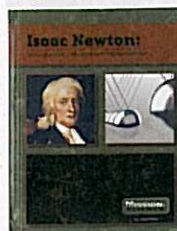


Isaac Newton: Groundbreaking Physicist and Mathematician, Jane Weir, 2010. Grades 4–6, 40 pp., \$26.65 cloth. ISBN 978-0-7565-4229-0. Compass Point Books; www.compasspointbooks.com.



Fun and interesting for middle school students, the story of Newton's life and contributions to both math and science, as well as his inventions, will bring enjoyment to students in just about any age group. Weir supplies easy-to-understand explanations of science concepts, such as gravity and the laws of motion, and relates them to modern, real-life applications. For example, she discusses how snowboarders use the laws of motion to perform their stunts.

A timeline of Newton's life and works appears at the end of the book. Notable physicists are also mentioned so that readers could research additional information about advancements made in physics. Some side notes highlight a few women who were able to build on Newton's ideas to further advance the sciences. This information is a nice stepping-stone for teachers who may want to have their students do a research project on women in mathematics or the sciences. A more up-to-date example notes that a female civil engineer uses Newton's laws of motion to design roller coasters. Although there is no detail about *how* mathematics is used in roller coaster design, the general information is a great way to get girls interested in studying mathematics or science. I think the book would make a nice addition to any school or classroom library.—Carol J. Bell, Northern Michigan University, Marquette, MI 49855.

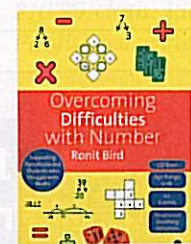
The Morphing Metric Family, Donna Scott Nusrata, 2009. 28 pp., \$12.95 paper. ISBN 978-1-9352-6812-3. Halo Publishing International; www.halopublishing.com.

This book's purpose is to teach or review the metric system through a story format. The intended audience is students in elementary school grades and possibly some students with learning disabilities. The story line relates to commonly known situations and contains accurate information. Interesting characters are presented on colorful pages that are not overly full

of pictures. The progression of size is consistent throughout the book. A clever rhyming pattern appeals to students, and questions at the end help them check for understanding. The family pictures on the front cover are quite inviting.

Although this is a fairly quick read, it could also be approached in sections, by topic: liters, meters, and grams. One weakness is that centiliter can relate to something other than a "medicine cup," and I am not sure how many children are familiar with a medicine cup anyway. *The Morphing Metric Family* appears to be appropriate and interesting for helping children visually understand and remember metric system relationships.—Susan L. Kidd, University of Wisconsin–Whitewater, WI 53190.

Overcoming Difficulties with Number, Ronit Bird, 2009. 168 pp., ages 9–16, \$33.95 paper. ISBN 978-1-84860-711-8. Sage Publications; www.sagepublications.com.



Byrd brings vast experience from years of working with children with dyslexia and dyscalculia. This text is written from personal experience and provides descriptions of games and activities that support children's growth in acquiring numeracy beyond counting. The resource begins with an overview summarizing the kinds of struggles some children may have when moving beyond counting. The introduction includes some key principles for teaching numeracy strategies.

Using such readily available concrete materials as Dienes blocks, Cuisenaire® rods, and dominoes, chapter one of this resource describes games that support children as they bridge from counting by ones to subitizing. The games become progressively more challenging to support growth and develop understanding of the processes of addition and subtraction.

Chapter two provides games and activities that support children in using the number line to make connections between addition and subtraction and in mastering understanding of the base-ten number system.

Other chapters describe activities and games that support multiplication and division, focus-

ing first on preskills, and moving children from area models to the standard written algorithms of computation.

A final chapter provides activities for developing mathematical reasoning. The text ends with a glossary of basic computational terms. A CD-ROM presents patterns for games in the text and will allow the teacher to develop file folder games that all students can play to support instruction.

The book's colorful cover—depicting puzzles, manipulatives, number lines, and mathematical symbols—may give an initial perception that this is a book of activity sheets. Leafing through the text, the reader will see detailed descriptions of games and activities, some with suggested dialogue, all with the purpose of supporting children with special needs as well as other students who struggle with math.

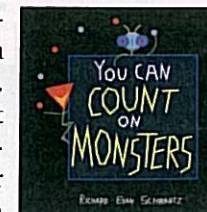
American teachers may be somewhat put off by the British English but will find this a valuable resource for any primary classroom that accommodates struggling students. The games and activities have worked successfully for the author and others who deal with special needs students. The book will become a valuable resource for any teacher working with students who struggle in basic mathematical concepts. Not all students are strong logical-mathematical thinkers, and the concrete, structured, thinking games and activities in this text will support all students in their growth as mathematical thinkers.—Linda Mahoney, Mississippi University for Women, Columbus, MS 39701-5800.

You Can Count on Monsters: The First 100 Numbers and Their Characters, Richard Evan Schwartz, 2010. Age 5 and up, 244 pp., \$24.95 paper. ISBN 978-1-5688-1578-7. A. K. Peters; www.akpeters.com.

Although *You Can Count on Monsters* may appear to be just a picture book, do not underestimate the higher-level mathematics content embedded in its 244 colorful pages. An interesting way to present the concepts of prime and composite numbers and prime factorization awaits readers and can be enjoyed by students from elementary school through middle school.

Showcasing numbers 1 through 100, Schwartz makes all explanations clear and easy to understand. If a reader—of any age—chooses to ignore the "math," the pages still offer a perfect oppor-

tunity to see the mathematics progress from both numbers and illustrations. The graphics are vibrant and able to hold the reader's attention. The author suggests that anyone who



knows how to multiply whole numbers can benefit from this book, so a recommendation for age 5 may be a bit premature. For classroom use, I suggest this book be presented as an all-class activity after prime and composite numbers have been defined and students have started to work with prime factorization trees. These good explanations of the "why" and "how" of finding prime numbers can infuse more literacy and books into your math curriculum.—Jill M. Schauland, Geneseo Middle School, Geneseo, IL 61254.

Et cetera

BizWorld Kit, 2009. \$95.00. The BizWorld Foundation; www.BizWorld.org.

Hands-on learning puts the power of education in students' hands. The Bizworld Kit gives students in grades 3–8 the opportunity to explore entrepreneurship, business creation, and money management by creating a business in which they make and sell friendship bracelets. Expecting students to work as teams to explore mathematics, the kit uses a real-world model that incorporates teamwork and leadership skills. The program takes students through the entire process of creating a business: design, manufacturing, marketing, and sales.

Users will find a detailed, easy-to-understand teachers' manual and resource guide as well as everything they need to help students create a successful business, including materials and instructions for making friendship bracelets. Plainly written lessons include all necessary materials, which are easily reproduced. Each lesson lists NCTM and 21st Century Skills Standards that are supported within. The kit would be an excellent addition to an integrated mathematics-social sciences unit.

BizWorld Foundation is a nonprofit organization whose stated goal is to make business fundamentals come alive within the context of core-subject study.—Lauren Mattone, Crocker Farm Elementary School, Amherst, MA 01002.