

# Books to last all summer

## Books

### From NCTM

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**High-Yield Routines for Grades K–8**, Ann McCoy, Joann Barnett, and Emily Combs, 2013. 86 pp., \$24.95 paper. ISBN 978-0-87353-719-3. Stock no. 14405. National Council of Teachers of Mathematics; [www.nctm.org](http://www.nctm.org).

*High Yield Routines* is a resource that contains descriptions of a variety of instructional routines that can easily be adapted for students in K–grade 8. These routines, when incorporated into your classroom, will enhance both mathematical content as well as the mathematical practices of your students. The routines provide valuable experiences for students within the content area, and class engagement in reflection and communication—which is a key part of each routine—allows for an even greater impact on student understanding.

This book is extremely user-friendly; every chapter includes a description of how to implement each specific routine into your classroom, along with the implementation guidelines. The routines are connected to the Common Core's Standards for Mathematical Practice and are supported by multiple research references validating the impact that may be seen in your classroom. Additionally, each chapter provides numerous student work examples from a wide range of grade levels.

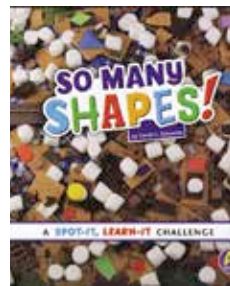
A true test of the Quick Images Routine was to implement the routine in a kindergarten classroom within the first month of school.



The implementation was simple enough that my students easily learned the routine, and they were quickly reflecting on their answers and communicating about strategies that they use for Quick Images in our classroom. I have already seen great growth in number sense and mathematical communication. I would definitely recommend adding this resource to your mathematics library.—*Bethany Singer, Marshall Elementary School, Byron Center, Michigan.*

### From other publishers

**So Many Shapes! A Spot-It, Learn-It Challenge**, Sarah L. Schuette, 2014. Pre-K–Grade 2, 32 pp., \$7.95 cloth. ISBN 978-1-4765-4010-8. Capstone Press; [www.capstonepub.com](http://www.capstonepub.com).



The book *So Many Shapes! A Spot-It, Learn-It Challenge*, offers students in the primary grades an opportunity to identify a variety of shapes and colors in a Where's Waldo type of resource. Students will

have to be comfortable using some spatial reasoning to find many of the shapes; however, this book is ideal for students in prekindergarten to grade 2. The shapes are appropriate for this grade and age level, and the expectations go beyond just finding the shapes. Students may have to identify a specific color of a shape, such as the gold circles on page 12, and they may have to identify the shape of the globe, as on page 16. Although the shape requirements meet some of the expectations for CCSSM, students may be unfamiliar with some shapes, such as a “spade” shape. The book does not show examples of prisms; however, it presents students with a plethora of examples of real-life visuals that they can identify using shapes and colors. Students

are also asked to count how many of a specific object they see, such as finding three blue circles. At the end of the book, students are encouraged to “Spot Even More” and to go back to find more shapes, count more objects, and identify more colors.—*Kimberly Kirk, Montgomery County Public Schools, Rockville, Maryland.*

**Teaching Math, Science, and Technology in Schools Today: Guidelines for Engaging Both Eager and Reluctant Learners**, Dennis Adams and Mary Hamm, 2014. 176 pp., \$27.95 paper. ISBN 978-1-4758-0904-6. Rowman and Littlefield Education; [www.rowman.com](http://www.rowman.com).



This book's goal is to provide explanations and examples of how mathematics, science, and technology should be taught in schools to encompass all learners. I found the first chapter repetitive, but the second chapter was well done. It provided the most information for teachers who are looking for reasons to improve their teaching of mathematics. I found the discussion of the nature of mathematics to be a powerful tool, allowing teachers, new and experienced, to reflect on what mathematics really is and providing a foundation for change.

The rest of the chapters talk about mathematics, science, and technology separately. With the math chapter, the emphasis is on explaining the NCTM Standards, yet the previous chapter emphasizes the Common Core State Standards for Mathematics (CCSSM). Although I know they are not mutually exclusive, I don't know how many teachers would misunderstand and dismiss the information because it does not explicitly talk about CCSSM.

The sample activities presented within the chapters are nice examples of how to apply the information. The questions that end each chapter provide opportunities for thoughtful reflections on the many ideas presented. I could see this book being a supplement to math teachers' libraries for the activities in the second chapter alone, but not necessarily a basis for rethinking

the way to effectively teach mathematics, science, and technology.—*Kevin LoPresto, Radford University, Virginia.*

**Using Children's Literature to Teach Problem Solving in Math: Addressing the Common Core in K-2**, Jeanne White, 2014. 98 pp., \$29.95 paper. ISBN 978-0-415-73231-4. Routledge Taylor and Francis Group; [www.routledge.com](http://www.routledge.com).

When teachers incorporate children's literature into mathematics, opportunities arise for young children to see math in their own lives. One way teachers can facilitate the teaching of word problems is to use children's literature as the context.

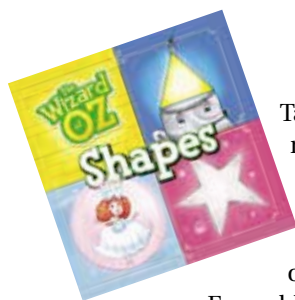
*Using Children's Literature to Teach Problem Solving in Math* blends children's literature with each of the eight Standards for Mathematical Practice in the Common Core State Standards. Although the book targets students in K-grade 2, it could be adapted for grades 3–5 with other titles.

Each chapter is organized into four sections: Unpacking the Standards for Mathematical Practice; student-friendly *I Can* statements; children's literature titles; and suggestions for teaching early problem solvers, developing problem solvers, and advanced problem solvers. The book is teacher friendly and learner-centered. Throughout the book, White offers questions to pose to students in addition to word problems that build on the literature. By aligning content standards to the literature titles, she demonstrates how to use problem solving to teach concepts as well as processes for the deepest mathematical understanding.

I highly recommend *Using Children's Literature to Teach Problem Solving in Math* for its practical approach to learning problem solving while comprehending stories. Strong problem solvers will evolve with White's natural connections between reading and math.—*Kristen Hahn, Rock Hill Schools, Rock Hill, South Carolina.*

**The Wizard of Oz Counting: The Wizard of Oz Shapes**, 2014. Pre-K–Grade 2, 24 pp. ea., \$7.99 ea. cloth. *Counting* ISBN 978-1-4765-3766-5; *Shapes* ISBN 978-1-4765-3767-2. Capstone Press; [www.capstonepub.com](http://www.capstonepub.com).





Targeting prekindergartners and early readers, these two books have students counting and identifying shapes in the Land of Oz. Following the classic tale, students count the lost children: one Dorothy all the way to ten towers in Emerald City. With simple text, children travel through the tale of Dorothy in the Land of Oz, joined by the Lion, the Scarecrow, and the Tin Man, counting along their way. In *The Wizard of Oz Shapes*, students find shapes referred to in the text. Some are simple (the stars on a gown), but some seem a stretch (“The Emerald City would not be the same without the OVAL in the Great Oz’s name.”)

Targeting the pre-K level, the shapes are limited on each page, making this book a simple teaching tool. Some vocabulary will make this a difficult read for an emerging reader (e.g., *soar*, *twitter*, *galore*, *miniature*, *alight*). However, the bright, unpretentious pictures will draw a child into reading aloud. In the back of each book is a glossary, an About the Wizard of Oz section, a section with Read More Suggestions, as well as an Internet site for reference. Finding shapes and counting in the world is fun in *The Wizard of Oz*.—Linda Carlson, Pace University, Pleasantville, New York.

**Wonder Readers Next Steps: Math (Extended Series!): Counting Money; Estimating; Fractions; Measuring**, Maria Alaina, 2014. Pre-K–Grade 1, 20 pp. ea., \$16.49 ea. cloth. *Counting* ISBN 978-1-4765-2366-8; *Estimating* ISBN 978-1-4765-2367-5; *Fractions* ISBN 1-4765-2368-2; *Measuring* ISBN 978-1-4765-2369-9. Capstone Press; [www.capstonepub.com](http://www.capstonepub.com).

This series of short books focuses on mathematical concepts relevant to prekindergarten through second-grade learners. The purpose of the books is to introduce young children to mathematical concepts often occurring in their everyday lives. The overall strength of the series lies in the relevancy of the chosen topics and the manner in which the author highlights the math content with real-life examples. Another strength found in all the books is the glossary, which reinforces specific mathematical terms.

Viewed individually, each book has strengths. Preservice teachers enrolled in a university course focusing on NCTM pre-K–grade 2 Stan-

dards identified several strengths: *Estimating* “shows real life pictures and examples of objects that children see and use every day.”

In *Counting Money*, “the children view both sides of the coins and highlight the size and color of each coin. The book is a great visual



introduction to coins and counting the value in terms of cents.”

“The pictures [in *Fractions*] help communicate the information by showing whole objects first, then how the same object would look divided into pieces. This will help the children understand the concept of fractions.”

Finally, in *Measuring Time*, “children are shown that days and months are aspects of time just like minutes and hours. Children are also given the opportunity to view different tools for measuring time in digital and analogical models.”

The same preservice teachers also had some suggestions for improvement. One teacher stated, “The text of the series was just OK. Much of the fraction book was redundant—especially the part that shows the sandwich.”

Another comment focused on the importance of giving relevant examples in the *Estimation* book: “Examples should show when estimation is important—and not just be about guessing.”

Overall, the Wonder Readers Next Steps series is an effective tool to introduce math concepts to children. The real-world photographs depict



activities that children experience daily and will help them make math connections in relevant ways. What a great way to make math make sense!—Cindy Olivas, University of La Verne, La Puente, California.

## Etcetera

**Common Core Collaborative Cards—Algebraic Thinking**, Kit Norris, 2013. Grades 3–5, \$24.95. Didax Code 211420. Didax; [www.didax.com](http://www.didax.com).

The Common Core Collaborative Cards were designed for a dual function: Students engage with a task aligned to the Common Core State Standards and then do a small-group activity. Within each grade-level section, groups of four cards share a solution. After solving the task, students with the same solution find one another to form a group. On the back of each of the four cards is a role that the holder will

perform in the group.

The Common Core Collaborative Cards were made for use as an auxiliary piece of curriculum in mathematics classrooms. The content and presentation of the material are clear, and students found their use engaging. I have used the cards in third- and fifth-grade classrooms.

In both classes, the cards have been used as a warmup leading into a small-group collaboration to tackle the problem of the day. Both teachers were happy with the rigor of the content and the efficiency of using the cards as they were intended.

The strengths of this product are that it works as a quick, engaging warmup at the start of a lesson; the cards align with the Common Core; and the product sets up students in small groups,



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with clear roles. The intelligent and balanced manner in which the student roles are designed is also a strength.

The obvious limitation of this product used as tool to form small groups is that it creates groupings at random, that is, neither heterogeneous nor homogeneous.

This is a good instrument to facilitate student-led conversation in classrooms where collaborative work is a new approach. I would recommend this product to any teacher who is trying to get small-group discussion off the ground.—*Christopher J. Ames, Instructional Coach, Somerville Public Schools, Somerville, Massachusetts.*

**Cross Number Discovery Puzzles**, Celia Baron, 2013. *Pre-K–Grade 4, Five resources including Smart Board CDs, \$74.00. Cross Number Discovery Puzzles and Games; [www.crossnumber.com](http://www.crossnumber.com).*

Celia Baron's math resources include Cross-Number Discovery Puzzles and Games for pre-K–grade 4. Students may complete puzzles to practice number concepts, strategies, and skills. In addition to puzzles are assessment sheets and games for 2–4 players. The cross-number puzzles look like crossword puzzles with such prompts as “Choose the greatest number: 425, 245, 452, 254 or the next number in the pattern: 17, 19, 21, 23, \_\_.” The games include game boards and game cards.

This product reinforces math concepts, offers a challenge, and uses an engaging format. The math problems also represent a variety of concepts, and students are asked to use their number sense knowledge. Students can check their own answers by using what fits into the puzzle. Overall, the puzzle format offers an engaging challenge for students.

Some weaknesses include confusing wording for emerging readers and lack of hands-on activities and materials. The format required quite a bit of modeling and whole-group work before students were comfortable working independently. Directions for pre-K and kindergarten did not include the need to cut out numbers; however, some of the puzzles needed numbers. Including a bag of numbers with each puzzle might make this product more manageable.

All grade levels enjoyed working with the materials to review concepts in center rota-

tions. The product is recommended for educators looking for review materials or activities to include in centers. It could also be used to challenge students who finish regular lesson work early.—*Valentyna Banner, San Diego Global Vision Academy, San Diego, California.*

**Desktop Place Value Cards; Active Place Value Set Value Cards**: \$12.95; *Value Set*: \$19.95. *Didax; [www.didax.com](http://www.didax.com).*



The Desktop Place Value Cards are dry-erase charts that have spaces to write the digits of any number ranging from 0.001 to 100 billion plus a place to express a number on a number line. The Active Place Value Set is an enlarged version of the Desktop Place Value Cards that can be displayed on the wall. The set comes with large-digit cards with Velcro® for placement. Directions include activities with Common Core State Standards listed.

The charts allow students to write a number in expanded form, write the number name, and locate the number on a number line. Having a place on the number line for locating the number is an extra bonus. Using dry erasers makes it easy to record the numbers and to erase quickly for the next problem. Having Velcro numbers for the large version means that no one has to fear that his or her writing is not neat; students can correct the placement of the numbers independently. You might have to find a way to cover the extra place values that you are not using, but it can be done. On the enlarged version, it is easy to change the place value that you need at different times of the year.

I highly recommend the Desktop and Enlarged Place Value set. I tried to make something similar, but this set is far superior and includes a number line. The directions are well

written and mathematically sound.—*Susan Weiss, Solomon Schechter Day School, Newton, Massachusetts.*

**Magnetic Equivalent Fractions, Grades 2–5,** \$22.95. Code 211035. Didax; [www.didax.com](http://www.didax.com).

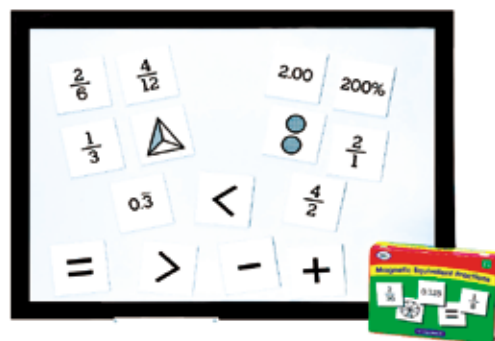
Didax's Magnetic Equivalent Fractions includes fifty-six magnets, fifty-one of which have a unique representation (numerical, decimal, percent, pictorial) as part of a whole or a whole (1, 2). Five magnets are operational symbols (addition, subtraction, equal, greater than, less than). Also included in the kit is one page of activity suggestions.

Ten fractions are represented in this kit in various forms:  $1/12$ ,  $1/10$ ,  $1/8$ ,  $1/6$ ,  $1/5$ ,  $1/4$ ,  $1/3$ ,  $1/2$ ,  $2/2$ , and  $2/1$ . Most fractions, but not all, are shown in six different versions: three equivalent fractions, percentage, decimal, and pictorial. I understand why certain fractions ( $1/12$ ,  $1/8$ ,  $1/6$ ,  $1/3$ ) are not represented as a percent-

age, but I was puzzled why three equivalent fractions are not included for all fractions. Because this is marketed to students through fifth grade, I was also puzzled by the omission of the multiplication and division signs. I also found a possible error in the product: A magnet for  $10/1000$  has no equivalent unit fraction or any other equivalent representation.

I appreciated the size of the magnets (3 in.  $\times$  3 in.), large enough to be seen by students during a whole-group lesson and easily manipulated by students in a small-group, or center, setting. I also liked the simplicity of each magnet: black print on a white background.

I recommend Magnetic Equivalent Fractions. It is a versatile product that can be adapted to many grade levels and concepts, and used in a variety of settings.—*Lisa Willman, Milaca Public Schools, Milaca, Minnesota.*



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