

Number Recognition

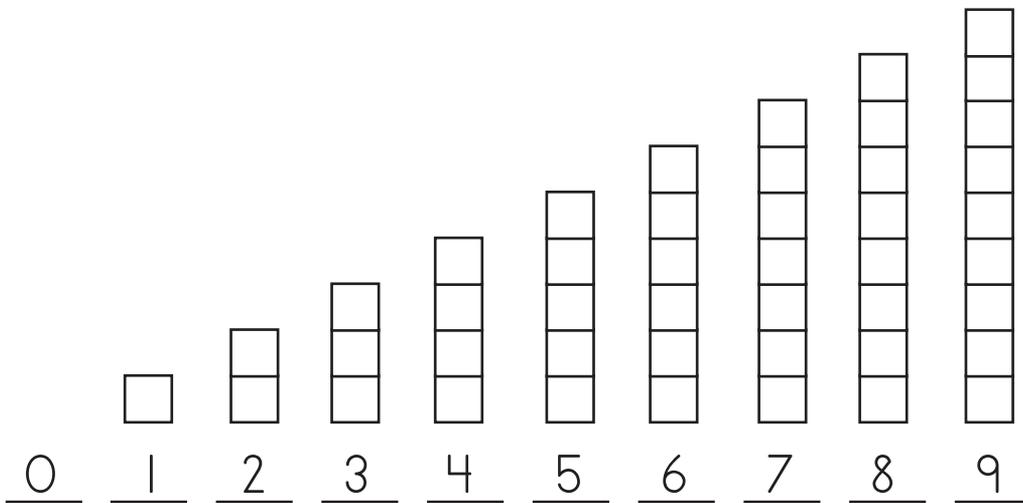
Counting from 0–9

The two skills needed to function in the decimal system are the ability to count to nine and an understanding of *place value*. In the *decimal system*, where everything is based on 10 (deci), you count to nine and then start over. To illustrate this, count the following numbers slowly: 800, 900, 1,000. We read these as eight hundred, nine hundred, one thousand. Now read these: 80, 90, 100. These are read as eighty, ninety, one hundred. Once you can count, work on place value. The two keys are learning the counting numbers zero through nine, which tell us how many, and understanding place value, which tells us what kind.

When counting, we begin with zero and then proceed to nine. Traditionally we've started with one and counted to 10. Look at the two charts that follow and see which is more logical.

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |

The second chart has all single-digit numbers in the first line, and then, in the second line, each digit in the units place is preceded by a one in the tens place. In the third line, each digit in the units place is preceded by two in the tens place. The first chart, though looking more familiar, has the 10, the 20, and the 30 in the wrong lines. When counting, begin with zero, count to nine, and then start over.



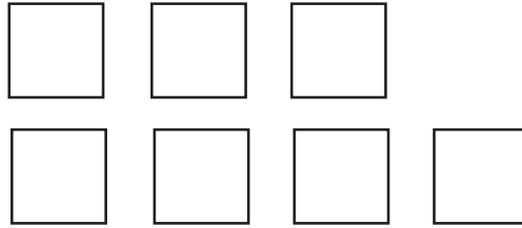
On the worksheets, the squares are the same size as the green unit blocks, so you can place the bars on the paper, count them, and then circle the correct number. When there are objects and pictures, count those and then circle the correct number. You can also have students trace over the numerals they circled to prepare them for writing. Remember to begin with zero when counting. Notice the senses involved: see the number of squares (visual), hear the correct number as you count (auditory), and build with the blocks (kinesthetic and tactile). Another way to combine the senses is to give a number verbally and have the student clap or jump that many times.

One of the reasons we use blocks is so that students recognize that numbers represent real things. On the worksheets, you will notice that we move from blocks to counting pictures of things, like frogs, crayons, and shoes. When counting real objects, be sure to arrange them in different patterns. For example, arrange the unit blocks in a circle as well as in a line.

Example 1

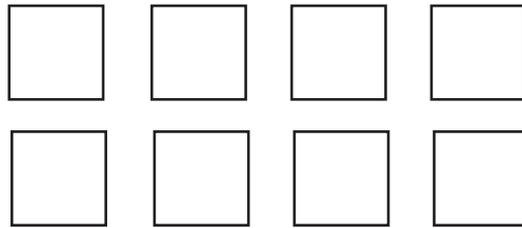


Example 2



0 1 2 3 4 5 6 7 8 9

Example 3



0 1 2 3 4 5 6 7 8 9

There are solution pages at the back of this instruction manual. The solutions for pages A and D are shown for each lesson.

