MATH! ALL SUMMER LONG

What would happen if a musician put down his instrument in June, did not play it all summer, and then tried to perform at a concert in September? He would probably give a "not so stellar" performance due to lack of practice. This is also true for students who do not practice academic skills over the summer months - they experience **summer learning loss**.

WHAT DOES THE RESEARCH SHOW?

❒ Most students lose about 2.6 months of "grade level equivalency" in math over the summer vacation.

❒ Summer has a greater effect on math learning loss than reading learning loss.

❒ The level of learning loss in math is similar among all children, regardless of socio-economic status. Researchers believe this occurs because, though many children have multiple opportunities to read over the summer, few are likely to practice math skills outside of a classroom setting.

❒ Over a child's school career, the negative impact of summer vacations on achievement has a cumulative effect...and it adds up quickly!

(Sources: *The Effects of Summer Vacation on Achievement Test Scores* by Cooper, Nye, Charlton, Lindsay, and Greathouse, Review of Educational Research, Vol. 66, No. 3, 1996 & Center for Summer Learning at www.summerlearning.org.)

We can deduce from the research that it is important to encourage children to practice math, in addition to reading, during the summer. But, not to worry - it can be fun!

WHAT CAN FAMILIES DO TO ENCOURAGE MATH LEARNING?

❍ Talk to teachers.

Ask your children's teachers what they were learning in math when the school year ended. Get suggestions on what they should practice over the summer to stay sharp!

❍ Play games at home.

Any game that requires players to use money, counting, or other math skills can be a worthwhile way to spend time. The classics, such as Monopoly, PayDay, and Life are just a few that encourage children to practice math skills indirectly.

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MATH! ALL SUMMER LONG...CONTINUED

❍ Encourage math skills practice on the Internet.

There are many interactive Web sites designed for children and teens to practice math. Most libraries are equipped with Internet-connected computers for patrons to use free of charge. Connect to these fun sites, either at the library or at home:

- ❒ **www.funbrain.com:** This site lets "mathematicians" hone their skills while playing games such as **Tic-Tac-Toe.** Solve the problem correctly and claim a square! In Math Baseball, FunBrain creates a problem to solve. Players answer, "swing" and find out if they've hit a single, double, etc. Wrong answer = OUT! Levels of games range from easy to SUPERBRAIN.
- ❒ **www.coolmath4kids.com:** This Web site has ArithmATTACK - a game that challenges players to solve as many arithmetic problems as they can in 60 seconds. Other games & math word searches are also available. Older children & teens can work on more difficult mathematical concepts, such as geometry, on this Web site.
- ❒ **www.figurethis.org:** Figure This! Math Challenges for Families has word problems to solve, hints on how to help kids in math and suggestions on talking about the math that is often integrated into children's books. Older children can check out Math Challenges for Middle School Families. Activities from this site can be downloaded into PDF format in **English** and **Spanish.**
- ❒ **www.aplusmath.com**: Children can create on-line math worksheets from basic operations, to fractions, money, order of operations, and more. There are also fun games to play.
- ❒ **www.m759.freeservers.com/puzzle.html:** Older children and teens will get a kick out of this on-line puzzle, **The Diamond 16,** that illustrates the theory of symmetry.

❍ Integrate math into every day activities.

When **grocery shopping** with your young child, talk about the prices on items. Point out how $1.50 means "one dollar & 50 cents." You can say, "50 cents is...(50 pennies/5 dimes/2 quarters) Show them what a penny, dime, or quarter looks like.

Have your children help count items you are purchasing, such as fruit & vegetables. Your first or second graders may be able to answer questions such as, "We can buy 2 cucumbers for $1. How many can we get for $2?" Then ask, "How did you get your answer?" Don't worry if they get it wrong - it's all in good fun, and good practice!

Point to the checkout line that says, "15 items or less" or "12 items or less." Ask him, "Do you think we can go in that line? Do we have fewer than 15 items in our basket/cart?"

Estimate how much the whole order will ring up to. Make a game out of it. This is a great exercise in 'mental math.' Who came closer?

Give older children the responsibility of selecting items for an event, such as a picnic. Give them a small budget and encourage them to compare products to find the best value. This is a good way to talk about "unit pricing." Talk about why a package of 10 rolls for $2 is a better deal than the 8-roll package for the $1.95. Many kids think the cheaper one is the better value, without realizing how the size/quantity of the product matters. See how they did at the register. Did they stay within the budget?

When **clothes shopping**, encourage older children to calculate how much you will save on an item that is "20% off."

Introduce your children to the concept of saving and budgeting using **family outings**. When you take your children out to a movie or museum, have your children calculate how much the family will need for tickets, concessions, parking (if applicable), etc.

MATH! ALL SUMMER LONG…CONTINUED

❍ Talk about math while reading:

Reading books to your children that integrate mathematical concepts into the story can be beneficial to your child in that they:

❒ Introduce your child to new math vocabulary. Understanding math vocabulary is essential for understanding problems on the MCAS math section.

❒ Introduce your child to new math concepts.

❒ Reinforce concepts and math vocabulary that your children may have learned in school.

❒ Provide illustrations of mathematical concepts, making them easier for young children to grasp (especially those visual learners.)

❒ Reinforce reading while learning about math, a double benefit!

❒ Demonstrate that math truly is everywhere and relevant to our daily lives.

❒ Demonstrate that math can actually be fun (imagine that!)

❒ Act as a springboard for fun, home activities that reinforce the mathematical concepts in the books.

The following pages contain a number of such books, divided loosely by age range. Some series, such as **Hello Reader! Math** and **Mathstart**, have suggestions for extension activities in the back of each book. The activities reinforce the math concepts demonstrated in the book, and can be done in the classroom or at home. For your reference, it has been noted next to the titles if the book is part of the **Mathstart** or **Hello Reader! Math Series.** In addition, some of the stories have Web-based follow-up activities. Titles with a computer mouse  next to them have an accompanying on-line activity. Visit **www.math.youngzones.org/literature.html** to access these follow-up activities and lessons.

Before reading a book to your child:

❒ Keep in mind that though a book may be organized in an age range category, it may not be suitable for your child - maybe it is too challenging, or not challenging enough. As a parent, you know your children, and their reading abilities, best. Try to choose books accordingly. Your children will also let you know if a book is too easy, boring, or difficult for them.

❒ There are many great books out there. Unfortunately, there are many so-so ones, too. Some can be downright confusing. You may want to read a book before sharing it with your children. You can also read book reviews on line at www.amazon.com or www.bn.com. You can even write a review (or encourage your child to write an on-line review) of a book you read together.

MATH! ALL SUMMER LONG...CONTINUED

SUGGESTIONS ON HOW TO TALK WITH YOUR CHILDREN ABOUT THE MATH WOVEN INTO THEIR BOOKS

The following excerpts are from children's books that have mathematical concepts woven into them. Here's how parents can use books to engage in dialogue about math with children.

❒ Sample Text from **Seventeen Kings and 42 Elephants** by Margaret Mahy and Patricia MacCarthy, 1972.

Excerpt 1:

"*Seventeen Kings on forty-two elephants going on a journey through the wild, wet night.*"

Sample follow-up question:

If there are 17 Kings and 42 Elephants, are there some elephants riding without a King? How many? (using subtraction - 42 elephants - 17 Kings =25 elephants riding alone.)

"*Forty-two elephants - oh, what a lot of 'ums, Big feet beating in the wet wood shade.*"

Sample follow-up question:

If there are 42 elephants, how many "big feet" are there?
(using multiplication: 42 elephants X 4 feet per elephant = 168 total feet.)

❒ Sample Text from **Amanda Bean's Amazing Dream: A Mathematical Story** by Cindy Neuschwander, Liza Woodruff, & Marilyn Burns, 1998.

Excerpt:

"The countertop," I say, "I must count these tiles. There are 12 columns of tiles. There are 12 tiles in each column. It is a long time before I count all 144 of them. I am Amanda Bean and I like to work quickly. Maybe multiplying would be faster.

Sample follow-up: Use the pictures in the book to talk about math. Have your child look at the picture on the page (a grid of tiles on Amanda Bean's counter top.) See how long it takes to count all the tiles. Demonstrate how multiplying is quicker. Then, look at the jars of pickles on the shelf over the counter top. There are five jars with three pickles in each one. Ask, "Using multiplication, how many pickles are there on this page?" (5 jars X 3 pickles = 15 pickles.) There are follow-up activities for teachers and parents in the back of the book.

A few pointers:

❒ Don't over do it with too many follow up questions - you don't want to break the rhythm of the story too much.

❒ If your children are not interested in talking about the math in the story (you may hear, "DAAAAD!, just read the story!) don't press the issue. You want reading to be an enjoyable time, not something your children dread. Follow their lead and enjoy!

Children's Books that contain Mathematical Concepts

Baby - Preschool (0 to 3 or 4 years old)

Before your children even get to school, you can read books with them that have math woven right into the stories! And, it's never too early to start reading to your children.

Addition & Subtraction

Carle, Eric	Rooster's Off to See the World (2002)
LeSieg, Theo; Seuss; Mckie, Roy	Ten Apples Up On Top (1998)
Mack, Stanley	Ten Bears in My Bed: A Goodnight Countdown (1974) (subtract from 10)
Moerbeek, Kees	Six Brave Explorers: A Pop Up Book (1997)

Counting:

Aker, Suzanne; Karlin, Bernie	What Comes in 2's, 3's & 4's? (1992)
Alda, Arlene	Arlene Alda's 1, 2, 3 -What Do You See? (1998)
Axtell, David	We're Going on a Lion Hunt (South African Tale) (2000)
Bang, Molly	Ten, Nine, Eight (1998)
Bang, Molly	Diez, Nueve, Ocho (spanish version) (1999)
Beaton, Clare	One Moose, Twenty Mice (1999)
Boynton, Sandra	Doggies: A Counting and Barking Book (1995)
Carle, Eric	1, 2, 3 to the Zoo: A Counting Book (1996)
Carle, Eric	The Very Hungry Caterpillar (1994)
Christelow, Eileen	Five Little Monkeys Sitting in a Tree (1999)
Christelow, Eileen	Five Little Monkeys Jumping on the Bed (counting & subtraction) (1998)
Dena, Anael; Eho, Jerome	Numbers (2002)
Deschamps, Nicole; Ward, Kristin	My First Number Board Book (1999)
Foreman, Michael	Dad! I Can't Sleep
Gibson, Barbara	A Pile of Puppies (1993)
Greenstein, Elaine	Dreaming: A Countdown to Sleep (2000)
Grossman , Virginia; Long, Sylvia	Ten Little Rabbits (native Americans)(1998)
Hamm, Diane Johnston et. al.	How Many Feet in the Bed? (1994)
Hill, Eric	Spot Can Count (counting to 10)
Hoban, Tana	26 Letters and 99 Cents (1995)
Hoban, Tana	1 2 3 (1985)
Hoban, Tana	Count and See (1972)
Hutchins, Pat	One Hunter (1986)
Jackson, Woody	Counting Cows (1999)
Johnston, Tony	Whale Song (1992)
Keats, Ezra Jack	Over in the Meadow (1999)
Kitamura, Satoshi	When Sheep Cannot Sleep (1988)
Mackinnon, Debbie	How Many? (1993)
Martin, Bill	Knots on a Counting Rope (1997)
Maurer, Donna; Cazet, Denys	Annie, Bea and Chi Chi Dolores
Mora, Pat; Lavalee, Barbara	Uno, Dos, Tres= One, Two, Three
O'Donnell, Elizabeth; Schwartz, Carol	Winter Visitors (1997)
Oxenbury, Helen	Numbers of Things (counting to 50) (1983)
Pallotta, Jerry; Masiello, Ralph	The Icky Bug Counting Book (1992)
Peek, Merle	Roll Over! : A Counting Song (1999)
Priddy, Roger	Baby's Book of the Body (2001)
Rey, Margaret	Curious Georges 1 to 10 and Back Again (2001)
Root, Phyllis; Chapman, Jane	One Duck Stuck (2001)
Sanchez, Ricardo	Numeros=Numbers (1994)
Scarry, Richard	Richard Scarry's Best Counting Book Ever (1975)
Schnetzler, Pattie L.	Ten Little Dinosaurs (2000)
Sendak, Maurice	One was Johnny: A Counting Book (1991)
Sis, Peter	Waving: A Counting Book (1988)
Sloat, Teri	From One to One Hundred (counting to 100) (1995)
Tafuri, Nancy	Who's Counting? (1986)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Baby - Preschool (0 to 3 or 4 years old)

Counting (continued):

Tucker, Sian	1 2 3 Count With Me: My First Lift-the-Flap Counting Book (1996)
van der Meer, Mara	How Many Monsters? (2000) (sorting and selecting from 1-10)
Walsh, Ellen Stoll	Mouse Count (1995)
Weihs, Erika	Count the Cats (1976)
Williams, Roseanne	Five Little Monsters (1995) (counting, sorting, 1-1 correspondence)
World Wildlife Fund	World Wildlife Fund Animals 1, 2, 3 (?)

Geometry & Shapes:

Brown, Margery W.; Blair, Culverson	Afro-Bets Book of Shapes (1991)
Carle, Eric	The Secret Birthday Message (geometric shapes)(1998)
Carle, Eric	The Very Busy Spider (1995) 
Ehlert, Lois	Color Farm (1997) (shapes and colors)
Hoban, Tana	I Read Signs (1987)
Hoban , Tana	Shapes, Shapes, Shapes (1996)
Hoban, Taba	Spirals, Curves, Fanshapes and Lines (1992)
Jonas, Ann	Round Trip (Pre-K geometry) (1990)
MacKinnon, Debbie; Sieveking, Anthea	Eye Spy Shapes: A Peephole Book (2000)
Rogers, Paul; Tucker, Sian	The Shapes Game (1990)
Tompert, Ann; Parker, Robert Andrew	Grandfather Tang's Story (tangram animals) (1997)
Van Fleet, Matthew	Fuzzy Yellow Ducklings: Fold Out Fun with Textures, Colors, Shapes, Animals (1995)

Measurement & Size:

Carle, Eric	Papa, Please Get the Moon for Me (1999)
Finzel, Julia	Large as Life (1991)
Haring, Keith	Big Baby (1998)
Henkes, Kevin; Tafuri, Nancy	The Biggest Boy (1998)
Hutchins, Pat	Happy Birthday Sam (1991)
Kalan, Robert; Crews, Donald	Blue Sea (size) (1992)

Number Sense & Patterns:

Geringer, Laura; Lobel, Arnold	A Three Hat Day (1987) (permutations & combinations)
Hoban, Tana	Exactly the Opposite (1997)
Wood, Audrey & Don	The Napping House (2000) (patterns)

Probability:

Carlstrom, Nancy White; Degen, Bruce	Jesse Bear, What Will You Wear? (1996) (combinations)

Money:

Gretz, Suzanna	Teddy Bears Go Shopping (1982)

Problem Solving:

de Paola, Tomie	Too many Hopkins (1989) (sequencing events)
Lear, Edward; Brett, Jan	The Owl and the Pussycat (1997) 
Lionni, Leo	Swimmy (1991) (problem solving)

Time:

Bridwell, Norman	What Time is it, Clifford? (1998) (has moveable clock hands)
Johnson, Meredith	When I Learn to Tell Time (1990)
Lewis, Paul Owen	P. Bear's New Year's Party (1999)
Trivas, Irene	Emma's Christmas (1992) (12 days of Christmas)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Below are some recommended titles for children Preschool-Grade 2. As a parent, you know your child's reading level and interests. Some of these book may not be challenging enough for advanced readers. Browse through books to see if they are suited to your individual child's abilities.

Addition & Subtraction:

Burningham, John	The Shopping Basket (1987) (subtraction to 21)
Choraw, Kay	Number One, Number Fun (1995) (add/subtract)
Dunbar, Joyce; Majewska, Maria	Ten Little Mice (1995) (subtraction for 10)
Gibson, Ray	I Can Add Up (1999)
Gisler, David; Beise, Sara	Addition Anne (2002)
Harris, Trudy; Griffis Johnson, Beth	100 Days of School (1999)
Leedy, Loreen	Mission-Addition (1999)
Long, Lynette	Domino Addition (1996)
Long, Lynette	Sumemos Con El Domino (1996)
Long, Lynette	Dealing with Addition (1998)
Rocklin, Joanne; Lemelman, M.	Just Add Fun (7-9 years) **HELLO READER! MATH**
MacCarone, Grace, et. al.	Monster Math Picnic (1998) **HELLO READER! MATH**
Murphy, Stuart J.,et. al.	A Fair Bear Share (1998) (regrouping in subtraction) (6-8 years) **MATHSTART**
Murphy, Stuart J., et. al	Animals on Board (addition) (1999) **MATHSTART**
Murphy, Stuart J., et. al	Elevator Magic (subtraction) (1997) (WEBPAGE) (6-8 years)**MATHSTART**
Murphy, Stuart J.,et. al	Monster Musical Chairs (2000)(subtraction)(3-6 years)**MATHSTART**
Murphy, Stuart J., et. al	Ready, Set, Hop! (1996) (addition/subtraction) (7-9 years) **MATHSTART**
Murphy, Stuart J., et. al	The Shark Swimathon (2000) (subtraction) (7-9 years) **MATHSTART**
Pallotta, Jerry; Bolster, Rob	The Hershey's Kisses Subtraction Book (2002)
Pallotta, Jerry; Bolster, Rob	The Hershey's Kisses Addition Book (2000)
Small , David	Imogene's Antlers (2000)
Sturges, Philemon; Vojtech, Anna	Ten Flashing Fireflies (1997) (add & subtract by ones)

Counting:

Allbright, Viv	Ten Go Hopping (1985)
Anno, Mitsumasa	Anno's Counting Book (1986)
Anno, Mitsumasa	Anno's Counting House (1982)
Anno, Mitsumasa	Anno's Flea Market (1984) (classification)
Berenstain, Stan & Jan	Berenstain Bears' Counting Book (1976)
Blumenthal, Nancy; Kaufman, Robert	Count-a-saurus (1989)
Brett, Jan	The First Dog (1999)
Bridgman, Elizabeth P.	All the Little Bunnies (1977)
Brooks, Bruce	NBA by the Numbers (1997)
Brown, Marc Tolon	One, Two, Three: An Animal Counting Book (1976)
Bursik, Rose	Zoe's Sheep (1994)
Carter, David	How Many Bugs in a Box? : A Pop Up Counting Book (1988)
Cave, Kate & Riddell	Out for the Count (1992)
Cherrill, Paul; Sawick, Norma Jean	Ten Tiny Turtles: A Crazy Counting Book (1995)
Clement, Rod	Counting on Frank (1991)
Cleveland, David	April Rabbits (ordinal, cardinal numbers)(1985)
Cole, Norma; Peck, Marshall	Blast Off! A Space Counting Book (1994) (counting large numbers)
Crews, Donald	Ten Black Dots (1986)
Cuyler, Margery; Howard, Arthur	100th Day Worries (2000)
Dee, Ruby; Meddaugh, Sarah	Two Ways to Count to Ten (1990)
Duke, Kate; Bonnel, J.	One Guinea Pig is Not Enough (2001)
Dunrea, Olivier	Deep Down Underground (1989)
Ehlert, Lois	Fish Eyes: A Book You Can Count On (1992)
Eichenberg, Fritz	Dancing in the Moon (1989) (counting rhymes)
Enderle, Judith; et. al.	Six Snowy Sheep (1995)
Evans, Lezlie; Roche, Dennis	Can You Count 10 Toes (count to 10 in 10 different languages) (1999)
Falwell, Cathryn	Feast for 10 (1995)
Feelings, Tom & Muriel L.	Moja Means One: Swahili Counting Book (1992)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Counting (continued):

Friedman, Aileen; Guevara, Susan	The King's Commissioners (1995)
Geisert, Arthur	Roman Numerals I to MM (2001)
Giganti, Paul; Crews, Donald & Cohn, Amy	How Many Snails? A Counting Book (1994)
Grover, Max	Amazing and Incredible Counting Stories! A Number of Tales (1995)
Harley, Bill; Harril, Kitty	Sitting Down to Eat (1996)
Harwayne, Shelley; Farr, Teresa	Jewels: Children's Play Rhymes (1995)
Haskins, James	Count Your Way Through...(series - Russia, the Arab World, China, Mexico, Japan, Germany, Africa, Korea, Israel, India, Canada, and Italy)(1988)
Inkpen, Mick	One Bear at Bedtime: A Counting Book (1992)
Jernigan, Gisela	One Green Mesquite Tree (1989)
Kahn, Katherine	Alef is One: A Hebrew Alphabet and Counting (1989)
Kasza, Keiko	The Wolf's Chicken Stew (counting to 100)(1996)
Kindersley, Dorling	The Lifesize Animal Counting Book (2001)
Kitchen, Bert	Animal Numbers (1991)
Koller, Jackie French; Munsinger, Lynn	One Monkey Too Many (1999)
Koomen, Michele	Numbers: Counting It Up (2001)
Kuskin, Karla; Cartwright, Reg	James and the Rain (1995)
Hughes, Shirley	When We Went to the Park (1985) (Counting to 55) (3-6 years)
Lesser, Carolyn; Regan, Laura	Spots: Counting Creatures From Sky to Sea
Leydenfrost, Robert J	Ten Little Elephants (1975)
Lindberg, Reeve; Jeffers, Susan	The Midnight Farm (1987)
Lobel, Anita	One Lighthouse, One Moon (2002)
Loomis, Christine; Eitan, Ora	Cowboy Bunnies (1997)
MacCarthy, Patricia	Ocean Parade: A Counting Book
Mahy, Margaret; Ogden, Betina	When the Kings Ride By (1995) (counting, classifying)
Marsh, T. J.	Way Out in the Desert (1998)
Martin, Bill; Sampson, M. & Cahoon, H.	Rock it, Sock it, Number Line (2001)
Mazzola, Frank	Counting is for the Birds (1997)
McGrath, Barbara	The M & M's Brand Chocolate Candies Counting Board Book (1994)
Merriam, Eve; Gorton, Julia; Horton, J.	Ten Rosy Roses (1999)
Merriam, Eve; Karlin, Bernie	Twelve Ways to Get Eleven (Counting to 11)
Milstein, Linda Breiner	Coconut Mon (counting down from 10)
Moore, Inga	Six Dinner Sid (1998)
Moss, Lloyd; Priceman, Marjorie	Zin! Zin! Zin!: A Violin (1995)
Nolan, Helen; Walker, Tracy	How Much? How Many? How Far? How Heavy? How Long? How Tall is 1,000? (2001) (counting to 1,000)
Onyefulu , Ifeoma	Emeka's Gift: An African Counting Book (1999)
Owens, Mary Beth	Counting Cranes (1993)
Pallotta, Jerry; Biedrzycki	Underwater Counting (2001)
Patten, J. M.	Numbers and Age(1996)
Patten, J. M.	Numbers and Counting (1996)
Petersham, Maud & Miska	The Rooster Crows: A Book of American Rhymes and Jingles (1987)
Pilegard, Virginia Walton; Debon, Nicolas	The Warlord's Beads (2001)
Pomerantz, Charlotte	One Duck, Another Duck (1987)
Reiss, John	Numbers (1976)
Rosen, Michael; Iwai, Melissa	Chanukah Lights Everywhere (2003)
Ryan, Pam; Benrei, H. & McCormack, E.	One Hundred is a Family (1996)
Ryan, Pam Munoz et. al.	The Crayon Counting Book (1996) (odd/even)
Sierra, Judy; Hillenbrand, Will	Counting Crocodiles (counting to 26)
Toft, KimMichelle; Sheather, Allan	One Less Fish (1998)
Thronhill, Jan	The Wildlife 1 2 3: A Nature Counting Book (1989)
Tudor, Tasha	1 is One (2000)
Wadsworth, Ginger; Needham, James	One on a Web: Counting Animals at Home (1997)
Wahl, John	I Can Count the Petals of a Flower (1985)
West, Cindy	Disney Babies 1 to 10 (1991)
Wildsmith, Brian	Brian Wildsmith's 1, 2, 3's (1999)
Winter, Jeanette	Josefina (1996)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Fractions:

Adler, David; Tobin, Nancy	Fraction Fun (1997)
Dennis, Richard J.	Fractions are Parts of Things (1972)
Emberley, Ed	Emberley's Picture Pie: A Circle Drawing Book (fraction circles) (1984)
Giganti, Paul & Crews, Donald	Each Orange Had 8 Slices (fractions) (1994)
Hutchins, Pat	The Doorbell Rang (1989)
Lacapa, Kathleen & Michael	Less Than Half, More than Whole(mixed heritage) (1994)
Leedy, Loreen	Fraction Action (halves, thirds, and fourths) (1996)
McMillan, Bruce	Eating Fractions (1991)
Murphy, Stuart J. et. al	Give me Half! (1996) (6-8 years) **MATHSTART**
Murphy, Stuart J. et. al	Jump, Kangaroo, Jump (1999)**MATHSTART**
Pallotta, Jerry; Bolster, Rob	Apple Fractions (August 2003)
Pallotta, Jerry; Bolster, Rob	Hershey's Milk Chocolate Bar Fractions Book (1999)
Pomerantz, Charlotte; DeSalvo Ryan, D.	The Half-Birthday Party (halves) (1984)
Pinczes, Elinor	Inchworm and a Half (2001)
Steig, William	Pete's A Pizza (1998)
Thompson, Lauren; Wingerter, Linda	One Riddle, One Answer (2001) (fractions; Persian folktale)
Ziefert, Harriet; Bolam, Emily	Rabbit and Hare Divide an Apple (1999)

Geometry & Shapes:

Allen, Pamela	Mr. Archimedes' Bath (1980) (volume, displacement)
Axelrod, Amy; McGinley-Nally, S.	Pigs on the Ball: Fun with Math and Sports (2000) (geometry in mini golf)
Bartalos, Michael	Shadowville (1995)(symmetry)
Baum, Arline et. al .	Opt: An Illusionary Tale (1997) (optical illusions)
Birmingham, Duncan	M is for Mirror (1989)
Brown, Jeff; Bjorkman, Steve	Flat Stanley (1996) (2D and 3d representations)
Burns, Marilyn; Tilley, Debbie	Spaghetti & Meatballs for All: A Mathematical Story (1997) (perimeter& area)
Burns, Marilyn; Silveria, Gordon	The Greedy Triangle (1995)
Carle, Eric	Draw Me a Star (1998)
Chavarria-Chairez, Becky ; Vega, A., et. al	Magda's Tortillas/Las Tortillas de Magda (2000) (shapes - circles and such)
Ernst, Lisa Cambell	Sam Johnson & the Blue Ribbon Quilt (1992)
Ernst, Lisa Cambell	The Tangram Magician (1990)
Esterl, Arnica et. al.	The Fine Round Cake (1991)
Falwell, Cathryn	Clowning Around (1991)
Friedman, Aileen; Howard, Kim	A Cloak for a Dreamer (1995) (tessellations)
Grifalconi, Ann	The Village of Round and Square Houses (1986)
Hoban, Tana	So Many Circles, So Many Squares (1998)
Hoban, Tana	Cubes, Cones, Cylinders, and Spheres (3-d shapes in everyday things) (2000)
Hoban, Tana	Over, Under, and Through and Other Spatial Concepts (spatial sense) (1973)
Hoban, Tana	Shadows and Reflections (1990)
Hopkinson, Deborah; Ransome, James	Sweet Clara and the Freedom Quilt (1995)
Hutchins, Pat	Changes, Changes (1997) (3-D shapes)
Jonas, Ann	Reflections (1987) (illustrations from different perspectives & symmetries)
Johnston, Tony; De Paola, Tomie	The Quilt Story (1999) (patterns)
Lasky, Kathryn; Hawkes, Kevin	The Librarian Who Measured the Earth (1994)
Lauber, Patricia; Lloyd, Megan	How We Learned the Earth is Round (1992) (circumference)
MacCarone, Grace; Kennedy, Anne	The Silly Story of Goldie Locks and the Three Squares (1999) **HELLO READER! MATH**
MacCarone, Grace	Three Pigs, One Wolf, and Seven Magic Shapes (1999) **HELLO READER! MATH** (tangrams & geometric shapes)
Murphy, Stuart J. et. al	Captain Invincible and the Space Shapes (2001)(3-D shapes) (6-8 years) **MATHSTART**
Murphy, Stuart J. et. al	Circus Shapes (estimation) (3-6 years) **MATHSTART**
Onyefulu, Ifeoma; Wasinger, Meredith M.	A Triangle for Adaora: An African Book of Shapes (2000) (Nigerian culture; shapes in nature)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Geometry & Shapes (continued):

Paul, Ann Whitford; Winter, Jeannette	Eight Hands Round (1996) (quilt patterns)
Pilegard, Virgina Walton; Debon, Nicolas	The Warlord's Puzzle (2000) (tiling and tessellating)
Pfanner, Louise	Louise Builds a House(1989) (architectural shapes)
Rocklin, Joanne	Not Enough Room (1998) (area)
Rocklin, Joanne	The Case of the Backyard Treasure (1998) (geometric shapes; mental math) **HELLO READER! MATH**
Ross, Kathy; Barger, Jan	Kathy Ross Crafts: Triangles, Rectangles, Circles, and Squares (2002) (crafts to teach shapes)
Stamper, Judith Bauer	Tic- Tac-Toe: Three in a Row (1998) **HELLO READER! MATH**
Testa, Fulvio	If You Look Around You (1997) (geometric shapes)
Tusa, Tricia	Maebelle's Suitcase (1991)
Walter, Marion; Habar-Schaim, Navah	Look at Annette (1972) (symmetry with mirrors)

Math Poems:

Franco, Betsy	Counting Caterpillars and Other Math Poems (1999)
Liatsos, Sandra et. al	Poems to Count (1999)

Measurement & Size:

Adler, David; Tobin, Nancy	How Tall, How Short, How Far Away (1999)
Albee, Sarah et al.	The Dragon's Scales (1998) (measurement & size; comparisons)
Allard, Harry G.; Marshall, James	Miss Nelson is Missing! (1985)(non-standard measurement) 
Allen, Pamela	Who Sank the Boat? (1996) (weight) 
Axelrod, Amy; McGinley-Nally, Sharon	Pigs in the Pantry: Fun with Math and Cooking (1999) (cooking measurements; following recipes)
Axelrod, Amy ; McGinley-Nally, Sharon	Pigs on the Move: Fun with Math and Travel (1999) (distance)
Banyai, Istvan	Zoom (1995)
Banyai, Istvan	Re-Zoom (1998)
Blake, Quentin	Mrs. Armitage on Wheels (1988) (balance, weight, speed, ratio)
Brett, Jan	Armadillo Rodeo (1995) 
Bridwell, Norman	Clifford
Briggs, Raymond	Jim and the Beanstalk (1997) (a "twisted" tale of measurement & proportion)
Browning, Dave	Marvin Measures Up
Browning, Dave	Marvin Weighs In
Carle, Eric	The Grouchy Ladybug (1996) 
Carrick, Carrol & Donald	Patrick's Dinosaurs (1985)
Clement, Rod	Counting on Frank (1998) (volume and other measurements)
de Paola, Tomie	Strega Nona (1988)
Du Quette, Keith	Hotel Animal (1996)
Esbensen, Barbara Juster	Star Maiden: An Ojibway Tale (1991)
Hightower, Susan; Novak, Matt	Twelve Snails to One Lizard (1997) (non-standard measurement; length; inches/feet/yards)
Hirst, Robin et. al.	My Place in Space (1992)
Hutchins, Pat	Titch (1993)
Johnston, Tony; Llyod, Megan	Farmer Mack Measures His Pig (1986)
Joyce, William	George Shrinks (2000)
Keenan, Sheila	The Biggest Fish (1996) **HELLO READER! MATH**
Keenan, Sheila et. al	What's Up with That Cup (2001) **HELLO READER! MATH**
Keller, Holly	Jacob's Tree (1999)
Kellogg, Steven	Much Bigger Than Martin (1992)
Kirk, Daniel; Paulsen, Nancy	Bigger (1998)
Koller, Jackie French; Catharine O'Neill	Fish Fry Tonight (1992)
Leedy, Loreen	Mappy Penny's World (2000)
Leedy, Loreen	Measuring Penny (2000)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Measurement & Size:

Lionni, Leo	Inch by Inch (1995) 
McMillan, Bruce	Mouse Views: What the Class Pet Saw (1994) (point of view, perspective, size)
Murphy, Stuart J., et. al	The Best Bug Parade (comparing sizes) (1996) (3-6 years)**MATHSTART**
Murphy, Stuart J., et. al	Super Sand Castle Saturday (1999)(measuring)**MATHSTART**
Myller, Rolf; McCrath, Susan	How Big is a Foot? (1991) 
Nimmo, Jenny; Howard, Paul	Esmeralda and the Children Next Door (2000)
Polacco, Patricia	Thunder Cake (1997)
Rex, Michael	The Fattest, Tallest, Biggest Snowman Ever (1997) **HELLO READER! MATH**
Schwartz, David; Warhola, James	If You Hopped Like a Frog (1999)
Tafuri, Nancy	The Brass Ring (1996)
Wells, Robert	Is the Blue Whale the Biggest Thing There Is? (1993) 
Wells, Robert; Grant, Christy	What's Smaller Than a Pygmy Shrew? (1995)
Traditional Jack and the Beanstalk	(WEBPage lesson on estimation and measurement) 

Money:

Adams, Barbara Johnston; Zarins, Joyce A.	The Go-Around Dollar (1992)
Axelrod, Amy	Pigs Go to Market (shopping for a Halloween Party)
Axelrod, Amy; McGinley-Nally, Sharon	Pigs Will Be Pigs: Fun with Math and Money (1997) 
Berger, Melvin et.al	Round and Round the Money Goes: What Money is and How We Use It (1993)
Brett, Jan	Town Mouse Country Mouse (reprint 2003) 
Brisson, Pat; Barner, Rob	Benny's Pennies (1995)
Hoban, Lillian & Russell	Arthur's Funny Money (1987)
Holtzman, Caren; Day, Betsey	A Quarter from the Tooth Fairy (1995) (6-8 years) **HELLO READER! MATH**
Inkpen, Mick	The Great Pet Sale (1999) (marketing, sales, price)
Leedy, Loreen	The Monster Money Book (2000) (budgeting, borrowing, checking & savings accounts)
MacCarone, Grace	Monster Money (1999) **HELLO READER! MATH**
McMillan, Bruce	Jellybeans for Sale (1996)
Murphy, Stuart J., et. al	Lemonade for Sale (1998) (bar graphs; money) (6-8 years)**MATHSTART**
Murphy, Stuart J., et. al	The Penny Pot (1998) (money & saving) (7-9 years)**MATHSTART**
Nagal, Karen Berman; Zimmerman	The Lunch Line (1999)
Rocklin, Joanne et. al	How Much is That Guinea Pig in the Window? (7-9 years) (1995) **HELLO READER! MATH**
Rocklin, Joanne et. al	The Case of the Shrunken Allowance (7-9 years) (1999) **HELLO READER! MATH**
Silverstein, Shel	"Smart" in Where the Sidewalk Ends (1974)
Schwartz, David; Kellogg, S. & Cohn, A.	If You Made a Million (1994)
Slater, Teddy; Lewis, Anthony	Max's Money (1999) (7-9 years) **HELLO READER! MATH**
Smyth, Gwenda; James, Ann	A Pet for Mrs. Arbuckle (1984)
Stewart, Sarah; Small, David	The Money Tree (1994)
Viorst, Judith; Cruz, Ray	Alexander, Who Used to Be Rich Last Sunday (1980) 
Wells, Rosemary; Axler, Rachel	Bunny Money (2000) (money to photocopy)
Williams, Vera	A Chair for My Mother (1984) (saving pennies in a jar)
Zimelman, Nathan; Slavin, Bill; & Mathews, Judith	How the 2nd Grade Got $8,205.50 to Visit the Statue of Liberty (1992) (fundraising)

Multiplication & Division:

Anno, Masaichiro &Mitsumasa	Anno's Mysterious Multiplying Jar (1999) (factorials)
Appelt, Kathi; Sweet, Melissa	Bats on Parade (1999)
Bruce, Sheila; Billin-Frye, Paige	Everybody Wins! (2001) (division) - web page lesson?
Buckless, Andrea, et. al.	Too Many Cooks (2002) (adjust the recipe for more) **HELLO READER! MATH**
Crossley-Holland, Kevin; Penny, Ian	Under the Sun and Over the Moon (1989) (multiplication)
Demi	One Grain of Rice: A Mathematical Folktale(1997)
Friedman, Aileen; Guevara, Susan	The King's Commissioners (1995) (multiply to 47; factors; remainders)
Hong, Lily Toy; Mathews, Judith	Two of Everything: A Chinese Folktale (1993) (multiply by two; doubles)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years old)

Multiplication & Division (continued):

Hutchins, Pat	The Doorbell Rang (1989) (division; sharing cookies)
Leedy, Loreen	2 x 2 = Boo! A Set of Spooky Multiplication Stories (1995) 
Losi, Carol	The 512 Ants on Sullivan Street (1997) (sequences; doubling to 512) (7-9 years) **HELLO READER! MATH**
Mahy, Margaret; MacCarthy, Patricia	Seventeen Kings and 42 Elephants (reprint 1997) (multicultural; division; remainders)
Mathews, Louise; Basset, Jeni	Bunches and Bunches of Bunnies (1990) (squaring numbers 1-12; multiplication)
Murphy, Stuart J., et. al	Divide and Ride (1997) (division with no remainder)(7-9 years)**MATHSTART**
Murphy, Stuart J., et. al	Too Many Kangaroo Things to Do (1996) (multiplication)(7-9 years)**MATHSTART**
Nesbit, Edith; Lynch, P.J.	Melisande (1999) (multiplication)
Neuschwander, Cindy, et. al	Amanda Bean's Amazing Dream: A Mathematical Story (1998)
Pallotta, Jerry & Bolster, Rob	The Hershey's Kisses Multiplication Book (2002)
Petty, Kate; Maizels, J.; & Johnson, D.	The Amazing Pop-Up Multiplication Book (1998)
Pinczes, Elinor; MacKain, Bonnie	A Remainder of One (1995) (factors, remainder, division; ants)
Pinczes, Elinor; MacKain, Bonnie	100 Hungry Ants (1999) (remainders) 
Rocklin, Joanne	One Hungry Cat (1997) (division) (6-8 years)
Stevenson, James	The Mud Flat Olympics (1994)
Thomspon, Lauren; Wingerter, Linda	One Riddle, One Answer (2001)

Number Sense:

Anno, Mitsumasa	Anno's Hat Tricks (1993)
Atherlay, Sara; Halsey, Megan	Math in a Bath & in Other Fun Places, Too: Everywhere, Everyday Math Concept Book (1995)
Barry, David; Perone, Donna	The Rajah's Rice: A Mathematical Folktale from India (1994) (powers of 2)
Birch, David; Grebu, Davis	The King's Chessboard (1993)
Bogart, JoEllen	10 for Dinner (1989) (Number families for 10; diversity)
Brett, Jan	Comet's Nine Lives (1996) 
Brown, Marcia	Stone Soup (1987) (multicultural; cooking)
Cristaldi, Kathryn et. al.	Even Steven and Odd Todd (1996)(even/odd numbers)  **HELLO READER! MATH**
Dailey, Don	Twelve Days of Christmas Cats (1998)
Gag, Wanda	Millions of Cats (1996) 
Kharms, Daniil; Rosenthal, Marc	First, Second (1996)
Hoban, Tana	More, Fewer, Less (1998)
Huck, Charlotte; Smith, Joseph	A Creepy Countdown (1998) (Halloween; number correspondence 1-10)
Hulme, Joy; Schwartz, Carol	Sea Squares (1993) (square numbers; square roots; arrays)
Lord, John Vernon	The Giant Jam Sandwich (1987)
McKissack, Pat; Schutzer, Dena	A Million Fish -- More or Less (1996) 
Munsch, Robert; Martchenko, Michael	Moira's Birthday (estimation) (1989)
Murphy, Stuart J., et. al	Betcha! Estimating (1997)(7-9 years) **MATHSTART** 
Murphy, Stuart J., et. al	Dave's Down to Earth Rock Shop (2000) (set theory; classification) (7-9 years) **MATHSTART**
Murphy, Stuart J., et. al	Henry the Fourth (1999) (ordinal numbers)(3-6 years)**MATHSTART**
Murphy, Stuart J., et. al	Just Enough Carrots (1997) (comparing) **MATHSTART**
Murphy, Stuart J., et. al	Missing Mittens (2000) (odd and even numbers) (3-6 years) **MATHSTART**
Murphy, Stuart J., et. al	Rabbit's Pajama Party (1999)(sequences)(3-6 years) **MATHSTART**
Murphy, Stuart J., et. al	Vroom-Vroom, Beep-Beep (2000) (sequence and patterns) (3-6 years) **MATHSTART**
Packard, Edward; Murdocca, Sal	Big Numbers: And Pictures that Show Just How Big They Are! (2000)
Reid, Margarette; Chamberlain, Sarah	The Button Box (sorting; comarison) (1990)
Slater, Teddy	Stay in Line (1996)
Slobodkina, Esphyr	Caps for Sale: A Tale of a Peddler, Some Monkeys, and Their Monkey Business (1987) (patterns and permutations)
Turner, Priscilla & Whitney	Among the Odds & Evens: A Tale of Adventure (1999) (even/odd numbers and their properties)
Zaslavsky , Claudia; Basset, Jeni	Zero: Is it Something? Is It Nothing? (1989)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS
Preschool - Grade 2 (3 to 7 or 8 years old)

Probability, Statistics, Data, and Graphing:

Van Allsburg, Chris	Jumanji (1981) (probability with dice)
Axelrod, Amy; McGinley-Nally, Sharon	Pigs at Odds: Fun with Math and Games (2000)
Baylor, Byrd; Parker, Robert Andrew	Guess Who My Favorite Person Is? (1985)
Blake, Jon; Scheffler, Axel	Daley B (1992) (data collection)
Bourgeois, Kim; Sarrazin, Marisol	Kitty's First Year (2000) (graphs & charts) (3-6 years)
Brett, Jan	The Hat (1997)
Cannon, Jannell	Stellaluna (1993) (graphing skills; comparison)
Derby, Sally; Henstra, Frisco	The Mouse Who Owned the Sun (1993) (data analysis)
James, Simon	Dear Mr. Blueberry (1996) (certain and impossible probabilities)
Johnson, Paul	The Cow Who Wouldn't Come Down (2002)
Henkes, Kevin	Chrysanthemum (1996)
Holtzman, Caren; Holub, Joan	No Fair! (fair games) (1999)
Murphy, Stuart J. et. al	The Best Vacation Ever (1997) (graphs) (6-8 years)**MATHSTART**
Murphy, Stuart J. et. al	Probably Pistachio (2001) (probability) (6-8 years)**MATHSTART**
Ochiltree, Diane et.al	Bart's Amazing Charts (2001) **HELLO READER! MATH**
Schotter, Roni; Hafner, Marilyn	Hannukkah (1990)
Silverstein, Shel	"Hungry Mungry" in Where the Sidewalk Ends (reprint 2002)
Stinson, Kathy, et. al	Red is Best (1988) (data by favorite color)

Problem Solving:

Accorsi, William	Billy's Button (1992) (sorting, guessing)
Armitage, Dave & Rhonda	Grandma Goes Shopping (1986) (classifying)
Base, Graeme	The Eleventh Hour: A Curious Mystery (1989) (critical thinking; 11th birthday)
Burns, Marilyn; Adams, Lynn	How Many Feet? How Many Tails? (1996) (math riddles) **HELLO READER! MATH**
Carlson, Nancy	Harriet's Halloween Candy (2002) (sorting, classifying, comparing)
Carroll, Lewis	Tangled Tale (2001) (ten mathematical story puzzles)
Folsom, Marcia McClintock et. al	Q is for Duck: An Alphabet Guessing Game (1985)
Lobel, Arnold	Ming Lo Moves the Mountain (1993)
Rocklin, Joanne	The Case of the Missing Birthday Party (1997)
Small, David	Imogene's Antlers (2000)

Ratio & Proportion:

Harshman,Marc; Garrison, Barbara	Only One (1993) (ratio)
Schwartz, David; Warhola, James -	If You Hopped Like a Frog (1999) (ratio, proportion)

Time:

Anno, Mitsumasa; Briggs, Raymond	All in a Day (1999) (seasons, clocks)
Appelt, Kathi; Sweet, Melissa	Bats Around the Clock (2000) (rhyme about time; bats)
Axelrod, Amy; McGinley-Nally, Sharon	Pigs on a Blanket (1998) (keeping track of time)
Behrman, Carol; Takahashi, Hideko	The Ding Dong Clock (1999)
Browne, Eileen; Parkins, David	Tick Tock (1996) (race against time)
Chase, Edith	The New Baby Calf/El Ternero Recien Nacido (1997) (seasons)
Cowley	Our Teacher, Miss Pool (1999) (days week; transportation)
Edwards, Richard; Crossland, Caroline	Ten Tall Oaktrees (1993) (time lines)
Harper, Dan; Moser, Barry	Telling Time with Big Mama Cat (1998) (book has moveable clock hands)
Hutchins, Pat	Clocks and More Clocks (1994) (telling time)
Keenan, Sheila	What Time is It: A Book of Math Riddles (5-7 years) **HELLO READER! MATH**
Lillie, Patricia; Crews, Donald	When This Box is Full (1993)
Livingston , Myra C.; Everett Fisher, L.	A Circle of Seasons (1988)
MacCarone, Grace	Monster Math School Time (1997) **HELLO READER! MATH**
McMillan, Bruce	Time to... (1989) (typical day in a child's life)
Murphy, Stuart J., et. al	Game Time! (2000) (time and soccer) (7- 9 years)**MATHSTART**

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Preschool - Grade 2 (3 to 7 or 8 years)

Time (continued):

Murphy, Stuart J., et. al	Get up and Go! (1996) (time lines)(6-8 years) **MATHSTART**
Murphy, Stuart J., et. al	Pepper's Journal: A Kitten's First Year (2000) (calendar concepts) (6-8 years) **MATHSTART**
Provensen, Alice & Martin	A Year at Maple Hill Farm (2001)
Roennfeldt, Robert	A Day on the Avenue (1984) (time of day)
Singer, Marilyn; Lessac, Frane	Nine O'Clock Lullaby (1993) (time zones around the world)
Slater, Teddy	Just a Minute (1996) (how long is a minute)**HELLO READER! MATH**

Other:

Andrew, Moira	One in a Million (poetry about math concepts)
Brett, Jan	Berlioz the Bear (1996)
Glass, Julie; Walz, Richard	The Fly on the Ceiling: A Math Myth (1998)
Kaye, Marilyn; Bowers, Tim	Day with No Math (1982) (what would the world be like with no math?)
Keenan, Sheila	More or Less a Mess (1997) (sorting, patterns)
Kopp, Jaine	Frog Math: Predict, Ponder, Play (1999) (math and writing activities)
Hopkins, Lee Bennett	Marvelous Math: A Book of Poems (1997)
Morrissey, Dean	Ship of Dreams (1994) (mathematical literacy)
Murphy, Stuart J. et. al	A Pair of Socks (1996) (pairs, patterns) (3-6 years) **MATHSTART**
Murphy, Stuart J. et. al	Let's Fly a Kite (2000)(cooperation) (6-8 years)**MATHSTART**
Murphy, Stuart J. et. al	The Greatest Gymnast of All (1998) (opposites) **MATHSTART**
Scieszka, Jon; Smith, Lane	Math Curse (1995) (math all around us)
Dr. Seuss	There's No Place Like Space (1999)
Wright, Alexandra; Word, Reagan	Alice in Pastaland: A Math Adventure (1997)
Anno, Mitsumasa	Anno's Math Games (1997)
Schecter, Deborah	Mother Goose Math (2003)

Grades 2/3 - 6/7 (8-12 years old)

Fractions:

Greenberg, Dan	Funny & Fabulous Fraction Stories (1999)

Geometry & Shapes:

Crawford, Chris	Tangram Puzzles: 500 Tricky Shapes to Confound & Astound (2002) (Includes deluxe wood tangrams)
Johnston, Sue	Fun with Tangrams (1977)
Neuschwander, Cindy; Geehan, Wayne	Sir Cumference and the Dragon of Pi: A Math Adventure (1999)
Neuschwander, Cindy	Sir Cumference and the Great Knight of Angleland (2001)
Read, MacDonald	Tangrams Three Hundred and Thirty Puzzles (1980)
Scholastic Disovery Box	Tangrams: Scholastic Discovery Box (1997)

Mathematicians:

Conley, Kevin et. al	Benjamin Banneker Scientist and Mathematician (1989)
Verheyden-Hilliard, Mary Ellen et al.	Mathematician and Computer Scientist, Caryn Navy (1988)

Measurement & Size:

Dahl, Roald	Esio Trot (1999)
MacDonald, George; Sendak, Maurice	The Light Princess (1992)
Norton, Mary; Krush, Beth & Joe	The Borrowers (1989)

Money:

Guilio, Maestro	The Story of Money

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Grades 2/3 - 6/7 (8-12 years old)

Probability, Statistics, & Data Analysis:

Bruce, Colin	Conned Again, Watson! Cautionary Tales of Logic, Math, and Probability (2002) (probability and game theory)
Cushman, Jean; Weston, Martha	Do You Wanna Bet? (1991) (probability situations)
Lambert, David	Dinosaur Data Book (1990) (statistics)
Morgan, Rowland	Fact Attack: Nutty Numbers (1998) (ecological statistics)
Nagda, Ann; Bickel, Cindy	Tiger Math: Learning to Graph from a Baby Tiger (2002) (graphing)
Rockwell, Thomas	How to Get Fabulously Rich (1991) (probability, lottery)

Problem Solving:

Sachar, Louis	More Sideways Arithmetic from Wayside School: More than 50 Brain Teasing Math Puzzles (1994) (58 zany problems)
Tang, Greg; Briggs, Harry	The Grapes of Math (Mind Stretching Math Riddles) (2001) (patterns, combinations, riddles, rhymes, probability)
Tang, Greg; Briggs, Harry	Math for All Seasons (2002)
Tang, Greg; Paprocki, Greg	Math-Terpieces: The Art of Problem Solving (2003)
Tumanov, Vladimir	Jayden's Rescue (2002) (fantasy novel; problem solving)

Time:

Babbitt, Natalie	Tuck Everlasting (1986) (time, exponential numbers)
Bosse, Malcolm	Captives of Time (1987) (time travel)
Handy, Libby; Newnham, Jack	Boss for a Week (1996) (days of week; calendar)
Juster, Norton; Feiffer, Jules	The Phantom Tollbooth (1993)

Other:

Bantam Books	Guinness Book of Records
Bendick, Jeanne	How Much and How Many: The Story of Weights and Measures (1989) (history of weights and measures)
Briggs, James	Jim and the Beanstalk (1997)(coordinate plane; pythagorean theorum)
Eager, Edward; Bodecker, N.	Half Magic (halving & doubling) (1999)
Enzensberger, Hans Magnus et. al	The Number Devil: A Mathematical Adventure (2000)
Glasthal, Jacqueline	American History Math (1999)
Greenberg, Dan	Mega Funny Math Poems and Problems (1999)
Kaye, Peggy	Afterwards: Folk & Fairy Tales with Mathematical Ever Afters (1997)
Kellogg, Steven	Jack and the Beanstalk (1997) (coordinate plane; pythagorean theorem)
L'Engle, Madeleine	A Wrinkle in Time (1973) (dimensions)
Pallotta, Jerry ; Bolster, Rob	Twizzlers Percentages Book 
Pappas, Theoni	The Adventures of Penrose, the Mathematical Cat (1997)
Pappas, Theoni	Fractals, Googols and Other Mathematical Tales (1993)
Pappas, Theoni	Math Talk: Mathematical Ideas in Poems for Two Voices (1991)
Poskitt, Kjartan	Murderous Maths (1997) (series of cartoon books)
Schwartz, David; Motts, Marissa	G is for Googol : A Math Alphabet Book (1998)
Schwartz, David; Meisel, Paul	One Beyond a Million: An Amazing Math Journey (1999) (big numbers; powers of ten; googol; infinity)
Schmandt-Besserat, Denise & Hayes, M.	The History of Counting (1999)
Tahan, Malba	The Man Who Counted: A Collection of Mathematical Adventures (1993) (math puzzles)
Twain, Mark; Fishkin, Shelly	The Celebrated Jumping Frog of Calaveras County (reprint 1996)  (mean, median, range)
Walter, Marion	The Mirror Puzzle Book (1986)

CHILDREN'S BOOKS THAT CONTAIN MATHEMATICAL CONCEPTS

Young Adult (12 years and up)

Isdell, Wendy	A Gebra Named Al (1993) (Algebra)
Stein, Sherman	How the Other Half Thinks: Adventures in Mathematical Reasoning (2001) (discoveries in advanced mathematics)
Swift, Jonathon; Damrosch, Leo	Gullivers Travels (reprint 1999) (ratio, proportion, measurement) 

Parents and Teachers

Barchers, Suzanne; Rauen, P.; Frohardt, D.	Storybook Stew: Cooking with Books Kids Love (1997) (cooking) *(This book lists about 40 kids' books featuring food as a main story element)*
Burns, Marilyn	Math and Literature K-3 (1993)
Hoping Egan, Lorraine	25 Super Cool Math Board Games: Easy to Play Reproducible Games that Teach Essential Math Skils (1999)
Kolakowski, Jane	Linking Math with Literature:Grades K-4 (1992)
Whitin, David; Wilde, Sandra	Read Any Good Math Lately?: Children's Books for Mathematical Learning, K-6 (1992)

Remember, book titles with a computer mouse  next to them have an accompanying Web activity for teachers and/or parents. Visit **www.math.youngzones.org/literature.html** to link onto these Web pages and download the lessons.

Please note: There are other children's books that have math woven into the stories, but are not listed in this guide. Ask your local librarian for assistance in finding more books that integrate math and literature. Or, visit **www.amazon.com** or **www.bn.com** (Barnes and Noble) to search for other titles.

Sources: www.amazon.com; www.bn.com (Barnes and Noble); www. math.youngzones.org/literature.html; and www.library.ucf.edu/CMC/subject/math.htm

- Compiled by the Title I Dissemination Project, May 2003 -