

Dice Baseball

What is it: A long-played math baseball game using dice. It's a fun at-the-end-of-class or at-home game.

What you need: Two participants, two dice, four place markers, a sheet of paper with a baseball diamond drawn on it.

Object of lesson: Having fun with math and giving students a possible math game for the summer.

What they'll learn: Basic multiplication, decimals and fractions, and baseball rules.

BATTING TABLE

Dice roll/Result	Dice roll/Result	Dice roll/Result	Dice roll/Result
2/Strike	3/Fly out	4/Single	5/Ground out
6/Strike	7/Fly out	8/Double	9/Ground out
10/Triple	11/Foul ball	12/ Home run	

Game Rules

- 1) Basic baseball rules are followed for this game: Three outs for each team in an inning; a run is scored when a player crosses home plate; the winner has the most runs at the end of the game.
- 2) To start the game, roll the dice to determine who will bat first. That player then puts his/her marker behind home plate.
- 3) Each player keeps one dice. To begin game, each player rolls their dice (or makes the pitch). The two dice are added together for the result of the at bat (see the batting table). For example, a 3 and 5 equals 8 for a double.
- 4) A game can be as many innings as you wish. A typical in-class game is 3 innings, which takes about 10 minutes.

League Rules

If you wish, you can have your class form two leagues: the National League and American League. Students can pair up to become managers of one team, with each team choosing a nickname. (Don't worry, there's math to figure out with this task)

Provide a schedule for the league, by letting students know what days the league will play. Each should play every other team in the league at least two times. Meet as a class to review the two league schedules. Now comes the math: Have both leagues model their mathematical scheduling strategies through diagrams or charts, demonstrating how they accounted for all possibilities. Distribute copies of the schedule to the class.

League Standings

Have students record the final scores of each of their games, then arrange for partner teams to take turns collecting and analyzing the results. They should report back with the overall win/loss record, winning percentage in decimal form and a ranking for each team. You might want to provide a mini-lesson on using division to find percentages, either as a paper-and-pencil exercise or with a calculator. This is a great opportunity to see clearly the relationship between fractions and decimals. Check and post each results report.

Sample Standings

Team	Games	Wins	Losses	Win Pct.
Mariners	5	4	1	.800
Athletics	5	3	2	.600
Angels	5	2	3	.400
Rangers	5	1	4	.200

Source: Special thanks to teacher-advisor Bob Krech, who actually put this game to paper for scholastic.com a few years back. While this dice game exists in many forms, we drew a lot from Bob's version of Dice Baseball.