

MATH RESOURCES

The following list is divided into two sections. The Professional Development Resources include books about teaching and learning in math. The Classroom Resources include a variety of sources to enhance instruction including lessons. Although lengthy, the lists are not exhaustive.

Professional Development Resources

- *About Teaching Mathematics, Second Edition, K-8*, Marilyn Burns, Math Solutions Publications, 2001
- *Activity Math, Using Manipulatives in the Classroom: Grades K-3, Grades 4-6*, Anne Bloomer and Phyllis Carlson, Addison Wesley, 1993
- *Adding It Up: Helping Children Learn Mathematics*, Mathematics Learning Study Committee, National Academy Press, 2001
- *Algebra To Go, A Mathematics Handbook*, Great Source, 2000
- *Algebraic Thinking: Readings from NCTM's School-Based Journals, Grades K-12*, National Council of Teachers of Mathematics, 1999
- *Best Practice: New Standards for Teaching and Learning in America's Schools*, Zemelman, Daniels, Hyde, Heineman, 1998
- *Beyond Arithmetic, Changing Mathematics in the Elementary Classroom*, Jan Mokros, Susan Jo Russell, Karen Economopoulos, Dale Seymour Publications, 1995
- *Connections, Linking Manipulatives to Mathematics, Grade 1-6*, Linda Holden Charles, Micaelia Randolph Brummett, Creative Publications, 1989
- *Constructive Assessment in Mathematics: Practical Steps for Teachers*, David Clarke, Key Curriculum Press, 1997
- *Creating Writers, Linking Writing Assessment and Instruction*, Vicki Spandel, Richard Stiggins, Longman, 1997
- *Curriculum and Evaluation Standards for School Mathematics Addenda Topics Series, Grades K-6*, NCTM Publications: Geometry and Spatial Sense, Making Sense of Data, Number Sense and Operations, Patterns
- *Developing Mathematical Reasoning in Grades K-12*, NCTM 1999 Yearbook, 1999
- *Early Numeracy: Assessment for Teaching and Intervention*, Wright, Martland, Stafford, Sage Publications, 2000
- *Elementary and Middle School Mathematics: Teaching Developmentally*, John A. Van de Walle, Longman, New York, 1998
- *Empowering Students by Promoting Active Learning in Mathematics*, Dorothy Buerk, NCTM, 1994
- *Facing an American Phobia*, Marilyn Burns, Math Solutions Publications, 1999
- *Family Math in the Middle School Years*, Virginia Thompson and Karen Mayhfield-Ingram, Equals, Lawrence Hall of Science, 1998
- *Feisty Females, Inspiring Girls to Think Mathematically*, Karen Karp, E. Todd Brown, Linda Allen, Candy Allen, Heinemann, 1998
- *Fostering Algebraic Thinking: A Guide for Teachers Grades 6-10*, Mark Driscoll, Heineman, 1999

- *Fostering Children's Mathematical Power, An Investigative Approach to K-8 Mathematics Instruction*, Arthur Baroody, Lawrence Erlbaum Assoc., 1998
- *Getting Your Math Message Out to Parents, A K-6 Resource*, Nancy Litton, Math Solutions Publications, 1998
- *Growing Mathematical Ideas in Kindergarten*, Linda Schulman Dacey and Rebeka Eston, Math Solutions Publications, 1999
- *Helping Children Learn Mathematics*, Reys, Lindquist, Lambdin, Smith, Suydam, John. Wiley and Sons, Inc. 2001
- *Hot Words, Hot Topics*, Creative Publications, 1998
- *Implementing Standards-Based Mathematics Instruction: A Casebook for Professional Development*, Stein, Smith, Henningsen, Silver, National Council of Teachers of Mathematics, 2000
- *Language in the Mathematics Classroom, Talking, Representing, Recording*, Rachel Griffiths and Margaret Clyne, Heinemann, 1994
- *Learning Mathematics for a New Century*, National Council of Teachers of Mathematics, 2000
- *Making Sense, Teaching and Learning Mathematics with Understanding*, Hiebert, Carpenter, Fennema, Fuson, Wearne, Murray, Olivier, Human, Heinemann Publications, 1997
- *Math At Hand, A Mathematics Handbook, Grades 4-6*, Great Source, 1999
- *Math Matters: Understanding the Math You Teach, Grades K-6*, Suzanne H. Chapin, Art Johnson, Math Solutions Publications, 2001
- *Math On Call, A Mathematics Handbook, Grades 6-8*, Great Source, 1998
- *Math To Know, A Mathematics Handbook, Grades 3-4*, Mary C. Cavanagh, Great Source, 2000
- *Mathematical Power, Lessons from a Classroom*, Ruth E. Parker, Heinemann, 1993
- *Mathematics in the Making, Authoring Ideas in the Primary Classroom*, Heidi Mills, Timothy O'Keefe, David Whitin, Heinemann, 1994
- *Mathematics in the Middle*, National Council of Teachers of Mathematics, and National Middle School Council, 1998
- *Motivation Counts, Teaching Techniques That Work*, David Johnson, Dale Seymour Publications, 1994
- *Principals and Standards for School Mathematics*, National Council of Teachers of Mathematics, 2000
- *Principal's Guide to Raising Math Achievement*, Elaine K. McEwan, Corwin Press, 2000
- *Putting It Together, Middle School Math in Transition*, Gary Tsuruda, Heinemann, 1994
- *Radical Equations: Math Literacy and Civil Rights*, Robert Moses, and Charles E. Cobb, Beacon Press, 2000
- *So You Have to Teach Math?: Sound Advice for K-6 Teachers*, Marilyn Burns and Robyn Silbey, Math Solutions Publications, 2000
- *Teaching Number: Advancing Children's Skill and Strategies*, Wright, Martland, Stafford, Stanger, Sage Publications, 2002
- *Thinking Like Mathematicians, Putting the K-4 NCTM Standards into Practice*, Thomas Rowan & Barbara Bourne, Heinemann, 1994
- *Uncovering Mathematics With Manipulatives and Calculators, Levels 1-3*, Jane Schielack and Dinah Chancellor, Texas Instruments, 1995.

- *Windows of Opportunity: Mathematics for Students with Special Needs*, edited by Carol Thornton and Nancy Bley, NCTM, 1994
- *Writing in Math Class*, Marilyn Burns, Grades 2-8
- *Writing Mathematics*, Nancy Rogers Bosse, Grades 1-6
- *Writing to Learn Mathematics, Strategies that Work*, Joan Countryman, Heinemann, 1992
- *Young Children Continue to Reinvent Arithmetic - 3rd - Grade: Implications of Piaget's Theory*, Constance Kamii, Sally Jones Livingston, Teachers College Press, 1994
- *Young Children Continue to Reinvent Arithmetic, 2nd Grade: Implications of Piaget's Theory*, Constance Kamii, Linda Joseph, Teachers College Press, 1994
- *Young Children Reinvent Arithmetic: Implications of Piaget's Theory*, Constance Kamii, Leslie Baker Housman, Teachers College Press, 1994
- *Young Mathematicians at Work: Constructing Multiplication and Division*, Catherine Twomey Fosnot, Maarten Dokl, Heineman, 2001
- *Young Mathematicians at Work: Constructing Number Sense, Addition, and Subtraction*, Catherine Twomey Fosnot, Maarten Dolk, Heineman, 2001
- *Young Mathematicians at Work: Constructing Fractions, Ratios, and Percents*, Catherine Twomey Fosnot, Maarten Dokl, Heineman, 2001

Resources for Classroom

Number Sense

- *Constructing Ideas About Patterns, Grades 1-3*, Sandra Ward, Creative Publications, 1995
- *Developing Number Sense in the Middle Grades 5-8*, Barbara Reys
- *Developing Number Concepts Using Unifix Cubes*, Kathy Richardson, Addison-Wesley Publishing Company, 1984
- *Developing Number Concepts, Addition and Subtraction*, Kathy Richardson, Dale Seymour Publications, 1999
- *Developing Number Concepts, Place Value, Multiplication, and Division*, Kathy Richardson, Dale Seymour Publications, 1999
- *Developing Number Concepts, Planning Guide*, Kathy Richardson, Dale Seymour Publications, 1999
- *Developing Number Sense, Grades 3-6*, Rusty Bresser and Caren Holtzman, Math Solutions Publications, 1999
- *Fractions, Decimals, Ratios, & Percents, Hard to Teach and Hard to Learn?*, Carne Barnett, Donna Goldenstein, Babette Jackson, Heinemann, 1994
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Kids Are Consumers, Too! Real World Mathematics for Today's Classroom*, Jan Fiar and Mary Melvin, Addison-Wesley, Menlo Park, California, 1986
- *Learning through Problems, Number Sense and Computational Strategies, A Resource for Primary Teachers*, Paul R. Trafton and Diane Thiessen, Heinemann, 1999
- *Lessons for First Grade*, Stephanie Sheffield, Math Solutions Publications, 2002
- *Lessons for Introducing Fractions, Grades 4-5*, Marilyn Burns, Math Solutions Publications, 2001
- *Lessons for Introducing Place Value, Grade 2*, Maryann Wickett, Marilyn Burns, Math Solutions Publications, 2001

- *Math By All Means - Place Value, Grades 1-2, A Marilyn Burns Replacement Unit*, Marilyn Burns, Math solutions Publications, 1991
- *Number Sense and Operations (Curriculum and Evaluation Standards for School Mathematics Addenda Series, Grades K-6)*, Grace M. Burton, 1993
- *20 Thinking Questions for Base Ten Blocks Grades 3-6* Kathryn Walker, Cynthia Reak, Kelly Stewart, Creative Publications, 1995
 - *20 Thinking Questions for Pattern Blocks, Grades 1-3*
 - *20 Thinking Questions for Number Combinations*
 - *20 Thinking Questions for Counting*
 - *20 Thinking Questions for Base Ten Blocks, Grades 2-3*
- *Marcy Cook Resources*, Math Specialist and Consultant, P.O. Box 5840, Balboa Island, CA 92662:
 - Adding Tiles and Dominoes*, Grades K-2, 1994
 - Balance to 12 Tiles*, Grades 1-3, 1997
 - Bearly Balanced Addition Tiles*, Grades 1-2, 1999
 - Charting the Unknown (Algebra)*, Grades 4 -8, 1999
 - Communicating with Tiles*, Grades 4-8, 1990
 - Coop Thinking*, Grade 4-8, 1993
 - Elementary Algebra Experiences*, Grades 3-6, 1996
 - First Count, Then Add Tiles*, Grade K-1, 1996
 - Math starters and Stumpers*, Grades 4-8, 1983
 - Mental Math with Tiles and The Hundred Chart*, Grades 2-6, 1997
 - Prove It: The "Doing: of Mathematical Concepts*, Grades 3-8, 1995
 - Skillboard Math, Book 2*, Grades 3-7, 1998
 - Skillboard Math*, Grades K-3, 1996
 - Talk It Over (Encounters of the Problem Solving Kind)*, Grades 5-8, 1987
 - Tiles a Number Sentence*, Grades 2-5, 1989

Algebra

- *20 Thinking Questions for Shapes and Sizes: Attribute Pieces*, Grades 1-2, Stewart, Walker, Reak, Creative Publications, 1995
- *20 Thinking Questions for Sorting Treasures*, Grades 1-3, Stewart, Walker, Reak, Creative Publications, 1998
- *Algebra Puzzles & Problems, Grade 4, 5, 6*, Greenes/Findell, Creative Publications, 1998
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Lessons for Algebraic Thinking, Grades K-2, 3-5, 6-8*, von Rotz, Burns, Wickett, Kharas, Lawrence, Hennessy, Math Solutions Publications, 2001
- *Navigating Through Algebra, PreK-2, 3-5, 6-8, 9-10*, National Council of Teachers of Mathematics, 2001
- *Patterns (Curriculum and Evaluation Standards for School Mathematics Addenda Series, Grades K-8)*, Terrence G. Coburn, 1993
- *Patterns and Functions (Curriculum and Evaluation Standards for School Mathematics Addenda Series, Grades 5-8)*, Elizabeth Phillips, 1991.

Data Analysis

- *Data, Chance, & Probability, Grades 4-6 Activity Book*, Graham A. Jones, and Carol A. Thornton, Learning Resources, Inc., 1993
- *Dealing with Data and Chance*, Judith Zawojewski, Grades 5-8
- *Glyphs!, Data Communication for Primary Mathematicians*, Susan R. O'Connell, Good Apple, 1997
- *Glyphs II, Data Communication for Elementary Mathematicians, Grades 4-6*, Susan R. O'Connell, Good Apple, 1997
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Graphic Organizers for Mathematics, Math-O-Graphs*, Donna Kay Buck & Francis Hildebrand, Critical Thinking Press & Software, 1990
- *Making Sense of Data (Curriculum and Evaluation Standards for School Mathematics Addenda Series, Grades K-6)*, Mary M. Lindquist, 1992
- *Math By All Means: Probability, Grades 1-2, 3-4, A Marilyn Burns Replacement Unit*, Marilyn Burns, Math Solutions Publications, 1995
- *Puddle Questions, Assessing Mathematical Thinking, Grade 3,4*, Joan Westley, Creative Publications, 1994
- *Teach-Stat Activities, Statistics Investigations for Grades 1-3*, The University of North Carolina, Dale Seymour Publications, 1997
- *Used Numbers, Grades 2-3, Sorting: Groups and Graphs*, Dale Seymour Publications, 1990
- *Used Numbers, Grades 4-6, Statistics: The Shape of the Data*, Dale Seymour Publications, 1989

Geometry

- *Geometry and Spatial Sense*, John Del Grande and Lorna Morrow
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Math By All Means: Geometry, Grades 1-2, A Marilyn Burns Replacement Unit*, Chris Confer Marilyn Burns Publications, 1994
- *Math By All Means: Geometry, Grades 3-4, A Marilyn Burns Replacement Unit*, Cheryl Rectanus, Marilyn Burns Publications, 1994
- *Navigating Through Geometry, PreK-2, 3-5, 6-8, 9-10*, National Council of Teachers of Mathematics, 2001

Measurement

- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Math By All Means: Area and Perimeter, Grades 5-6*, Cheryl Rectanus, Math Solutions Publication, 1997
- *Curriculum and Evaluation Standards for School Mathematics Addenda Series: Measurement in the Middle Grades, Grades 5-8*, Dorothy Geddes, 1994

Computation

- *Computational Alternatives for the Twenty-first Century, Cross-Cultural Perspectives from Japan and the United States*, Robert Reyes, Nobuhiko Nohda, NCTM, 1994
- *Lessons for Addition and Subtraction, Grades 2-3*, Bonnie Tank, Lynne Zolli, Math Solutions Publications, 2001
- *Lessons for Introducing Multiplication, Marilyn Burns*, Math Solutions Publications, 2001

- *Lessons for Introducing Division Grades 3-4*, Maryann Wickett, Susan Ohanian, Marilyn Burns, Math Solutions Publications, 2001
- *Lessons for Extending Multiplication, Grades 4-5*, Maryann Wickett, Marilyn Burns, Math Solutions Publications, 2001
- *Lessons for Decimals and Percents, Grades 5-6*, Carrie DeFancisco, Marilyn Burns, Math Solutions Publications, 2001
- *Math By All Means: Division, Grades 3-4*, Marilyn Burns and Susan Ohanian, Math Solutions Publications
- *Math By All Means: Money, Grades 1-2, A Marilyn Burns Replacement Unit*, Jane Crawford, Math Solutions Publications
- *Math By All Means: Multiplication, Grade 3, A Marilyn Burns Replacement Unit*, Marilyn Burns, Math Solutions Publication, 1991
- *Mental Math in the Primary Grades*, Jack Hope, Larry Leutizinger, Barbara Reyes, Robert Reys, Dale Seymour Publications, 1988
- *Using the Math Explorer Calculator, A Sourcebook for Teachers*, Gary Bitter, Jerald Mikesell, Addison-Wesley, 1990

Problem Solving

- *101 Short Problems from EQUALS, Grades 2-9*, Jean Kerr Stenmark
- *50 Problem-Solving Lessons, Grades 1-6, The Best from 10 years of Math Solutions Newsletters*, Marilyn Burns, Math Solutions Publications, 1996
- *Collection of Math Lessons, Grades 1-3, 3-6, 6-8*, Marilyn Burns, B. Tank, and C. McLaughlin, Math Solutions Publications, 1988
- *Cooperative Problem Solving With Pattern Blocks*, Creative Publications
- *Cooperative Problem Solving With Tangrams*, Ann Roper, Creative Publications, 1989
- *Cooperative Problem Solving With With Tangrams, Middle School*, Creative Publications
- *Critical Thinking Activities in Patterns, Imagery, Logic, Grades K-3, 4-6*, Dale Seymour and Ed Beardslee, Dale Seymour Publications
- *Get It Together: Math Problems for Groups, Grades 4-12*, Tim Erickson, 1989
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Group Solutions: Cooperative Logic Activities K-4*, Jan Goodman
- *Math for Smarty Pants*, Marilyn Burns, Scholastic, 1982
- *Mathematics Activities for Elementary School Teachers: A Problem Solving Approach*, Dan Dolan, 1996
- *Mathematics: Problem Solving Activities, Grades 3-6*, D. Holmes, W. Klassen, W. Szetela,
- *Posing Open-Ended Questions in the primary classroom*, Christina Myren, Teaching Resource Center, 1995
- *Problem Solver with Calculators, Grades 4-8*, Creative Publications
- *Problem Solver, Grades 1-8*, Goodnow, Hoogeboom, Moretti, Setphens, Scanlin, Creative Publications
- *Problem Solving, Reasoning and Communicating K-8*, Arthur J. Baroody
- *The Book of Think, or How to Solve a Problem Twice Your Size*, Marilyn Burns, Little, Brown and Company
- *The Way to Math Solutions*, Marilyn Burns, Marilyn Burns Education associates, 1992
- *Think About It, Grades 4-8*, Marcy Cook
- *United We Solve, 116 Problems for Groups, Grades 5-10*, Tim Erickson, EEPS Media, 1996

Assessment

- *Alternative Assessment - Evaluating Student Performance in Elementary Mathematics*, Ann Arbor Public Schools, Dale Seymour Publications, 1993. ISBN # 0-86651-691
- *Assessment techniques that promote learning*, EQUALS staff and the Assessment Committee of the California Mathematics Council Campaign for Mathematics, 1989
- *Authentic Assessment - A Handbook for Educators*, Diane Hart, Addison Wesley, Menlo Park, California, 1994
- *A Collection of Performance Tasks and Rubrics*, Charlotte Danielson, Upper elementary School Mathematics, Eye on Education, 1997
- *Developing Judgment, Assessing Children's Work in Mathematics*, Jean Moon, Heinemann, 1997
- *Elementary Grades Assessment, Balanced Assessment for the Mathematics Curriculum*, Berkeley, Harvard, Michigan State, Shell Centre, Dale Seymour Publications, 1999
- *Graph Paper Masters*, Dale Seymour Publications, 1989
- *Math Assessment - Grades 3-4*, Layne Vinton, Teacher Created Materials, Inc., 1994
- *Mathematics Assessment - Myths, Models, Good Questions, and Practical Suggestions*, Jean Kerr Stenmark, University of California, National Council of Teachers of Mathematics, 1991

- *Mathematics Assessment, What Works in the Classroom*, Gerald Kulm, Jossey-Bass Publications, 1994
- *The Number Devil, a Mathematical Adventure*, Hans Magnus Enzensberger, Henry Holt and Co., 1997
- *Performance Assessment and Standards- Based Curricula: the Achievement Cycle*, Allan A. Glatthorn, Eye on Education, Inc., Larchmont, New York, 1998
- *Puddle Questions, Assessing Mathematical Thinking, Grade 1, 2, 3, 4, 5, 6* John Westley, Creative Publications, 1994
- *A Sampler of Mathematics Assessment*, Tej Pandey, Mathematics Assessment Development Team, California Department of Education, 1991
- *Student-Centered Classroom Assessment*, Richard Stiggins, Merrill, Upper Saddle River, New Jersey, 1997