GRADE FOCUS

First Grade mathematics is about (1) learning strategies for adding and subtracting within 20; (2) developing an understanding of whole number relationships and place value, including grouping in tens and ones; (3) measuring length and using length units such as centimeters; and (4) reasoning about the qualities of shapes.

• Module 1: Sums and Differences to 10
• Module 2: Introduction to Place Value Through Addition and Subtraction Within 20
• Module 3: Ordering and Comparing Length Measurements as Numbers

» Module 4: Place Value, Comparison, Addition and Subtraction to 40
• Module 5: Identifying, Composing, and Partitioning Shapes
• Module 6: Place Value, Comparison, Addition and Subtraction to 100

LET'S CHECK IT OUT!

MODULE 4 FOCUS

In this 35-day module, students will study, organize, and manipulate numbers within 40. They will compare number quantities, using the symbols for greater and less than (>,, <). Students will work with adding and subtracting tens and will begin to add two-digit numbers.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

• Represent and solve problems using addition and subtraction
• Extend the counting sequence to 40 (In first grade, we will eventually count to 120)
• Understand place value
  » Understand that the two digits of a two-digit number represent amounts of tens and ones.
  » Compare two two-digit numbers based on meaning of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.
• Use place value understanding and properties of operations to add and subtract

TOPIC OVERVIEW

Topics are the lessons within a module that help children master the skills above. Here are the lessons that will guide your child through Module 4:

• Topic A: Tens and Ones
• Topic B: Comparison of Pairs of Two-Digit Numbers
• Topic C: Addition and Subtraction of Tens
• Topic D: Addition of Tens or Ones to a Two-Digit Number
• Topic E: Varied Problem Types Within 20
• Topic F: Addition of Tens and Ones to a Two-Digit Number

WORDS TO KNOW

• Greater than: shown by the symbol >, e.g. 10 > 4
• Less than: shown by the symbol <, e.g. 4 < 10
• Place value: quantity represented by a digit in a particular place within a number, e.g. the "1" in the number 17 represents a ten
SAMPLE PROBLEMS

SAMPLE 1
Some ways to indicate addition with group of 10:

\[ 26 + 10 = 36 \]

Arrow Notation

Quick Ten

SAMPLE 2
Some ways to show two-digit numerals:

Tape Diagram

Place Value Chart

Hide Zeros Cards

SAMPLE 3
The place value chart is a flexible tool. Young students can place chips on the chart, and physically move them as they bundle and group numbers. Older students can quickly create their own place value charts to illustrate their thinking for a problem and show their understanding of more complex numbers. In first grade, students use the chart extensively as they work to build their understanding of numbers up to 100, and will often be asked to use the chart to illustrate what each numeral in a digit represents.

The place value chart at this point in 1st grade consists of two boxes; the one on the left labeled "tens" and the one on the right labeled "ones".

Students will be asked initially to match a number of objects with the correct representation on the place value chart. Later, they will complete the place value chart to represent a given number of objects.

HOW YOU CAN HELP AT HOME

- Continue to practice counting up to 40 or beyond.
- Continue to ask your student to compare two different quantities, using the language "greater than" and "less than"
- Begin to ask questions such as "What does the 2 represent in the number 29?"