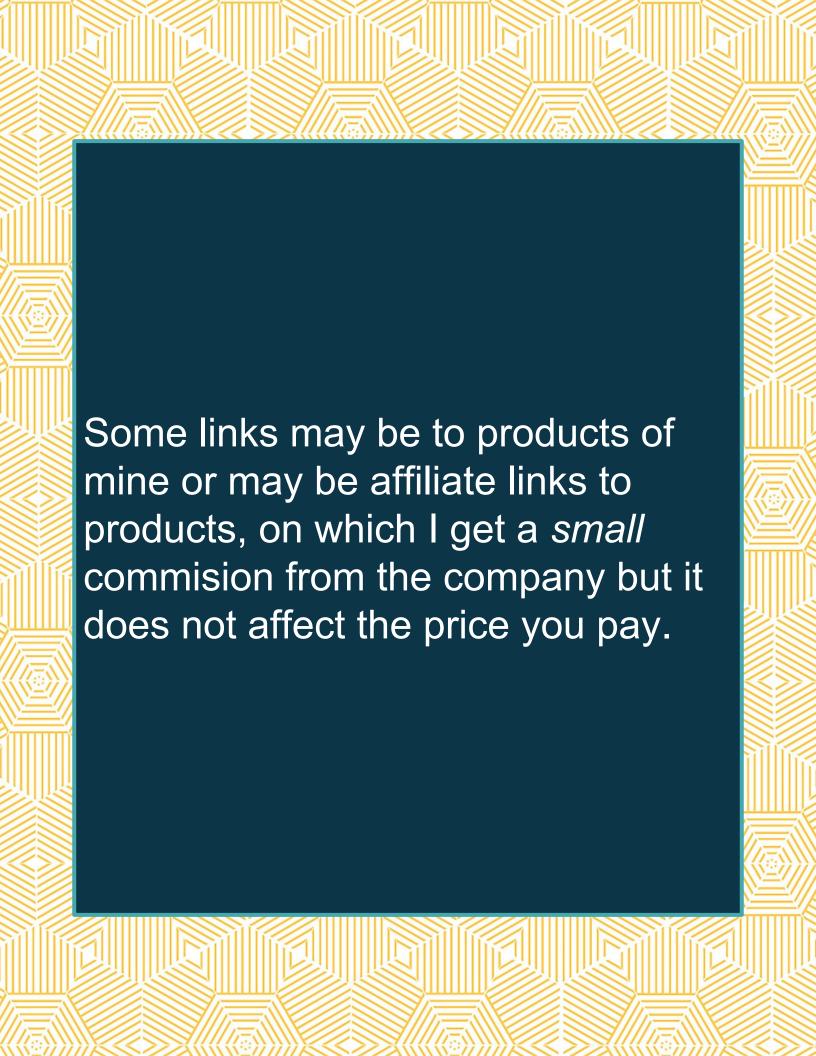


# PreK-2 Math Manipulatives

MUST HAVE MANIPULATIVES FOR THE PREK-2 MATH CLASSROOM



## Hi! I'm Christina

IT'S MY PASSION TO HELP TEACHERS AND CHILDREN LEARN TO LOVE MATH

Teaching math isn't easy and for a lot of teachers, it isn't fun...like AT ALL!! Especially in this era of education, there is a lot of unknowns about what and how we should be teaching. You are NOT alone.

With the implementation of new standards, assessments, and (for some) new curriculum, teachers are feeling bogged down and yet left out on their own to make sense of it all. I'm here to help with that.

I am a former middle school math teacher who learned, and taught, math the traditional way. That was until I realized that many of my students did not learn math the same way I did. So, I embarked on a journey to increase my understanding of mathematics in order to teach it to my students. Now I am a Recovering Traditionalist and a teacher educator who gets the pleasure of helping other teachers learn what I learned about how children think about mathematics.

I work with schools and districts to help teachers focus on the math content that is THE MOST IMPORTANT and how to weave that into instruction if it isn't already in their curriculum (which most of the time it isn't). I vlog about some of the issues that come up during the PD I do over at The Recovering Traditionalist.



### **Number & Operations**

Rekenreks help to build number sense and fluency with addition and subtraction. They are the #1 manipulative that I recommend in the early grades.

Ten Frames help to build number sense and fluency with addition and subtraction

Magnetic Demonstration Ten Frames

Student Ten Frames

Number Paths and Number Lines give a linear view of numbers and how they relate to each other. Kindergarten and 1st grade should be using number paths to help lay the foundation to understand the transition to the number line that is a measurement view of a number. I like these <a href="Number Path Pocket Chart">Number Path Pocket Chart</a> because you can put in any numbers you are working on.

I like this set of 6 Problem Solving Whiteboards from Really Good Stuff because they have some of my favorites built in. These boards have a number path, ten frame, and space for kids to explain their thinking and a reminder to attach an equation to their thinking.

### **Number & Operations**

Math Balances help kids get a visual of equality which helps them better understand addition and subtraction.

Interlocking Cubes are great for counting but also help kids as they move into building the area model for multiplication and modeling volume.

Cuisenaire rods are something I really love for older elementary but I'm starting to come around to them for the younger grades as well. My only concern is that the rods might be too abstract for some of your kiddos. For example, with the rod that represents 3, you don't see 3 things. It's only "3" if the white rod is "1." So if you think the rods might be too abstract for your kids, I'd just stick with linking together the Interlocking Cubes and making rods out of those. If you want to try out Cuisenaire Rods, try this <a href="Classroom Kit">Classroom Kit</a>. It gives you the rods, an activity book to learn how to use them with the kiddos, plus the very cool Math Cooperation Mats. I also love having a demonstration set of any manipulatives I use, so check out this <a href="Magnetic Cuisenaire Rods set">Magnetic Cuisenaire Rods set</a>.

Dice are great for playing all kinds of games and I really LOVE these new Multiple Representation Dice from Hand2Mind that incorporate all different types of representations on the dice instead of just dot patterns. These dice have ten frames, tally marks, base ten, and numerals.

### **Number & Operations**

Playing Cards are also great but I wanted a way to have multiple representations on the cards. So I created <u>Savvy</u> <u>Subitizing Cards</u>. These cards have 6 different representations of each quantity 0-10. Kids get to see the quantities represented as dot patterns, tally marks, ten frames, rekenreks, numerals, and finger patterns. You can use them for any game your students play with normal cards and it takes the game to a whole new level and builds their number sense along the way.

The Double Sided Hundred Chart is great for really focusing on patterns within a hundreds chart. I like this one because the back side is blank and allows you to mix up where you "start" the hundreds chart. Instead of always having the 1 be in the top left corner, put the 1 in the bottom left. Can the kids fill out the chart that way? Can they figure out where 13 would be? The types of pattern explorations you can do with an empty hundreds chart are endless.

Interlocking Base 10 Blocks allow kids to see the Base 10 Blocks being built. One issue with Base 10 Blocks is that kids see the 10 block as just a bigger 1 because it's just one piece. These interlocking blocks allow kids to actually build the 10s and 100s to see how the 10 things become 1 ten and how 10 tens becomes 1 hundred.

#### Measurement & Geometry

<u>Pattern Blocks</u> not only help kids develop their understanding of Geometry but are a great way to build spatial reasoning.

<u>Tangrams</u> are a great way to build students' spatial reasoning. I love doing Tangram activities like <u>these</u>.

<u>Dive into Shapes Set</u> let's kids explore 3-dimensional shapes and build their spatial reasoning as they build the shapes.

Even though we have so many digital clocks in our world, it is still important for kids to learn to tell time on analog clocks. <u>Judy Clocks</u> are the best because the hands move together. As the minute hand moves around the clock the hour hand moves proportionately.

While money isn't a mathematical concept, it is a context that we use to help teach many math concepts. Kids need experiences with actual dollars and coins, but they aren't getting those experiences in their life outside of school. So consider getting a <u>set of play money</u> and create a class store. I also love this <u>magnetic set of money</u> to use for demonstrations of story problems that involve money.

Rulers are so important to learn how to use, but for young kids that measurement view of an amount is so hard. That's why I recommend the <u>Inchworms and Centibugs rulers</u>. These are wonderful in helping kids still see the quantity and relating it to a length.