

# Math Manipulatives: Learning to Control the Chaos

By [Meghan Everett](#) on August 24, 2012



Hands-on learning facilitates good instruction, but it can be so hard to implement! If you are like me, you want to be the kind of teacher who creates a free environment where all the students are creatively engaged, but somehow this conflicts with the desire to control your class and keep order. This is the challenge that I deal with each time I get the math tools off the shelf. It is easy for me to let my kids' creativity reign supreme over art, literature, and even science, but the minute those math cubes hit the floor I want to scream!

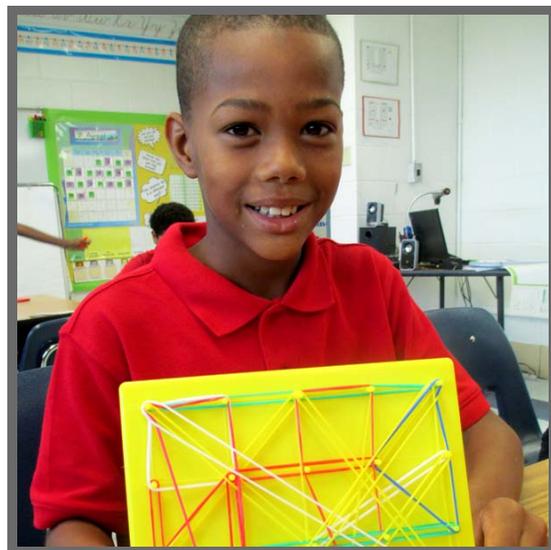
Here are a few tips I've developed to calm myself and make a pleasant math environment where everyone is happy.

## Play

Yes, I said it; the dreaded P word. The fact is students want to play with the math tools. Let's face it -- didn't you make a tower in your last math workshop too? I know I did. So each time I introduce a new math tool during the year, I let my students have a certain length of time to explore it. Then when it's time to get down to work, you can remind them that they had time for this early exploration and now you expect them to get serious. Sometimes my students automatically start creating patterns or sorting in ways that lead into our lesson. Bonus!

## Talk the Talk

I know I said to let them “play” but I never, ever use that word when working with my class. Instead, I use “explore” and “discover,” my dice become “number generators” and blocks become “math tools.” We want our students to feel there is a real reason these tools are out and that work will be done with them. Calling them more mathematical names and creating a serious atmosphere with your word choice is the first step in control.



## Set Ground Rules

After one or two short tries with the phase ten blocks during my first year of teaching, I was ready to give up and never get them out again. You know the exact moment that I’m talking about... that ten-stick has plunk against the ground for the hundredth time just when you notice group three has set up an elaborate hockey rink with their tools. Here’s the one, two, three of getting control over the lesson. First, explain and demonstrate the task before you ever let the students lay hands on the tools. Next, make sure your lesson has a clear focus and outline the desired outcome, so students know exactly what should be done and how much time to do it. Finally, repeat my favorite mantra, “Take your hands off the tools.”

Any time you expect the students to listen or you need to add instructions, make sure each little pinky is off the tools so that all their focus is on you.

## Have Fun!

Though students will not hear the “play” word, that doesn’t mean lessons have to be stodgy! Think of your desired outcomes. If you want to know if a student can count the phase blocks, let her build a tower and tell you how much it is “worth.” Creating patterns? Use items that fit the current holiday, like conversation hearts or stickers. Let students make pictures or designs with pattern blocks and then tell you the fraction of each color or geometric shape. The possibilities are endless, and isn’t fun in learning the whole point?

## Connect

Don’t forget the web resources for math are wide open. Here are just a couple I reference for math and manipulative work:

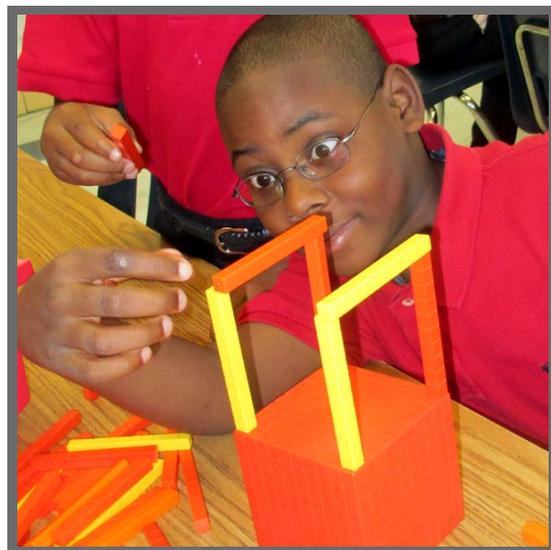
[Teacher Share](#) at Scholastic has hundreds of lesson plans and activities. Just search “math manipulative” for a

variety of ideas to get you started.

[The National Library of Virtual Manipulatives](#) makes Smartboard demonstration easy!

[The National Council for Teaching Math](#) has 105 online activities for getting your students engaged.

[ETA Cuisenaire](#), and a variety of other supply companies, provides free online lessons for the popular tools. If you have a tool you enjoy, check the company website for more ideas and resources.



I'm always ready to hear how manipulatives are being used in other classrooms, and we all love a good "block up the nose" horror story. Be sure to share your classroom adventures and advice!



[Back to Top](#)