

Math Moments that Matter

SECOND GRADE

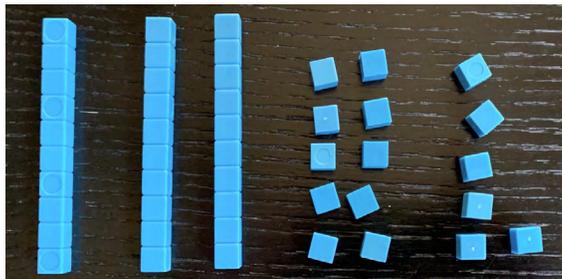


Place Value to 1,000

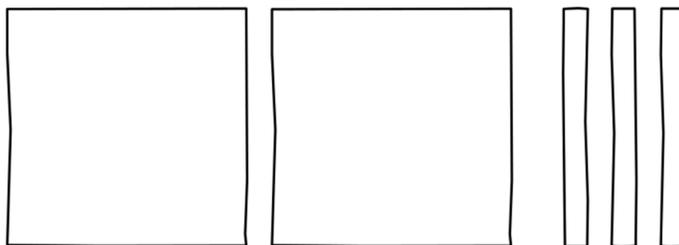
In 2nd grade, students grow their understanding of place value as they work with numbers up to 1,000. Using hands-on tools, drawings, and place-value models, they show how hundreds, tens, and ones come together to make numbers. As students group, count, and take apart numbers, they begin to notice patterns that help them understand larger numbers and prepare them for adding, subtracting, and problem-solving.

Students use base-ten blocks, drawings, and bundled straws to build and compare numbers. In the first image, students trade ones for tens and explain what they notice. The second image shows how a student might draw 230 using hundreds and tens. Connecting what they can see and touch to written numbers helps students understand how our base-ten system organizes quantities and how numbers relate to each other.

EXAMPLE: *Base-ten blocks showing tens and ones*



EXAMPLE: *Drawing models showing hundreds and tens*



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Modeling and Data Analysis in Math

When students work with hundreds, tens, and ones, they begin to see how math helps them make sense of the world. Modeling is more than building with blocks—it's using math to represent and explain real situations. Students model and analyze numbers when they count, compare, and group the objects they see every day. They learn to:

- Apply math to real-life problems, like figuring out how many more they need to make a hundred
- Identify important quantities and show them with drawings, diagrams, or equations
- Explain their reasoning and what their models represent
- Compare different ways to show the same number and choose the one that makes their thinking clear

Modeling helps students connect math to meaning, showing how numbers describe and solve real problems.

What You Might See in the Classroom

Students using base-ten blocks, drawings, or bundled straws to show hundreds, tens, and ones.

Teachers asking:

- “How many hundreds, tens, and ones are in 346?”
- “Can you show that another way?”
- “Which number is greater? How do you know?”

Students building numbers in more than one way (e.g., 245 as 2 hundreds, 4 tens, 5 ones or 1 hundred, 14 tens, 5 ones).

Students comparing numbers using symbols like $<$, $>$, and $=$.

Students explaining how regrouping or trading groups (like ten ones for one ten) changes how a number looks, but not its value.

What You Can Do at Home

Use household objects: “Let’s count 100 pennies by making groups of ten.”

Ask: “How many tens are in 120?” or “Can you show 435 with coins or blocks?”

Play: “How many ways can you make 300 using hundreds, tens, and ones?”

Compare: “Which is larger, 578 or 585? How do you know?”

Talk it out: “If we trade ten tens for a hundred, what happens to the number?”

Make it a Math Moment!

We can model the world with math. When students describe numbers as hundreds, tens, and ones, they’re building a picture of how larger numbers work.

Tap or Scan for Interactive Tools and More Resources!

