: INN (Innings Played), PB (Passed Balls), SB (Stolen Bases), CCS (Caught Stealing).
- Pitchers:** A grid for recording pitcher statistics for each pitcher in each inning. The columns represent: P (Pitcher), I (Innings Pitched), H (Hits), K (Strikeouts), BB (Base on Balls), RS (Runs Scored), ER (Earned Runs), WP (Wild Pitch), BK (Base on Balls), PO (Putout), PCS (Passed Ball), BFP (Batters Faced), S (Strikeout), PIT (Pitches Thrown), M (Miscellaneous).
- Official Recorder:** COACH, OFFICIAL RECORDER, SCORER HOME, SCORER VISITING.
- Umpire Sign:** UMPIRE SIGN.
- Scorebook Summary:** WON BY, LUMPRES: PLATE (1ST, 2ND, 3RD), PITCHER: WIN, LOSS, SAVE, ON BENCH, SCORE: R + LOB + PO + SF = SUM.

- Player statistics:
  - batting (BLUE)
  - fielding (RED)
  - pitcher and catcher (GREEN)
- Inning (YELLOW)
- Balancing (PURPLE)

# Batting

<b>PA</b>	Plate Appearance	A completed turn at the plate. If the third out is made in the field, there is no PA.			
<b>AB</b>	At Bat	When the batter has been given the opportunity to make a play. If the batter reaches 1 <sup>st</sup> base by a walk, hit by pitch, sacrifice (bunt or fly), catchers interference or obstruction*, there is no AB. (play in the shaded area = no AB)			
<b>R</b>	Run	When the runner scores			
<b>H</b>	Hit	When the batter reaches at least 1 <sup>st</sup> base on a safe hit			
<b>1</b>	Single	<b>2</b> Double	<b>3</b> Triple	<b>HR</b> Home Run	
<b>RBI</b>	Runs Batted In	When the batter advances a runner home (except on a double-play). If the batter hits a home run, count an RBI for all runners and the batter.			

<b>SAB</b>	Sacrifice Bunt	<b>SAF</b>	Sacrifice Fly
<b>BB</b>	Walk	<b>HPB</b>	Hit By Pitch
<b>CI</b>	Catchers Interference, Obstruction*		

BATTING																			
PA	AB	R	H	1	2	3	HR	RBI	SAB	SAF	BB	HPB	CI	K	GDP	SB	CS	LOB	

Smaller row at the bottom for column totals – used for balancing.

<b>K</b>	Strikeout	All types whether the batter is out or safe
<b>GDP</b>	Grounds out into a Double-Play	
<b>SB</b>	Stolen Base	
<b>CS</b>	Caught Stealing	
<b>LOB</b>	Left on Base	When the player is left safely on a base at the end of the inning

\* batter reaching 1<sup>st</sup> base only



# Fielding

For fielding statistics, the plays where a batter or runner is called out or an error has been scored are recorded.

<b>A</b>	Assist	Player(s) that threw or deflected the ball.
<b>PO</b>	Put-out	Player that made the out by catching the ball on the full, tagging the base, runner or batter.
<b>E</b>	Error	Player that made the error.

FIELDING		BATTING ORDER																
TEAM		1	2	3	4	5	6	7	8	9	10	11						
DO	PO	A	E	Pos	Ch	U	A	PO	E									
						1	○	○	○	○	○	○	○	○	○	○	○	○

There are two different sections for recording fielding statistics:

- **A PO E rows** at the top of the scoring area is a summary of the assists, put-outs and errors made in that inning. They are a direct copy of all the fielder position numbers involved in the plays.
- **PO A E columns** to the left of the players name is where each players tally of put-outs, assists and errors for the game is recorded.

KC and K strikeouts are recorded as a put-out to the catcher – fielder position number 2.

Receiver errors - record the assist(s) and the error (there will be no put-out).

# Fielding – cont.

Write the assists, put-outs and errors in the A PO E rows at the top of the inning column in the same order as they occur.

Indicate when a pitching change (blue line) or substitution, fielding change (green line) has been made.

FIELDING		BATTING ORDER TEAM		1		2	
DO	PO	A	E	Pos	Ch	Uni	E
				1		6-3	
				2		E4	
				3		2 K2	
				4		3 F8	
				5		1 F9	
				6		CS11-3-6 2 7	
				7		3 KC	
				8			
				9			
RUNS							

- Count the number of put-outs, assists and errors a player has made and record them to the left of their name.
- In a rundown, if a player has multiple assists count as one assist only.
- Take care as the order is different.
- Remember, a player's fielding details are on the other team's scoresheet.

FIELDING		BATTING ORDER TEAM		A			
DO	PO	A	E	Pos	Ch	Uni	E
1	1	6		GIBBS Stephen			1
1	1	3		JONES Mitchell			2
				5 B2B7			
		1		GRANT Oliver			3
				2 B2B7			
1		7		HARRIS Toby			4
1		8		ALEXANDER Bree			5
		1	4	LEE Brayden			6
				1 B2B7			
1		5		MORRIS Brooke			7
				7 B2B7			
1		2		WILSON Bailey			8
1		9		DAVIS Jaxon			9
RUNS							

At the end of the game, write the total number of put-outs, assists and errors here. →

6 3 1

# Inning

<b>Balls</b>	Number of balls pitched
<b>Stks</b>	Number of strikes pitched
<b>Pit</b>	Total number of pitches thrown
<b>BFP</b>	Batters faced (completed turn)
<b>HITS</b>	Number of safe hits
<b>LOB</b>	Number of runners left on base

RUNS							
Balls	10	16	26	4	30	3	
Stks	15	13	28	1	29	12	
Pit	25	29	54	5	59	15	
BFP	8	6	14	2	16	3	
HITS	3	2	5	0	5	1	
LOB	1	0	1	1	2		

Each inning column is split into two:

- Left side – total for that inning
- Right side - cumulative total for the pitcher

Inning statistics are recorded separately for each pitcher that pitches in that inning.

Indicate a pitching change with a blue line and pitchers name (optional).

When there is a pitching change during the inning, split the column so the inning and cumulative totals for the replaced pitcher can be recorded in one column.

LOB is a running total for the whole game and is not reset at the change of pitcher.

# Pitcher

PITCHERS	PI	INN	H	K	BB	HPB	RS	ER	WP	BLK	PO	PCS	BFP	B	S	PIT	W/L/S
BROWN Jamie	3	2.1	5	0	3	1	5	5	1	0	0	0	16	30	29	59	
JONES Elisa	1	0.2	1	2	0	0	0	0	0	0	0	0	3	3	12	15	

<b>PI</b>	Innings participated in. This is a whole number. Include any inning the pitcher pitches in. The total for all pitchers may exceed the number of innings in the game.
<b>INN</b>	Innings pitched. Based on the number of outs that occurred while the player was pitching. 3 outs = a whole inning 2 outs = 0.2 of an inning 1 out = 0.1 of an inning eg. if a pitcher has 2 outs in the 4 <sup>th</sup> and 2 outs in the 5 <sup>th</sup> INN = 1.1
<b>H</b>	Hits
<b>K</b>	Strikeouts – all types whether the batter is out or safe

<b>BB</b>	Walks
<b>HPB</b>	Hit by Pitch
<b>RS</b>	Total Runs Scored
<b>ER</b>	Earned Runs – green runs only
<b>WP</b>	Wild pitches
<b>BLK</b>	Balks
<b>PO</b>	Pick offs: PO 1-#
<b>PCS</b>	Pitcher caught stealing: CS 1-#
<b>BFP</b>	Batters faced (completed turn)
<b>B</b>	Total number of balls pitched
<b>S</b>	Total number of strikes pitched
<b>PIT</b>	Total pitches thrown
<b>W/L/S</b>	Win, loss, save



# Catcher

<b>INN</b>	Innings as catcher. Based on the number of outs that occurred while the player was catching. 3 outs = a whole inning 2 outs = 0.2 of an inning 1 out = 0.1 of an inning
<b>PB</b>	Passed Balls
<b>SB</b>	Stolen bases (a double steal counts as 2 stolen bases)
<b>CCS</b>	Catchers caught stealing: CS 2-#

CATCHERS	INN	PB	SB	CCS
GRUCIX Brax	1.2			
TREWIN Daniel	1.1			

# Balancing

## Column totals from batting statistics:

<b>AB</b>	At Bats
<b>BB</b>	Walks
<b>HP</b>	Hit by Pitch
<b>SAC</b>	Sacrifice bunts + sacrifice flys
<b>CI</b>	Catchers interference
<b>SUM</b>	Total of above

$$\begin{array}{r}
 \text{AB} + \text{BB} + \text{HP} + \text{SAC} + \text{CI} = \text{SUM} \\
 \square + \square + \square + \square + \square = \square \\
 \\
 \text{R} + \text{LOB} + \text{PO} = \text{SUM} \\
 \text{(Opposing Team)} \\
 \square + \square + \square = \square
 \end{array}$$

SUM figures should be the same as each other and should equal the total PAs for the team.

<b>R</b>	Runs scored
<b>LOB</b>	Left on Base (from inning statistics)
<b>PO</b>	Total number of put-outs made by the other team
<b>SUM</b>	Total of above

Cross-check a teams total batting statistics with the total for all opposition pitchers:

Batting	Pitching
PA	BFP
R	RS
H	H
BB	BB
HPB	HPB
K	K

# Calculating Averages

## Batting Average:

Divide the total number of safe hits by the total number of times at bat.

$$\frac{H}{AB} \quad \text{eg. Lucy Marshall had 1 Hit and 2 ABs: } \frac{1}{2} \quad \text{Batting ave} = 0.500$$

## Fielding Average:

Divide the total number of put outs and assists by the total number of put outs, assists and errors.

$$\frac{PO+A}{PO+A+E} \quad \text{eg. Stephen Gibbs has 2 POs, 5 As and 1 E: } \frac{2+5}{2+5+1} \quad \text{Fielding ave} = 0.875$$

## Earned Run Average (ERA):

Multiply the number of earned runs by 9 (7 for juniors) then divide by the number of innings pitched.  
If INN is x.1 use x.333 and if INN is x.2 use x.666.

$$\frac{ER \times 9}{INN \text{ (converted)}} \quad \text{eg. Jamie Brown had 5 ERs and 2.1 INNs: } \frac{5 \times 9}{2.333} \quad \text{ERA} = 19.288$$