GRADE FOCUS

Second Grade mathematics is about (1) extending students' understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

» Module 1: Sums and Differences to 20
- Module 2: Addition and Subtraction of Length Units
- Module 3: Place Value, Counting, and Comparison of Numbers to 1000
- Module 4: Addition and Subtraction Within 200 with Word Problems to 100
- Module 5: Addition and Subtraction Within 1000 with Word Problems to 100
- Module 6: Foundations of Multiplication and Division
- Module 7: Problem Solving with Length, Money, and Data Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes

LET'S CHECK IT OUT!

MODULE 1 FOCUS

Module 1 sets the foundation for students to master sums (addition) and differences (subtraction) to 20. Students then apply these skills to fluently add one-digit to two-digit numbers at least through 100 using place value understanding, properties of addition and subtraction, and the relationship between these operations.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:
- Use addition and subtraction within 100 to solve one- and two-step word problems.
- Fluently add and subtract within 20 using mental strategies.
- Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

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 1:

- Topic A: Sums and Differences Within 100
- Topic B: Strategies for Composing a Ten
- Topic C: Strategies for Decomposing a Ten
- Topic D: Strategies for Composing Tens and Hundreds
- Topic E: Strategies for Decomposing Tens and Hundreds
- Topic F: Student Explanations of Written Methods

WORDS TO KNOW

- STRATEGY: Make ten and subtract from ten: strategy in which students decompose a number in order to make a ten, thus using simpler, known facts to solve the problem, e.g., \( 8 + 3 = 8 + 2 + 1 \) and \( 15 - 7 = 10 - 7 + 5 = 3 + 5 \)
- STRATEGY: Say ten counting: e.g., 11 is "1 ten 1," 12 is "1 ten 2," twenty is "2 tens," 27 is "2 tens 7," 35 is "3 tens 5," 100 is "10 tens," 146 is "14 tens 6."
- Ten plus: number sentences in which students automatically combine one addend with the group of 10 without having to count, e.g., 10 + 3 = 13, 30 + 5 = 35, 70 + 8 = 78
- Number bond: used to explore the part/whole relationships within a given number, e.g., for the number 6: 5 + 1 = 6, 1 + 5 = 6, 6 - 1 = 5, 6 - 5 = 1
SAMPLE PROBLEMS

SAMPLE 1

The goal of Eureka Math is to produce students who are not merely literate, but fluent, in mathematics. Your student has an exciting year of discovering the story of mathematics ahead!

Students will begin by using ten-frame cards. This is a ten-frame card. The card has 10 places to hold dots. This card only has 6 dots and we need 4 more to make 10. \(6 + 4 = 10\)

SAMPLE 2

Kayla has 21 stickers. She gives Sergio 7 stickers. How many stickers does she have left?

SAMPLE 3

Label each sentence as true or false.

\[26 + 4 = 20 + 10 \quad \text{true} \quad 58 + 5 = 50 + 10 + 2 \quad \text{false}\]

58 can be decomped to 50 and 8. What number can we add to 8 to make 10? (2) Decompose 5 as 2 and 3. To make this sentence true it should be: \(50 + 8 + 2 + 3 = 50 + 10 + 3\)

HOW YOU CAN HELP AT HOME

- Roll single digit numbers and add them together.
- Roll 2-digit or 3-digit numbers and add them together.
- Add all the digits of your house number together.
- Make a train with Legos or colored blocks. Write a number sentence for the different colors in the train.
- Represent two digit numbers with popsicle sticks – make bundles of ten for the tens and use single sticks for the ones. Add the piles together.
- Use small items (counters, beans, small toys) to represent number sentences. Use index cards to make +, -, <, >, and = symbols. Show a number sentence with a missing element: \(7 + \underline{\quad} = 12\). Have your student find the missing addend.