

## Recommended Books for Middle School Libraries to Support Mathematics Instruction

### A. Interesting Mathematics

- Blair, Harry & Bob Knauff. Not Strictly by the Numbers. Palo Alto, CA: Dale Seymour, 1996.
- Buxton, Laurie. Mathematics for Everyone.
- Crossen, Cynthia. Tainted Truth.
- Devlin, Keith. Mathematics: The Science of Patterns. New York, NY: W. H. Freeman, 1994.
- Feldman, Judy. Shapes in Nature. Chicago, IL: Children's Press, 1991.
- Garland, Trudi Hammel. Fascinating Fibonacci: Mystery & Magic in Numbers. White Plains, NY: Dale Seymour Publications, 1987.
- Gleick, James. Chaos: Making a New Science.
- Hargittai, Istvan. Symmetry: A Unifying Concept. Mineola, NY: Dover, 1991.
- Humphrey, Henry & Deirdre O'Meara-Humphrey. When is Now?
- Huntley, H. E. Divine Proportion: A Study in Mathematical Beauty.
- Isaac, Richard. The Pleasures of Probability. New York, NY: Springer-Verlag, 1995.
- Linn, Charles F. The Golden Mean: Mathematics and the Fine Arts.
- Nichols, Judith E. By the Numbers: Using Demographics and Psychographics... Chicago, IL: Bonus Books, 1990.
- Pappas, Theoni. Math Talk: Mathematical Ideas in Poems for Two Voices.
- Paulos, John Allen. Innumeracy: Mathematic Illiteracy and Its Consequences
- Paulos, John Allen. A Mathematician Reads the Newspaper. New York, NY: Basic Books, 1995.
- Paulos, John Allen. Mathematics and Humor.
- Pedoe, Dan. Geometry and the Visual Arts.
- Peterson, Ivars. The Mathematical Tourist: Snapshots of Modern Mathematics.
- Phillips, Richard. Numbers: Facts, Figures, & Fiction. New York, NY: Cambridge University Press, 1994.
- Riedel, Manfred G. Winning with Numbers: A Kid's Guide to Statistics. Englewood Cliffs, NJ: Prentice-Hall, 1978.
- Rucker, Rudy. Mind Tools: The Five Levels of Mathematical Reality.
- Spangler, David. Math for Real Kids. Glenview, IL: Goodyear Books, 1997.

Sproul, Robert C. Not a Chance: The Myth of Chance in Modern Science & Cosmology. Grand Rapids, MI: Baker Books, 1994.

Stein, Sherman. Strength in Numbers. New York, NY: John Wiley & Sons, 1996.

#### B. Facts/Trivia/Applications

Guinness Book of Sports Records. New York, NY: Facts on File, 1997.

Rand McNally World Facts and Maps. Chicago, IL: Rand McNally, 1996.

The World Almanac and Book of Facts. Mahwah, NY: Funk & Wagnalls, 1998.

Ashabrunner, Brent. Counting America: The Story of the United States Census.

Bendick, Jeanne. How Much and How Many: The Story of Weights and Measures.

Blocksmas, Mary. Reading the Numbers.

Braude, Jacob M. Origins and Firsts.

Bureau of the Census. "Statistical Abstract of the United States." Washington, DC: The National Data Book, 1995.

Desmond, Kevin. A Timetable of Inventions and Discoveries.

Federal Reserve Bank of New York. The Arithmetic of Interest Rates.

Feinsilber, Mike and Mead, William B. American Averages.

Fekete, Irene & Deyer, Jamine. Mathematics. New York, NY: Facts on File, 1990.

Fowler, Allan. The Metric System. Chicago, IL: Children's Press, 1995.

Goldwyn, Martin M. How a Fly Walks Upside Down ... and Other Curious Facts.

Hershey, Robert L. How to Think with Numbers.

Heymann, Tom. On an Average Day ....

Holden, Alan. Shapes, Space and Symmetry. Mineola, NY: Dover, 1991.

Hoffman, Mark S., ed. The World Almanac and Book of Facts.

Judge, Clark S. The Best, Worst, Least, & Most.

Kaplan, Andrew. Careers for Number Lovers. Brookfield, CT: Millbrook, 1991.

Kapraff, Jay. Connections: the Geometric Bridge. New York, NY: McGraw-Hill Publications, 1990.

Knapp, Brian. Measuring. Danbury, CT: Grolier, 1994.

Krentz, Les. What the Odds Are. New York, NY: Harper Perennial, 1992.

Lapham, Lewis H., Michael Pollan, and Eric Etheridge. The Harper's Index Book.

Laudan, Larry. The Book of Risks: Fascinating Facts About the Chances We Take Every Day.

Lerner, Marcia & McMullan, Doug, Jr. Math Smart Junior: Math You'll Understand. New York, NY: Random House, 1995.

Louis, David. 2201 Fascinating Facts.

McLeish, John. Number. New York, NY: Fawcett Columbine, 1992.

McWhirter, Norris & Ross. Dunlop Illustrated Encyclopedia of Facts.

Nichols, Eugene D. & Schwartz, Sharon L. Mathematics Dictionary & Handbook. Honesdale, PA: Nichols Schwartz Publishing, 1993.

Room, Adrian, ed. Guinness Book of Numbers. New York, NY: Sterling, 1990.

Smoothey, Marion. Area and Volume. New York, NY: M. Cavendish, 1993.

Strauss, Stephen. The Sizesaurus. New York, NY: Kodansha International, 1995.

Sutcliffe, Andrea. Numbers: How Many, How Long, How Far, How Much. New York, NY: Harper Perennial, 1996.

U.S. Department of Commerce. Statistical Abstract of the United States.

Wallechinsky, David and Irving Wallace. The People's Almanac.

Weiss, Daniel. 100% American.

#### C. Puzzles, Problems, Tricks, and Illusions

Edwards, Ronald. Alge-Cadabra! Algebra Magic Tricks. Palo Alto, CA: Dale Seymour, 1996.

Eysenck, H. J. Check Your Own I. Q.

Gardner, Martin. The Mathematical Magic Show.

Gardner, Martin. Mathematics, Magic, and Mystery.

Gardner, Martin. Riddles of the Sphinx and Other Mathematical Puzzle Tales.

Greenes, Carole and Immerzeel, George. Trivia Math: A Problem a Day.

Heufford, Philip. Great Book of Math Puzzles. New York, NY: Sterling, 1993.

Hoffman, Paul. Archimedes' Revenge.

Kenda, Margaret & Williams, Phyllis. Math Wizardry for Kids. Hauppauge, NY: Baron's, 1995.

Kim, Scott. Inversions. Scott Kim, 1989.

Kohl, Herbert. Mathematical Puzzlements: Play and Invention with Mathematics.

Kraitchik, Maurice. Mathematical Recreations.

Pedersen, Katherine, Gadel, Sandra, et al. Trivia Math: Algebra and Geometry.

Sachar, Louis. Sideways Arithmetic from Wayside School.

White, Laurence & Broekel, Ray. Math-a-Magic: Number Tricks for Magicians. Morton Grove, IL: A. Whitman, 1991.

#### D. Mathematical People/History/Multicultural

Albers, Donald J. and Alexanderson, G. L. Mathematical People: Profiles and Interviews.

Ascher, Marcia, Ethnomathematics: A Multicultural View of Mathematical Ideas. Pacific Grove, CA: Brooks/Cole Publishing Co., 1991.

Bechmann, Petr. A History of Pi.

Critchfield, Keith. Islamic Patterns. New York, NY: Schocken Books, 1976.

Gillings, Richard. Mathematics in the Time of the Pharaohs.

Katz, Victor J. A History of Mathematics: An Introduction. New York, NY: Harper Collins, 1993.

Krause, Marina C. Multicultural Mathematics Materials.

Parker, Marla. She Does Math! Real-Life Problems from Women on the Job. Washington, DC: Mathematical Association of America, 1995.

Perl, Teri. Women and Numbers – Lives of Women Mathematicians. New York, NY: Interscience, 1961.

Perl, Teri. Math Equals: Biographies of Women Mathematicians + Related Activities.

Shannon, George. Stories to Solve: Folktales from Around the World.

Smith, Sanderson. Agnesi to Zeno: Over 100 Vignettes from the History of Math. Key Curriculum Press, 1996.

Swetz, Frank J. From Five Fingers to Infinity: A Journey Through the History of Mathematics. Chicago, IL: Open Court Publishing Co., 1994.

Turner, Nura, ed. Mathematics and My Career

Zaslavsky, Claudia. Africa Counts.

#### E. Technology

Ditlea, Steve, ed. Digital Deli: The Lunch Group.

Patent, Dorothy Hinshaw. The Quest for Artificial Intelligence.

Ritchie, David. The Computer Pioneers: The Making of the Modern Computer.

Texas Instruments. The Great International Math on Keys Book.

#### F. Hands-on Activities

Ardley, Neil. Making Metric Measurements.

Bishop, Owen. Yardsticks of the Universe.

Brisby, Linda Sue, Heidemann, Andy, et al. Hands On Statistics, Probability, and Graphing.

Gregory, J. Algebra Before and After.

Jennison, Christopher. Baseball Math: Grand slam Activities and Projects, Grades 4-8. Glenview, IL: Good Year Books, 1995.

Kohl, Herbert. Insides, Outsides, Loops, & Lines: Not Just Another Math Book. New York, NY: W. H. Freeman, 1995.

Laycock, Mary and Smart, Margaret. Manipulative Interludes: Algebra.

NCTM. Organizing Data and Dealing with Uncertainty.

Ogilvy, Charles S. Excursions in Geometry. Mineola, NY: Dover, 1990.

Olson, Alton T. Mathematics Through Paper Folding.

Pohl, Victoria. How to Enrich Geometry Using String Designs.

Sharp, Richard M. & Metzner, Seymour. The Sneaky Squares & 113 Other Math Activities for Kids. Blue Ridge Summit, PA: TAB Books, 1990.

Stwertka, Eve and Albert. Make It Graphic: Drawing Graphs for Science and Social Studies.

Van Cleave, Janice Pratt. Janice Van Cleave's Geometry for Every Kid. New York, NY: John Wiley & Sons, 1994.

Wah, Anita and Picciotto, Henri. Algebra: Themes, Tools, Concepts.

Winter, Mary Jean, Lappan, Glenda, Phillips, Elizabeth, and Fitzgerald, William. Spatial Visualization: Middle Grades Mathematics Project.

#### G. Literature

Abbott, Edwin. Flatland: A Romance of Many Dimensions.

Anno, Masaichiro & Anno, Mitsumasa. Anno's Mysterious Multiplying Jar. New York, NY: Philomel Books, 1983.

Anno, Mitsumasa. Anno's Magic Seeds. New York, NY: Philomel Books, 1995.

Anno, Mitsumasa. Anno's Math Games II. New York, NY: Philomel Books, 1989.

Aksakov, Sergei. The Scarlet Flower.

Anderson, Hans Christian. The Nightingale.

Barry, David. The Rajah's Rice: A Mathematical Folktale from India. New York, NY: W. H. Freeman, 1994.

Birch, David. The King's Chessboard. New York, NY: Puffin Pied Piper Books, 1988.

Buck, Pearl. The Big Wave.

Burger, Dionys. Sphereland

Carroll, Lewis. Alice in Wonderland.

Connell, David D. & Thurman, Jim. Mathnet Casebook #1: The Case of the Unnatural. New York, NY: Scientific Books for Young Readers, 1993.

Connell, David D. & Thurman, Jim. Mathnet Casebook #2: Despair in Monterey Bay. New York, NY: Scientific Books for Young Readers, 1993.

Connell, David D. & Thurman, Jim. Mathnet Casebook #5: The Case of the Mystery Weekend. New York, NY: W. H. Freeman, 1995.

Connell, David D. & Thurman, Jim. Mathnet Casebook #6: The Case of the Smart Dummy. New York, NY: W. H. Freeman, 1995.

Ferris, Jeri. What Are You Fighting Now? A Story About Benjamin Banneker.

Gardiner, John Reynolds. Stone Fox.

Gordon, Sheila. Waiting for the Rain.

Hamilton, Virginia. The House of Dies Drear.

Hamilton, Virginia. The Magical Adventures of Pretty Pearl.

Hoobler, Dorothy and Hoobler, Thomas. The Trail On Which They Wept, The Story of a Cherokee Girl.

Ikeda, Daisaku. The Cherry Tree.

Innocenti, Roberto. Rose Blanche.

Isdell, Wendy. A Gebra Named Al. Minneapolis, MN: Free Spirit Publishing, 1993.

Juster, Norton. The Dot and the Line: A Romance in Lower Mathematics.

Krumgold, Joseph. ... And Now Miguel.

Lasky, Kathryn. The Night Journey.

Lewis, Elizabeth Foreman. Young Fu of the Upper Yangtze.

Lieber, Lillian. The Education of T. C. Mitts.

Lowry, Lois. Number the Stars.

Martin, Bill, Jr. and Martin, John Archambault. Knots on a Counting Rope.

McKissack, Patricia C. Mirandy and Brother Wind.

McMillan, Bruce. Eating Fractions. New York, NY: Scholastic, 1991.

Mendez, Phil. The Black Snowman.

Miller, Robert. Reflections of a Black Cowboy.

Mohr, Nicholas. Felita.

Naidoo, Beverly. Journey to Jo'Burg.

Nhuong, Huynh Quang. The Land I Lost, Adventures of a Boy in Vietnam.

Okijk, Pamela. The Mayas.

Osinski, Alice. The Tlingit. Chicago, IL: Children's Press, 1990.

Pittman, Helena Clare. A Grain of Rice. New York, NY: Bantam Skylark Books, 1986.

Polacco, Patricia. Mrs. Katz and Tush.

Reiss, Johanna. The Upstairs Room.

Richter, Hans Peter. Friedrich.

Smucker, Barbara. Runaway to Freedom: A Story of the Underground Railway.

Sorensen, Virginia. Plain Girl.

Spinelli, Jerry. Maniac Magee. Boston, MA: Little, Brown & Co., 1990.

Steptoe, John. Mufaro's Beautiful Daughters.

Stienecker, David. Fractions. New York, NY: Benchmark Books, 1996.

Swift, Jonathan. Gulliver's Travels.

Tahan, Malba. The Man Who Counted. W. W. Norton & Co., 1993.

Taylor, Theodore. The Cay.

Trimble, Stephen. The Village of Blue Stone.

Uchida, Yoshiko. Journey Home.

Voight, Cynthia. Dacey's Song. New York, NY: Antheneum Press, 1982.