

# Great Books to Count On

## • Keep 'em Reading •

Grades  
3-6

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### Taking a Bite Out of Fractions and Percents

When I think of fractions, I don't automatically think of pizza—and I bet most students don't, either. I'm not convinced that pizza is the most organic or intuitive way for the brain to process the concept of fractions. But learning fractions has gotten to be awfully pizza-centric, and there are still a lot of students out there who just don't "get it."

How about a different, pizza-less approach to edible math lessons? The incorporation of different kinds of snacks can help to make learning math more fun (and often, the snacks are the lessons). So have fun with the activities and book suggestions here. They can add a whole new dimension to number crunching!

#### Fractions with Mike and Ike

Gather students in a circle. Open a box of Mike and Ikes and place the candies on a paper towel so the pieces stay in one place. Ask two or three students to start sorting the pieces into rows by color. The rest of the class should count aloud as they go. They will end up with various-sized rows, depending on how many of each color are in the box. When I ran this activity, my box yielded 18 yellow, 16 reds, 17 greens, 13 orange, and 27 turquoise. Total count was 81. So yellow represented  $18/81$ , red was  $16/81$ , green was  $17/81$ , orange was  $13/81$ , and turquoise was  $27/81$ . Your box will likely yield a similar set of fractions that may or may not be able to be reduced.



Discuss the fractions that you see. Do they look like the fractions you see in a workbook? What is different about them? Can they be reduced? This exercise is a great way to familiarize students with fractions they may not normally see in their math books, as the fractions may have large denominators, prime numbers, etc.

Now try this exercise with a bag of Skittles. Break the class into groups of three or four and give each group a bag of Skittles to investigate.



#### Money Counts



They're not edible, but coins are a great vehicle for extending the Mike and Ike/Skittles fractions activity. Students can be in groups for this activity, or you can demonstrate while teaching the lesson.

Put a handful of money on the table. Arrange the rows by type of coin: pennies, nickels, dimes, and quarters (don't count the pocket lint!). Record what you see. How many coins altogether? How many of each kind? Record the fractions that go with these counts. For instance, in a group of six pennies, four nickels, three dimes, and a quarter, the dime count would be  $3(\text{dimes})/14(\text{coins})$ . Once you figure out the fractional money rows, go one step further by dividing the rows of coins into rows that are heads up and those that are tails up. What new fractions can be made from these new rows?

If your students are ready for a tougher challenge, have them figure out the monetary value of each row of coins, and add the rows together to find the total monetary value of the group. What fraction of the total value does each row of coins represent?