

Eureka Math Parent Guide

A GUIDE TO SUPPORT PARENTS AS THEY WORK WITH THEIR STUDENTS IN MATH.

GRADE 1
MODULE 2

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 2 FOCUS

Module 2 serves as a bridge from problem solving within 10 to work within 100 as students begin to solve addition and subtraction problems involving teen numbers. In Module 1, students were encouraged to move beyond the Level 1 strategy of counting all to the more efficient counting on. Now, they go beyond Level 2 to learn Level 3 decomposition and composition strategies, informally called make ten or take from ten.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Use addition and subtraction within 20 to solve word problems.
- Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.
- Apply properties of operations as strategies to add and subtract. *Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)*
- Understand subtraction as an unknown-addend problem. *For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.*
- Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making ten (e.g., $8 +$

$6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

- The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

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 2:

- Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems
- Topic B: Counting On or Taking from Ten to Solve Result Unknown and Total Unknown Problems
- Topic C: Strategies for Solving Change or Addend Unknown Problems
- Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones

WORDS TO KNOW

- **A ten** (a group, or unit, consisting of 10 items)
- **Ones** (individual units, 10 of which become a ten)
- **Ten frame**
- **Related Facts**
- **More**
- **Part Ones**
- **5-Groups**
- **Partners to Ten**
- **Teen Numbers**
- **Decompose**



SAMPLE PROBLEMS

SAMPLE 1

Mom baked some cookies. She made 8 chocolate chip cookies, 2 sugar cookies, and 4 peanut butter cookies. How many cookies did mom make?



$$\begin{aligned} 8 + 2 + 4 &= 14 \\ 10 + 4 &= 14 \\ \text{Mom baked 14 cookies.} \end{aligned}$$

$$8 + 2 + 4 = \square$$

$$\begin{array}{r} 10 \\ \wedge \\ (8) + (2) + 4 = 14 \end{array}$$



SAMPLE 2: SOLVE PUT TOGETHER/TAKE APART UNKNOWN ADDEND

Charlie ate 5 green apples and some red apples this week. If he ate 12 apples in all, how many red apples did he eat?



$$5 + \boxed{7} = 12$$

Charlie ate 7 red apples.

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.
- Add the price of two items at a store.
- Compare gas prices to find the lowest amount.
- Start with 20 counters (beans, pennies, etc.) and roll two dice to make a 2-digit number. Subtract counters until you get to 0.
- Give your student an addition or subtraction number sentence and ask them to make up a story problem to go with the number sentence.
- Make a physical array with counters and record on paper using symbols