

Math Moments that Matter

FIRST GRADE

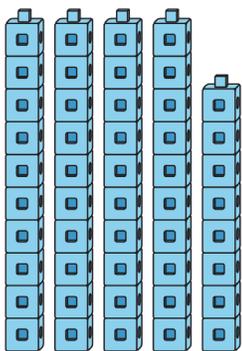


Place Value and the Base-Ten System

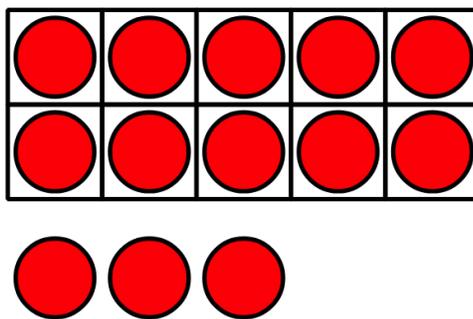
In 1st grade, students learn that numbers are built from tens and ones—kind of like stacking groups and leftovers. They use connecting cubes, ten-frames, and drawings to show how a number can be made in different ways, such as showing 14 as one ten and four ones. These experiences help students notice patterns in our number system and build a strong foundation for understanding larger numbers with confidence.

Students use connecting cubes, ten-frames, and counters to show how numbers can be built from tens and ones. In the first image, stacks of connecting cubes show 48 as four tens and eight ones. In the second image, a ten-frame shows 13 as ten ones and three more. When students build numbers in different ways, they begin to see that tens and ones work together to make any number. These simple models help students make sense of place value and explain their thinking in clear, student-friendly ways.

EXAMPLE: Connecting cubes showing tens and ones for 48



EXAMPLE: Ten-frame showing 13 red counters



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Modeling and Data Analysis in Math

When 1st graders work with tens and ones, they use tools, drawings, and simple number models to show their thinking. Modeling isn't just building with cubes—it's about figuring out what the math means. They learn to:

- Use math to make sense of real situations, like counting objects or seeing how many more they need to make a ten
- Show what they notice using drawings, equations, or models
- Explain their thinking and how their model represents the problem
- Look at what they find and use it to understand the situation
- Try different models and choose the one that shows their idea most clearly

These experiences help students see that math is something they can understand and use to make sense of their world—not just something which they find an answer.

What You Might See in the Classroom

Students using connecting cubes, base-ten blocks, or drawings to build numbers with tens and ones.

Teachers asking:

- “Where is the ten in this number?”
- “Can you show 27 in another way?”
- “How many tens and ones are in 45?”

Students modeling numbers with tools and explaining how they know.

Students drawing base-ten models and labeling the tens and ones.

Quick partner talks: Students comparing numbers and explaining which is greater and why.

What You Can Do at Home

Use small objects to build numbers: “Let’s make 34 with groups of ten and leftover ones.”

Ask your student: “How many tens and ones are in 28?” or “Can you trade ten ones for one ten?”

Try it with everyday items: Make little piles with snacks or toys and group them into tens to see what number you’ve made.

Talk together: “Which is bigger, 47 or 42? How do you know?”

Play: Make a number with coins or snacks and ask. “How many groups of ten can you make?” Encourage your student to explain their thinking.

Make it a Math Moment!

Math helps us make sense of the world. When students build numbers with tens and ones, it helps them see how quantities fit together in clear and meaningful ways.

