

## Teaching Unit 1 (Continued)

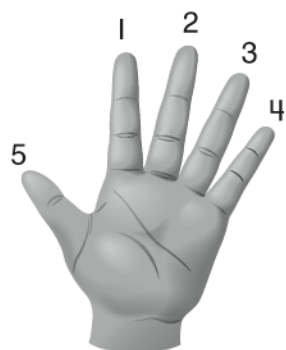
### Math Background

#### Fingers are Central to Early Math Understanding

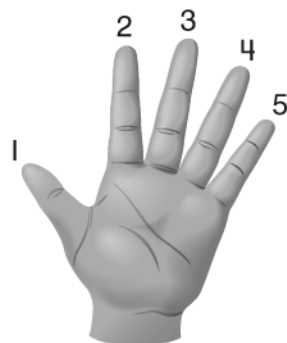
**Our First Math Tool** Children use their fingers as their first tools when they are developing beginning number concepts. When children are asked, “How old are you?” they invariably answer by showing their fingers. Children’s hands become their first calculator. Fingers are organized in base 5 (one hand) and base 10 (2 hands). In this unit, fingers will continue to provide support for children as they explore numbers and count to 10.

**Different Methods** You will want to be aware of, and discuss with children, the different ways they use their fingers to count and show a number. We believe children should use the method with which they feel most comfortable. Encouraging children to try different ways of using their fingers will help them understand that there is more than one way of counting out and showing numbers. Daily practice will strengthen and improve your students’ finger coordination. They will soon move from awkwardness to proficiency.

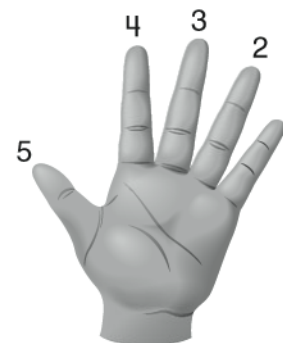
Some children start by putting up the index finger, then middle, ring, pinky, and the thumb last. Children in North America often do this. Others start with the thumb first and count across, ending with the pinky. Or, children may start with the pinky and end with the thumb.



Index First



Thumb First



Pinky First

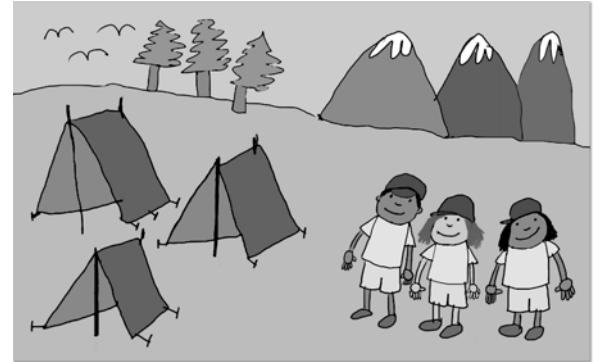
These last two methods are more common with Latino and European children.

No matter which finger children start with, they will count 5 fingers on one hand.

## Drawing Scenes

The drawings children do in this and subsequent units bring their lives into the classroom. This enables all children to learn about each other, to feel known, and to be comfortable in school.

Whole-class activities center around these drawings of real-life scenes that have groups of objects in a particular number. The activities begin in Lesson 1 as children are introduced to *Anno's Counting Book*, by Mitsumasa Anno. Reading and discussing the book becomes a model for children as they draw their own scenes for a given number.



## Geometry and Spatial Activities

Geometry and spatial concepts are woven into many activities as well as being the major focus of several lessons in this unit. Besides learning about basic geometric shapes, children compare and contrast shapes and size through spatial, visual, and kinesthetic experiences.

**Circle and Ball** Children sing a circle song as they form a circle. The attributes of a circle and a ball are discussed, contrasting 2-D and 3-D shapes. Such contrasts continue in other units.

**Large Balls and Small Balls** Children stand in a circle and pretend to pass large balls around the circle. Then they pretend to pass small balls.

## Counting Mat Activities

**Purpose** These activities enable all children to learn early number concepts and skills as well as develop vocabulary for spatial relationships, shapes, color, and more. In Unit 1, children initially work with the numbers 1 through 5 and then progress to numbers 1 through 10. They use number tiles and various counters on their Counting Mat. Children also work on Graph Mats with their counters.

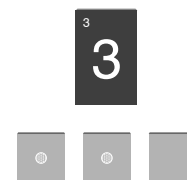
**Relating Numbers and Things** Children set up to get started and then they make a number.



First children put number tiles in order.



Then they identify numbers from spoken number words.



Showing objects to match the number follows this.