



# Eureka Math Tips for Parents

Grade K • Module 1

## Numbers to 10

In Module 1, students begin to observe and analyze the world around them mathematically. They will count, order, and draw up to ten objects. They will eventually work toward an understanding that each successive number names a quantity that is 1 more, and that the number before is 1 less. This is just the beginning of an exciting mathematical year for kindergarten students!

## Grade Level Standards

K.MD.3, K.CC.3, K.CC.4, K.CC.5, K.OA.3

## Student Report Card

- COG-1: Classification
- COG-2: Number Sense of Quantity
- COG-3: Number Sense of MATH Operations

## Key Vocabulary



**Exactly the same/not exactly the same/the same, but:** ways to analyze objects to match or sort

**Match:** group items that are the same or that have the same given attribute

**Sort:** group objects according to a particular attribute

**Counting path:** order of count, especially with large numbers

**Number story:** stories with add to or take from situations

**Zero:** understand the meaning of, write and recognize

**Number sentence:**  $3 = 2 + 1$

**Rows/columns:** linear configuration types

**1 more/1 less:** e.g., 4. 1 more is 5. 4. 1 less is 3

## How you can help at home:

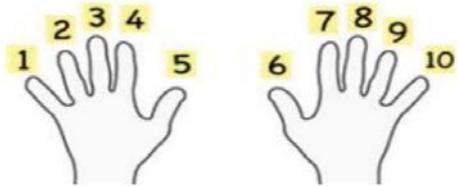


- Play the license plate game with numbers as you walk through your neighborhood. Have them look for a 1 on a license plate. Then find a 2, then a 3, and so on.
- Write your name and a family member's name. How many letters are in your name? How many are in your family member's name? Which name has more?
- Look through a store ad. Cut out numbers 0-20. Put the numbers in order from least to greatest.
  - Grab a handful of an item, cereal, beans, etc. Estimate how many pieces you grabbed. Now count them. Was your estimate close?
  - Estimate how many spoonful it take to finish a bowl of cereal. Count each spoonful as you eat.
  - Walk around your home. Count how items are plugged into the wall.
  - Show the number 5 in as many ways as you can. Use pictures and numbers.

# Models and Representations

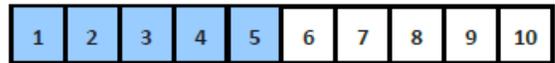
## Ways to count and show understanding of numbers to 10

### Finger Counting



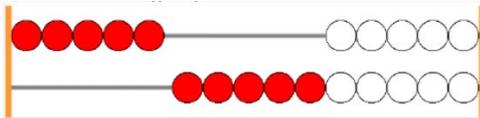
Students will be taught to begin counting on their left hand pinky finger, which would be the number 1, then the ring finger is 2, middle finger 3, pointer 4, and thumb is 5. Right hand thumb is 6, pointer is 7, middle finger is 8, ring finger 9, and pinky is 10. This method of counting leads into number paths and number lines.

### Number Path



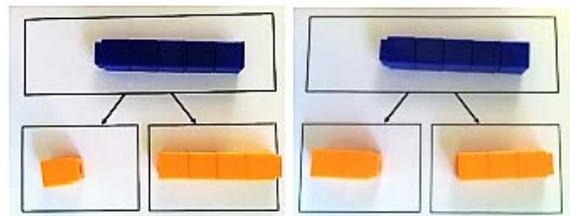
The number path is a foundation to understanding the number line. It also serves as a visual representation of 1:1 correspondence (one number, one space, and each being equal in size). If a student places 7 objects in each of the 7 spaces on the path, they must realize that there are 7 objects. The color change at 5 helps to reinforce the 5 and 10 benchmarks.

### Rekenrek



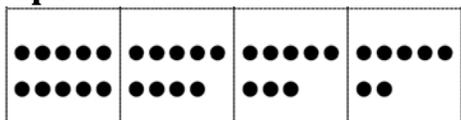
The Rekenrek is made of two strings of ten beads each, strategically broken into two groups of five red beads and five white beads. This model helps children think of numbers in groups of five and ten.

### Hidden Partners



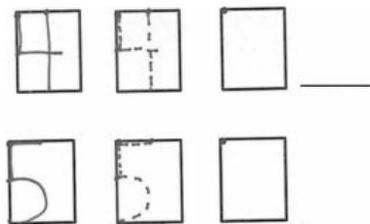
Students are asked to find hidden partners by representing numbers as a combination of two smaller numbers. For example, "I found 4 and 1 and 3 and 2 hiding inside my 5!"

### 5-Groups



Students learn to recognize and use the benchmark of 5 throughout this module. One use is for counting. To count the dots on the 7 card, students would start with 5 in the first row, and then count the dots in the second row, "5, 6, 7." Another use is for recognizing hidden partners with 5. For example, "9 is 5 and 4."

### Writing Numbers



Students will practice writing numerals from 0 to 10 in this module, practicing in boxes like those above until they are comfortable using just the line.

