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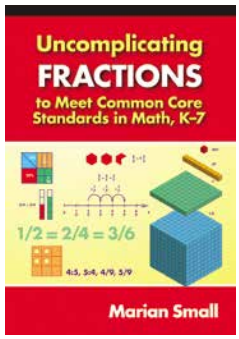
Uncomplicating Fractions to Meet Common Core Standards in Math, K–7, *Marian Small, 2013. 144 pp., $26.95 paper. ISBN 978-0-8077-5485-6. Stock no. 14817. National Council of Teachers of Mathematics co-published with Teachers College Press; www.nctm.org.*



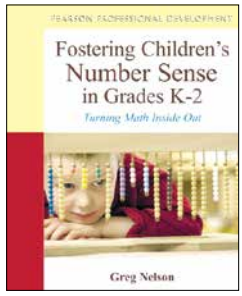
The relationships of mathematical concepts have truly been made "uncomplicated" in Small's latest work. From stating common misconceptions to showing the connections between and among concepts as well as scaffolding mathematical concepts through each grade level, this book is a must-have for instructional coaches, supervisors, and teachers. The vertical articulation shared in this text is essential to teachers' understanding of prerequisite skills necessary to build mathematical understanding of fractions. Small's book is an invaluable resource for K–grade 5 teachers because it is more general rather than math-content–specific or specialist-oriented.

The book meets expectations for all teachers who use Common Core State Standards as well as those in states like Virginia who use the Standards of Learning (SOLs). The Process Standards from NCTM—or Process Goals, as Virginia refers to the five goals for all students (Representations, Communications, Connections, Problem Solving, and Reasoning)—are strongly represented. Teachers will learn to guide students easily among graphical, numerical, algebraic, verbal, and physical representations as well as help them recognize that representation is both a process and a product. Students will understand that representations of mathematical ideas are an essential part of learning, doing, and communicating mathematics.

Finally, *Good Questions to Ask* sections at the end of each grade level or chapter are essential again for all K–grade 7 teachers and especially important for K–grade 5 generalist teachers. I will recommend this text for all K–grade 5 teachers in my district and will purchase the text for the math curriculum committee to use as a book study.—*Sharon Shrum, Frederick County Public School Instructional Supervisor, Winchester, Virginia.*

From other publishers

Fostering Children's Number Sense in Grades K–2: Turning Math Inside Out, *Greg Nelson, 2014. 176 pp., $30.99 paper. ISBN 978-0-13-298151-4. Pearson Teacher Education and Development; www.allynbaconmerrill.com.*



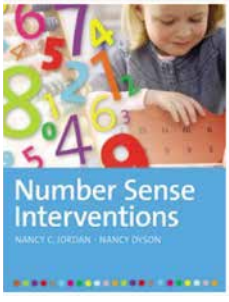
With engaging opportunities for promoting effective elementary number sense instruction, this book integrates hands-on activities, application, and reflective practices for teachers working on the development of place value, addition, and subtraction. The book provides a resource to support student and teacher learning and presents a professional development opportunity for individuals or small groups. Each section includes a description of

the mathematical content and the aha moments that occur for students. Sections contain launch points and checkpoints. Launch points are clearly written activities that foster student mathematical understanding. Checkpoints are assessments for monitoring student progress. The author includes methods to vary and extend both.

In working with preservice teachers, we used the Hundreds Board Magic Windows assessment to facilitate mathematical discussions with second graders. The activity allowed preservice teachers to reflect on their own understanding through student responses and suggestions provided by the author as to what one would be looking for in completing the probe. Study guide questions contained within the text were used to further classroom development. The book includes an online toolkit, but at the time of this review, I was unable to access the resource.

This book is a good choice if you are looking to improve your understanding of elementary number sense individually or within a small group. The rich activities followed by clear descriptions of what should occur in the classroom make the book a great learning opportunity for teachers and students.—*Kristina Anthony, Virginia Commonwealth University, Richmond, Virginia.*

Number Sense Interventions, *Nancy C. Jordan and Nancy Dyson, 2013. 240 pp. $34.95 paper. ISBN 978-1-59857-291-9. Brookes Publishing Co.; www.brookespublishing.com.*



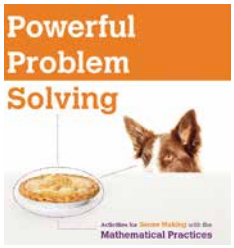
If, as an elementary school teacher or an elementary strategist, you have exhausted all your math resources, you ought to consider this book. The authors' research establishes the long-term struggle in mathematical achievement to be anticipated when young students fail to master the foundational concepts of number sense, number relation, and number operation.

This teacher resource was created with all the practical resources needed to aid in the intervention process for students to be more confident and successful in math. Twenty-four step-by-step lessons for small-group instruction have easy-to-follow directions and teacher-prompting guides to maximize student learning by encouraging higher critical-thinking skills. All the lessons have activity sheets and photocopy-ready materials, which can easily be adapted into math centers and classroom activities to implement immediately in the classroom.

Although the lessons were created for pre-K, kindergarten, and first-grade levels, older elementary school students with limited academic readiness can benefit from these lessons because they are designed with scaffolding activities to reinforce and build on a student's current knowledge. Even my older elementary school students enjoyed creating an adapted version of a number-recall activity with dots (referred to as subitizing) during a math-and-science-night activity.

Therefore, as an active elementary school teacher who is passionate about math, I highly recommend this resource as an addition to your classroom resource library.—*Elizabeth Fleener, M.Ed., Eisenhower Elementary School, Grand Prairie, Texas.*

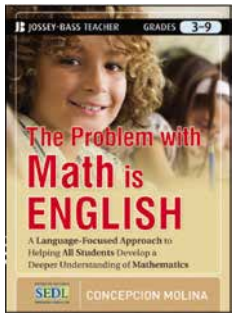
Powerful Problem Solving, *Max Ray, 2013. Foreword by Susan O'Connell. ISBN 978-0-325-05090-4. Grades 3–8, 192 pp., $27.50 paper. Heinemann; www.heinemann.com.*



This book provides activities designed to help students develop an understanding of the Common Core State Standards for Mathematical Practice through problem solving activities. The book is designed for teachers to present detailed activities in the classroom to help their students develop mathematical practices and make sense of mathematics. Additionally, this resource is designed to help teachers support their students' mathematical

development through problem solving. The introduction of each of the Standards for Mathematical Practice (SMPs) are explored in individual chapters, and problem-solving activities related to the standard are presented. Additionally, the book discusses the important characteristics of problem solving and links problem solving to each of the SMPs. I would have liked to see more examples of activities that classroom teachers can use. In most cases, only one or two activities relate to a standard. A sequence of activities and suggestions to order the introduction of the mathematical practices with students may also be helpful. I would recommend this book be used with preservice and in-service teachers as an introduction to using problem solving in mathematics and incorporating the SMPs into problem solving.—*Cliff Chestnutt, Georgia State University, Atlanta.*

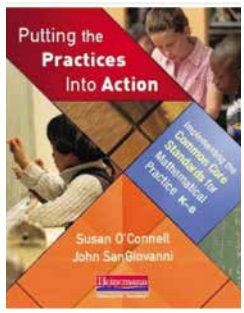
The Problem with Math Is English: A Language-Focused Approach to Helping All Students Develop a Deeper Understanding of Mathematics, *Concepcion Molina, 2012. 304 pp., $29.95 paper. ISBN 978-1-118-09570-6. Jossey-Bass, An Imprint of Wiley; www.josseybass.com.*



Exploring a variety of student misconceptions throughout the elementary, middle, and high school mathematics curriculums, this book identifies the heavy use of language- and vocabulary-based instructional models in classrooms today as the culprit to these misunderstandings and seeks to develop students' conceptual understanding of mathematics through questioning and representational models. Intended audiences are classroom elementary, middle, high school, and ESOL (English speakers of other languages) teachers and teacher educators. The author begins his discourse by identifying the importance of symbols in mathematics. He uses the symbolism to address topics within the curriculum, such as order of operations, fractions, operations with fractions, and multiplication and then returns to the importance of symbolism in identifying relationships within the math classroom.

Although the author criticizes contemporary instructional practices that he purports to be heavily language based, the book is overly pedantic in nature, with little empirical evidence to support the author's claims. He should cite research and statements that can be supported through research or principles and standards from NCTM. For example, on page 12, he states that research shows that direct formal vocabulary instruction is effective but gives no citation to back it up and presents no possible strategies. He dismisses mnemonic strategies such as FOIL and PEMDAS as rudimentary ways that seek only to make students more procedural, yet these strategies have important implications for students, especially students with a variety of learning needs, including English language learners. He focuses on developing contextual awareness yet gives few examples or strategies toward reaching this end. Chapter 6 presents strategies in multiplication through use of the distributive property, which is good, but then digresses toward the "Intersecting Line Method" in box 6.14. Although it is interesting, little evidence supports the use of this method, especially as it pertains to benefiting ESOL students.—*Brandt S. Lapko, Lane Elementary School, Alexandria, Virginia.*

Putting the Practices into Action: Implementing the Common Core Standards for Mathematical Practice K–8, *Susan O'Connell and John San Giovanni, 2013. 168 pp., $25.00 paper. ISBN 978-0-325-04655-6. Heinemann; www.heinemann.com.*



Putting the Practices into Action offers readers information that will broaden their understanding of the practices and help them engage students in making sense of mathematics. The authors presume that facing another set

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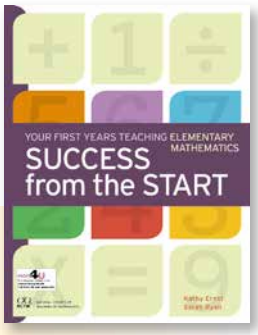

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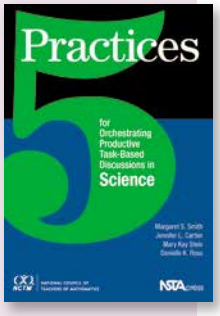

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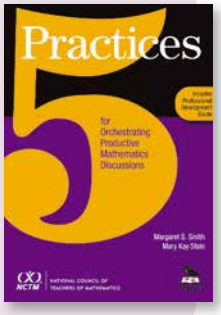

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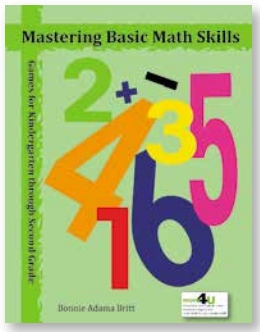

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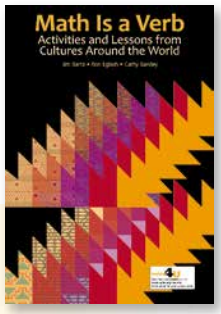

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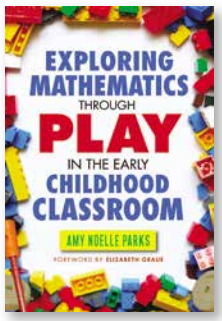

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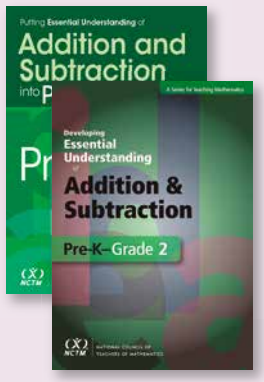

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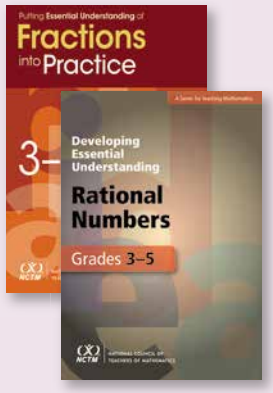

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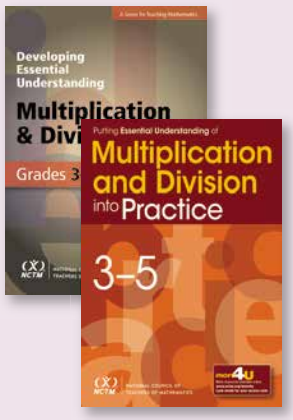

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of standards can cause some anxiety for teachers, but the Common Core State Standards for Mathematics (CCSSM) have evolved out of previous reform work. CCSSM brings together ideas from the National Council of Teachers of Mathematics and the National Research Council to emphasize the blending of content standards with Standards for Mathematical Practice (SMP). Each chapter addressing one of the SMPs is organized into five sections:

1. Why [this particular standard]?
2. Understanding the standard
3. How do we get there?
4. Assessment tip
5. Summing it up

Readers are presented with a discussion of the meaning of the standard, examples of mathematical activities for a variety of grade levels, and formative assessment ideas. In an example activity (Exploring Standard 1), the authors suggest posting a data set that students will work with throughout a week. The initial focus should be on understanding the problem situation rather than finding correct answers. Each day, the teacher can ask different questions for problem solving with the data. Suggestions for guiding questions are provided.

Clearly a resource for classroom teachers, this book is a guide for preservice teachers and teacher educators as well; I highly recommend it. The authors emphasize that "there are no tricks in math. It is understanding math that makes it easier" (p. 124). Likewise, there are no tricks for implementing the SMPs. Understanding them will make implementation easier.—*Clare V. Bell, University of Missouri–Kansas City.*

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