Preface

I have a confession to make. I was one of those kids who never considered using the words *math* and *fun* in the same sentence! I struggled to understand math; I certainly didn't consider myself to be successful at it; I can't remember ever enjoying a single moment of it (probably a mild understatement!), and I avoided it like the plague in college!

Then, suddenly, I was an elementary school teacher, and I had to teach math! Well, how hard could it be? I only had to teach up to third grade math. I had managed to memorize the multiplication facts. What about fractions? The thought of multiplying fractions terrified me. No, you don't have to multiply fractions in the third grade. Whew! I was pretty sure I could do this!

I quickly realized that I was teaching math the way it had been taught to me in elementary school. Even though I had been an elementary education major in college, there had been no classes on how children learn math and how it should be taught. (Unfortunately, I think the situation is only a little better today.)

Needless to say, I was uninspired and uninspiring. I wasn't an effective math teacher, and neither my students nor I were in any way captivated by, or fascinated with, math. I decided that this status quo was not acceptable. I didn't want to repeat the past. I wanted to be a good teacher and I wanted my students to love math! I had heard that was possible, although you certainly couldn't prove it by me! I had a lot of math to learn and a long way to go before I could teach it well.

I began by spending an entire summer at a math institute for elementary school teachers at the University of California at Riverside. Math started to become understandable. It was definitely challenging, exciting, and, yes (gasp!), fun! Who knew? All right, that was all well and good, but I realized that the journey had only just begun. I began work on a Master of Arts in Elementary Education at California State University at San Bernardino. My particular emphasis was on brain-based learning—how children learn and what that means regarding how they should be taught. I packed two years of course work into just five years! That's what happens when you are teaching full-time and working on a master's degree.

I read everything I could get my hands on about how children learn math and how to teach math in engaging and effective ways. As I learned, I began to change the way I taught. One of the things I realized was how very important it is to listen to and learn from the children—they are great teachers!

Much changed in my math classroom. One of the learning tools I began to experiment with was math games. As I watched the students play, I quickly realized that games were a wonderful, useful teaching tool.

In the years since I retired, I have worked in elementary schools all over southern California helping teachers, parents, students, administrators, and after-school child-care workers use math games to support their children in learning and practicing math concepts and skills. Their enthusiasm for these games as a teaching tool encouraged me to compile them, including their education rationales and some pointers I have picked up from playing the games with children.

The games in this book will provide children with—

- engaging opportunities to discover math concepts;
- stimulating math reinforcement; and
- the chance to discover that math can be fun and not threatening or frustrating.

For parents and teachers, the games offer another effective and engaging way to help their children.

The best part is that parents, teachers, and children will enjoy playing the games in this book. So, get everyone together and start playing! Have fun!

More4U

Many of the games in this book use materials such as cards, number lines, recording sheets, and game boards. These can all be found for downloading and printing on NCTM's More4U online resource. Simply go to www.nctm.org/more4U and enter the access code that is on the title page of this book.