

Eureka Math Parent Guide

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

GRADE K
MODULE 5

GRADE FOCUS

Kindergarten mathematics is about (1) representing, relating, adding and subtracting whole numbers, and (2) describing shapes and space.

- Module 1: Numbers to 10
- Module 2: Two-Dimensional and Three-Dimensional Shapes
- Module 3: Comparison of Length, Weight, Capacity, and Numbers to 10
- Module 4: Number Pairs, Addition and Subtraction to 10
- » **Module 5: Numbers 10—20 and Counting to 100**
- Module 6: Analyzing, Comparing, and Composing Shapes

LET'S CHECK IT OUT!

MODULE 5 FOCUS

This module is a key next step for kindergarten students in understanding place value beyond the numbers 1–10. We will first talk about teen numbers as “10 ones and some ones,” and extend that understanding to writing teen numbers. Finally, we will count to 100 by ones and by tens using various strategies.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Count to 100 by ones and by tens including count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- Write numbers from 0 to 20
- Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- Understand that each successive number name refers to a quantity that is one larger.
- Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.
- Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g. $18 = 10 + 8$.

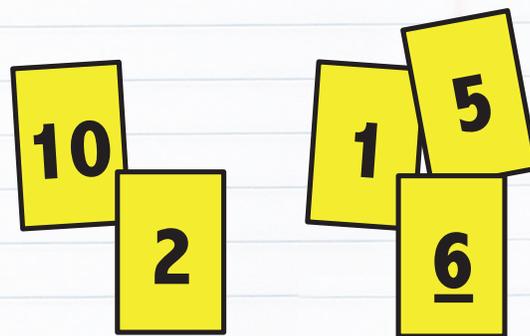
TOPIC OVERVIEW

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 5:

- Topic A: Count 10 Ones and Some Ones
- Topic B: Compose Numbers 11—20 from 10 Ones and Some Ones; Represent and Write Teen Numbers
- Topic C: Decompose Numbers 11—20, and Count to Answer “How Many?” Questions in Varied Configurations
- Topic D: Extend the Say Ten and Regular Count Sequence to 100
- Topic E: Represent and Apply Compositions and Decompositions of Teen Numbers

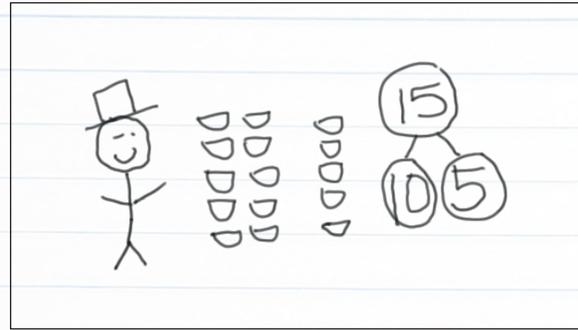
WORDS TO KNOW

- Counting to 100 in two different ways:
 - » Regular counting by tens: “ten, twenty, thirty”, etc.
 - » The “Say Ten” way of counting to 100: “1 ten, 2 tens, 3 tens,” etc.
- Hide Zero Cards (pictured)—cards used to teach and reinforce place value concepts
- 10 ones and some ones—a way to talk about teen numbers that emphasizes groups of ten as the basic place value concept



SAMPLE PROBLEMS

SAMPLE 1

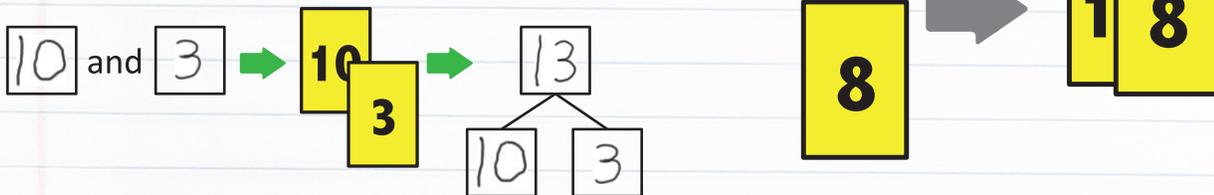


Another way of showing that 10 ones and 5 more ones make 15, this time with tacos instead of smiley faces! Note the use of the number bond as well.

In the two examples above, children practice thinking of teen numbers as 10 and a certain number of ones. In this case 15 can be broken down into 10 and 5 ones. Composing and decomposing numbers in this way helps build students' familiarity with our place value system, which is based on the number 10, and sets the stage for them being able to quickly add and subtract numbers down the line.

SAMPLE 2

The yellow cards are hide zero cards. Digits are used to "hide the zero" in order to emphasize that, for example, 18 is made from a 10 and 8 ones — and the ten is still there as part of the number!



Hide Zero cards are a way of showing that even as we compose and create numbers larger than 10, the 10 is still there, always part of the number.

Thus, we start with the numerals for 10, and cover, or hide, the zero, to make a new number, e.g. 10 and 3 ones. Students' concrete understanding, built up by counting and drawing physical objects, now moves toward a more abstract understanding of how the numbers 11–19 are created. They see the 10, and then the zero covered up to make a new number, but always with the understanding that 10 is a basic building block of that number. Number bonds, as above, are also used to reinforce this new understanding.