



Introduction

In *Specific Skills: Place Value* you will find a collection of reproducible math activities, pattern pages, and easy-to-play learning games to help students, especially struggling learners, develop an understanding of base-ten concepts and number quantities. Each book in this series also includes assessment opportunities in the form of a pretest/posttest, which has been formatted according to national standards. A special feature in this series is the “Place Value for Parents” letter. This reproducible handout incorporates math-related literature with fun at-home activities to further enhance each child’s understanding of place value. The authors believe that the letter will also encourage parental involvement. Finally, provided in the back of each resource book is a list of Web sites that may be useful to teachers and parents. Some of the Web sites are information based, which will be helpful in designing lesson plans. Other Web sites offer place value games that children will enjoy playing while learning number concepts at the same time.

Specific Skills: Place Value—Level 1 is aligned with NCTM (National Council of Teachers of Mathematics) Standards. The practice pages and partner games can be used in a variety of ways, including whole group lessons, independent student work, or as enrichment activities at home. Based on various standards, the activities cover the following essential math skills:

- Naming and writing numerals 1–100
- Counting ones and tens
- Using expanded notation
- Ordering and comparing numbers
- Adding and subtracting two-digit numbers

Before place value concepts are introduced to young children, it is important that they have had adequate practice visualizing number quantities by working with concrete materials. To do this, it may be appropriate to provide the children with certain quantities of identical objects, such as drinking straws or toothpicks, and guide them as they count and arrange the items into bundles of 10. You might also consider having the children work with ten-frame grids (Toucan Ten-Frame Grids pattern on page 9). Provide either dried beans or large pasta rings for the children to use on the grids to show quantities up to 20. Later, as the children become proficient with this task, they may enjoy playing the games “Thirty to Win!” and “100 Puffy Pillows” (directions on page 48). As their level of understanding advances, challenge the children by having them build number quantities between 20 and 100 on multiple copies of the ten-frame grids as well as complete the activities on pages 12–18. This process of arranging sets of identical objects into groups of 10 with “some left over” is an important step to master. When children have internalized this concept, they should be able to identify quickly how many tens are part of numbers 10–30 and they will then be ready for more challenging tasks using base-ten models to complete the remaining games and activities offered in this book. Please keep in mind that some special needs children may benefit from working extensively with ten-frame grids instead of plastic, proportional base-ten models (rods and units) or paper models (ten-strips and squares), because they can construct number quantities 1–100 on the grids. If your students are experiencing success with ten-frame grids and are having difficulty with number-comparison activities on paper, you might consider directing those students to use the grids when deciding which sign—greater than, less than, or equal to—makes a number sentence true.