



HELPING
YOUR CHILDREN
LEARN AND ENJOY
MATHEMATICS

RESOURCES TO HELP YOU AND YOUR CHILD WITH MATH

If you'd like more information about family math activities, mathematics education, or strategies for supporting your child's math learning, you'll find the following list of publications and Internet websites helpful.

PUBLICATIONS

Adding It Up: Helping Children Learn Mathematics (National Academies Press, 2001). This report from the National Research Council of the National Academies will be of interest to parents who want to explore current research about mathematics education in the United States.

Algebra To Go (Great Source Education Group, 2000). This reference book is designed to help students when they're not clear about a math topic and need someplace to look up definitions, procedures, explanations, and rules. The book uses lots of graphics and charts, and includes test-taking strategies, tips for using graphing calculators, and more.

Family Math, by Jean Stenmark, Virginia Thompson, and Ruth Cossey (Lawrence Hall of Science, University of California, Berkeley Press, 1986). *Family Math* is a popular book with dozens of math activities that parents and children, age 8 to 12, can do together. Included are activities related to number sense, geometry, probability and statistics, and algebra. A Spanish version of the book, *Matemática Para La Familia*, is also available.

Family Math for Young Children, by Grace Dávila Coates and Jean Kerr Stenmark (Lawrence Hall of Science, University of California, Berkeley Press, 1997). A sequel to the first *Family Math* publication, this book was developed for families with children age 4 to 8.

Family Math—The Middle School Years, Virginia Thompson and Karen Mayfield-Ingram (Lawrence Hall of Science, University of California, Berkeley Press, 1998). The activities in this book cover algebraic reasoning and number sense and are appropriate for students in grades six, seven, and eight.

A Family's Guide: Fostering Your Child's Success in School Mathematics (National Council of Teachers of Mathematics, 2004). This guide summarizes what today's mathematics classroom is like, offers tips on how parents can help their children have a positive attitude about mathematics, and presents practical ways to discuss and do math at home together.

Permission is granted to reproduce and share this article for instructional use by parents, guardians, teachers, and families—provided it is duplicated with full credit given to the author and the California Mathematics Council.

Helping Your Child Learn Mathematics (U.S. Department of Education, 2004). This publication, available in both English and Spanish, may be downloaded for free at www.ed.gov/parents/academic/help/hyc.html.

It highlights activities that parents can do with children from preschool age through grade 5 to strengthen math skills and build strong, positive attitudes toward math.

Math On Call (Great Source Education Group, 2004). Short definitions, examples, and lessons on over 300 mathematics concepts studied in kindergarten through eighth grade are included in this small handbook for middle school students and parents.

INTERNET SITES

Calculation Nation (calculationnation.nctm.org), developed by the National Council of Mathematics Teachers, uses interactive games organized around content from the upper elementary and middle grades math curriculum. Students must establish an account to play online math strategy games that promote learning about and practice with fractions, factors, multiples, and much more.

The *California Mathematics Council* (cmc-math.org/for-families) website includes a “For Families” section that offers free math education articles and activities for students from pre-kindergarten through high school. Use the pull-down menu to access the many resources that are available including free PDF’s of this *Math at Home* booklet.

Figure This! (www.figurethis.org) includes a collection of math challenges for middle school students and their families. Each challenge comes with a hint and the complete solution, along with related information and questions to think about.

Illustrative Mathematics (www.illustrativemathematics.org) is an online resource of free mathematical tasks that illustrate every one of the Common Core Standards for each grade.

The Math Forum (www.mathforum.org) hosts “Ask Dr. Math” and has weekly/monthly math challenges, Internet math hunts, and math resources organized by grade level.

The *National Library of Virtual Manipulatives* (nlvm.usu.edu) promotes three key areas of mathematics: procedural skills, conceptual understanding, and problem solving. Over 100 virtual manipulatives are sorted by grade level, providing interactive tutorials that engage students in number sense, algebra, geometry, measurement, and probability learning. The site offers a free trial version; there is a modest charge for an individual license.

Thinkfinity (www.thinkfinity.org) is a project of the Verizon Foundation. The site has thousands of resources—including many math-focused ones—that have been screened by educators to ensure that content is accurate, up-to-date, and appropriate for students. Resources are grouped by grade and subject area.

