

# T/E Intermediate 3-4 Mathematics

## May 2012



### Sports and Math



Strike One, Strike Two, Strike Three, You're Out. Between professional sports and youth sports, these are familiar sounds this time of year. With practices, games and cheering for your favorite teams, you may not have stopped to think of the math that is involved in sports.

One type of math that is present in all athletics is data analysis. With the spring sports underway, there are many natural opportunities to study statistics and use data to create graphs, interpret information and make predictions. Although data is often presented to children, and they need to interpret it and make decisions based upon it, this topic is one that is not frequently investigated outside of school.

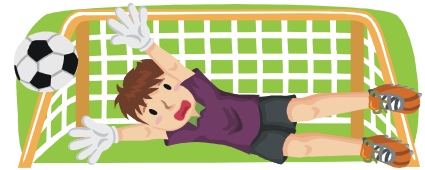
Students can use the data from their favorite team, be it a professional baseball team, or their own team, to create different types of graphs. For example, they can graph the number of wins for the team or the number of runs scored; make a double bar graph comparing the number of runs scored by their favorite team vs. the number of runs scored by the team's opponent. Students can also practice creating pie charts for a series of games, or make a line graph showing their favorite players' number of hits spanning the season.

Students can use the above information to find the average number of runs scored by their favorite team and compare that to the average number of runs that were "given up" to the opponents. They can use that to make predictions about future games.

Students can also use their personal statistics to find their own batting averages. Although this is slightly simplified, this is basically the process.

Add up your number of hits. Count your number of at bats. (Safe hits, hitting into an out and striking out) Divide your hits by your "at bats." Round to the nearest thousandth, and then you have your batting average.

So, remember the next time you "shoot and score," use the information from your game to practice graphing, finding averages and make predictions about the outcome of future games.



On NCTM's website, there is an activity called Fun with Baseball. It uses the many statistics that are present on baseball cards. Here is the link to it.  
<http://iem.nctm.org/link.php?M=1813951&N=1326&L=4518&F=H>

