## MATH BASEBALL

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## CREATION IDEA / SOURCES:

Math Games for the Elementary School Classroom by Darrell E. Phillips, http://www.helium.com/items/964010-math-games-for-the-elementary-school-classroom

This article gave us the idea to use a popular sport as a classroom game to incorporate fractions, decimals, and percents. We modified it so that it involves more of the students at once and we changed some of the rules.

GAME DESCRIPTION: Step up to the plate and use your knowledge of fractions, decimals, and percents to bat your way around the bases in this fun and modified version of America's favorite pastime.

MATH SKILLS EMPHASIZED: Percent, decimal, and fraction conversion
GAME PLAYER CONFIGURATIONS: Split class into two teams (best if played with 810 students per team, if there are more than that they can be split into three teams if needed)

## NEEDED MATERIALS FOR ELEMENTARY OR MIDDLE SCHOOL CLASSROOM:

- Chalkboard/whiteboard
- Dry erase pens
- Different colored magnetic markers or some other form of representation for runners on the bases
- Scratch paper
- Stopwatch or clock with second hand
- List of at least 20 questions and bonus "Home Run" questions (more challenging) (see included template for sample questions)
- Baseball hat or some other device to put the questions in to be drawn out.


## THE CLASSROOM / HOW TO PLAY THE GAME: NOTES FOR THE TEACHER

Before the Game:

- Draw a baseball diamond on the board
- Create math questions on note cards regarding percent, decimal, and fraction conversions or copy included question and answer cards on card-stock and cut out.
- Group students into 2 teams; if necessary, group higher level students with lower level students

During the Game:

- Directions:
o One player from each team goes up to the board.
o One question is drawn from the baseball hat and read aloud to the students (or have questions numbered 1-20 and have students pick a number that will correlate with the question).
o Both students solve problem (writing out their work on the board). 2 minute time limit.
o First student to get the correct answer gets to move their marker up a base.
o The team scores a run when the marker has made it all the way around the bases to home.
o Two new students come up to the board.
o The team that loses the previous round then gets to pick the next question.
o Play continues until one team reaches 5 runs and is declared a winner.
- Rules:
o To begin the game, one representative from each team plays Rock, Paper, Scissors to determine who gets to draw the first question.
o Team that loses the previous round gets to draw the question for the next round.
o Students must show all their work on the board.
o Team members can help the student at the board but only the current batter is allowed at front of the room.
o NO pinch hitters are allowed unless the game is in Home Run round (specified only by the teacher; the Home Run round can be used if short on time or in case of a tie breaker)

After the Game:

- This is a good time to assess what students have learned when they do their work on the board.
- If needed, teams may be mixed up if they the skills of the students were not evenly distributed.

Possible Game Extension:

- This game can be used for any grade level (simple addition, subtraction, multiplication, etc.) and also for whichever subject you are working on (history, English, spelling, etc.)

