

# 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.



# Batting

|            |                  |  |        |          |        |           |          |  |
|------------|------------------|--|--------|----------|--------|-----------|----------|--|
| <b>PA</b>  | Plate Appearance | A completed turn at the plate.<br>If the third out is made in the field or the player is a tie-breaker runner, there is no PA.   |        |          |        |           |          |  |
| <b>AB</b>  | At Bat           | When the batter has been given the opportunity to make a play.<br>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.<br>(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).<br>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          |   |     |    |    |   |   |   |   |   |   |   |   |   |    |    |   |
| DO       | PO | A             | E | Pos | Ch | Un | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |   |
|          |    |               |   |     |    |    | 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 the fielder position numbers involved in the plays - if a player has multiple assists in a rundown, only write their fielder position number once.
- **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).





# 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.

\* tie-breaker runners are not counted as a batter faced

# 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  |       |
|             |    |     |   |   |    |     |    |    |    |     |    |     |     |    |    |     |       |

**PI** 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.

**INN** 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

**H** Hits

**K** Strikeouts – all types whether the batter is out or safe

**BB** Walks

**HPB** Hit by Pitch

**RS** Total Runs Scored\*

**ER** Earned Runs – green runs only

**WP** Wild pitches

**BLK** Balks

**PO** Pick offs: PO 1-#

**PCS** Pitcher caught stealing: CS 1-#

**BFP** Batters faced (completed turn)\*

**B** Total number of balls pitched

**S** Total number of strikes pitched

**PIT** Total pitches thrown

**W/L/S** Win, loss, save

\* tie-breaker runners are not counted as a batter faced, but if they score, the run is counted towards the pitcher that started the inning



# Catcher

|            |   |
|------------|---|
| <b>INN</b> | Innings as catcher.<br>Based on the number of outs that occurred while the player was catching.<br>3 outs = a whole inning<br>2 outs = 0.2 of an inning<br>1 out = 0.1 of an inning |
| <b>PB</b>  | Passed Balls  |
| <b>SB</b>  | Stolen bases<br>(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        |

Note: all tie-breaker runners need to be added to the top SUM to balance the box score.

# 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.

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