



Introduction

The acquisition of computational skills is a key component of the mathematics curriculum. The National Council of Teachers of Mathematics (NCTM) in its *Principles and Standards for School Mathematics* (2000) advocates computational fluency, meaning that students are able to compute efficiently and accurately. In September 2006, NCTM released *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics* in which specific topics of study are outlined for each grade level. One of the grade 3 focal points is developing understanding of division and strategies for basic division facts.

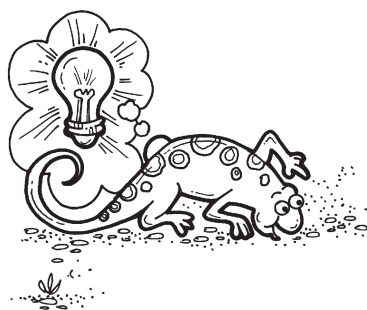
In reading, the goal is for students to be able to read for meaning and recall words quickly and with fluency. The same goal applies to the acquisition of division facts in mathematics. Students should be able to recall facts from memory with quickness and accuracy, and they should also know what those facts mean. In order to achieve that goal, students must have mastery of counting skills, including skip counting backwards by 2s, 3s, 4s, 5s, and 10s. Oral counting can be taught through the use of rhythmic counting, songs, raps, and CDs. A lack of counting skills makes the initial work with division difficult.

The activities and games in *Specific Skills: Division Facts Tips & Tricks* are aligned to both the NCTM Standards and Focal Points. The activities can be used for individual practice, whole group instruction, homework, or enrichment. The activities cover the following key concepts:

- Skip counting backwards
- Repeated subtraction
- Making equal groups
- Connecting multiplication to division
- Specific strategies for memorizing the division facts
- Division practice



The main goal of *Specific Skills: Division Facts Tips & Tricks* is for all students, including reluctant learners, to memorize and master the division facts through 10. The authors advocate using the 11's and 12's facts to introduce two-digit by two-digit division. This strategy will set the stage for working with the division of larger numbers.



A special section for teachers and parents on pages 10–14 outlines a suggested sequence for introducing the facts in a logical order that builds on students' prior knowledge of skip counting backwards and repeated subtraction. The student activities and games provide meaningful practice to aid in the mastery of the basic division facts. Breaking down the facts into smaller "chunks" increases the probability of success for all students. At the end of the book is a list of helpful Web sites for teachers, parents, and students. The sites can be used for lesson planning by teachers and include fun games for students to play.