## How to Start Building Math Confidence in Preschool

Teachers can get kids comfortable with math concepts by using numeracy-focused vocabulary in everyday classroom activities.

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Math has a terrible reputation. Many people are convinced that math is either boring or too difficult. Fortunately, young children aren't jaded—yet!

Math learning doesn't start with numbers on a worksheet. The way we use and talk about numbers, patterns, and comparisons in daily life has a far bigger impact on early math literacy and eventual success in formal math classes in school. Even before children learn how to count, they absorb mathematical concepts through everyday conversations and actions, from noticing that one apple is bigger than another, to <u>observing patterns in nature</u>, to noting that a ball and a tortilla are both round (one a sphere and one flat).

Children who develop strong math vocabulary and <u>number sense between ages 3 and 6</u> perform significantly better in elementary school—not just in math, but in reading as well. The concrete feedback that comes from early math practice helps develop stronger self-esteem and self-perception, leading to greater willingness to experiment with ideas and learn from mistakes.

For us as educators, it's our job to hype math up—and pass that enthusiasm to the children and to their parents—so that no one utters the dreaded phrase "I'm not a math person." Because the truth is, we're all math people, all day, every day—we just don't realize it.

## Math is a Language

To start, it's important to understand that math is fundamentally a language—a rich vocabulary that describes size, quantity, time, measurement, weight, scale, proximity, placement, and relationships. We use math words to describe—"backward," "deep," "full," and "sideways"—as well as quantitative terms like "10 tons," "5 feet," and "365 days." The question isn't whether young children can handle math concepts; it's whether we're giving them enough opportunities to engage with mathematical language and play.

You can start doing just that by weaving math talk into your existing classroom routines indoors and outside. Here are a few vocabulary categories and words to consider using:

**Quantities:** More, less, equal, empty, full, half; counting or naming numbers while matching them with objects

Patterns: Alternating, repeating, sequence, rhythm; sorting

Measurements: Longer, shorter, heavier, lighter, faster, slower

**Spatial relationships:** Over, under, between, above, below

The best news? Numeracy talk and numeracy play don't demand specialized materials or extra time; they simply require intentional integration into activities you're already doing in your classroom.

## 5 Simple Ways to Incorporate Math Words Into Your Classroom

I've outlined five simple ways to bring math words to the forefront—all of which you can start right now.

**1. Morning meeting: Setting the mathematical stage.** Transform your morning circle time into a numbers-rich experience. When you discuss the day's schedule, engage children in math-centric conversations: "How *many* activities do we have planned today? Let's *count* them together."

The weather is a perfect opportunity to weave in math language. Place a thermometer in the window, and give children an opportunity to record the temperature each day on a clipboard chart. This simple routine introduces measurement, comparison, and data collection.

At the end of each month, count and record: "How many days were sunny, rainy, snowy, or foggy?"

**2. Classroom transitions: Order and patterns.** Transitions offer natural opportunities for positional and ordinal language. Instead of randomly calling children to line up, use mathematical criteria: "Today, names that begin with M are *first* in line. Everyone else, line up by *height* from *shortest* to *tallest*." Practice formations: "Let's line up *two by two*—how many *pairs* do we have? Are there any friends *left over*?"

Walking through the hallway can become <u>a lesson in spatial relationships</u>: "Stay on the *right* side, walk *one after the other* with some space."

**3. Snack and lunch: Shapes, sharing, and fractions.** Mealtime naturally incorporates basic geometry. Ask questions that highlight these concepts: "Who brought something *circular*? Something *square*? Something *layered*?"

Use food for informal fraction lessons. Cut an apple in half, then into quarters, then into eighths. "If we have *four* children to serve and *eight* apple pieces, *how many* pieces will each child get?" These realworld applications make abstract concepts approachable.

- **4. Recess and playtime: Movement and counting.** Outdoor time offers plenty of math vocabulary opportunities. Count playground equipment: "How *many* balls are in our box today?" Describe motion: "The swing goes *up and down, back and forth.*" Use ordinal numbers for turn-taking: "Sarah is *first* on the slide, Nico is *second*, and Lily is *third.*"
- **5. Story time:** Literacy meets numeracy. Reading aloud provides the perfect opportunity to reinforce math concepts. Point out the title on the *front* of the book, demonstrate *left-to-right* and *top-to-bottom* reading progression. *Match* pictures with text. Stories about pairs, quantities, shapes, and patterns seamlessly blend literacy with numeracy, showing children that math is everywhere. Here are a few of my favorite books, taken from my years as a literacy specialist:

- Pairs: *The Missing Pairs*, by Yvonne Ivinson; and *Two Together*, by Brendan Wenzel
- More/too much: <u>More</u>, by I.C. Springman, illustrated by Brian Lies; and <u>Too Much Stuff</u>, by Emily Gravett
- Divide and multiply (without even knowing it!): *The Doorbell Rang*, by Pat Hutchins; and *Each Orange Had 8 Slices*, by Paul Giganti Jr., illustrated by Donald Crews

The beauty of this approach is its simplicity: recognizing that math already exists in and out of the classroom and giving it a voice. When you do, you'll help your children discover that math isn't something to fear or avoid—it's a natural language that helps us understand and describe our world.