

Math Picture Books and in Literature

Compiled by Donna Bowen

"Benny's Pennies" Pat Brisson Doubleday

Benny's family has many ideas as to how he should spend his pennies and when he goes shopping he meets all the suggestions with his choices.

Use: money

Level: SK, Gr. 1

"The Cheerios Counting Book" Barbara Barbieri McGrath Scholastic

Counting cheerios and fruit to 10 and then by 10's to 100.

Use: counting by ones and tens.

Level: 1, 2 and 3

"Counting on Frank" Rod Clement Gareth Stevens Publishing

The story of Frank who loves to calculate and solve problems, such as how many of his dogs would fit into his bedroom. Additional problems at back of book. *note: not metric

Use: introduction to problem solving; just for fun; introduce problem of the week

Level: Gr. 3, 4, 5, 6

"Divide and Ride" Stuart J. Murphy Scholastic

Math Start Series: As a group of children go on various rides at the carnival, they discover how to divide the group and how to add an extra person to make sure there are none left over. Includes hints page at back.

Use: dividing, remainders

Level: Gr. 2, 3

"Each Orange Has 8 Slices A Counting Book" Paul Giganti, Jr.
Mulberry Paperback

Simple, bright pictures answer 'how many' type questions dealing mostly with 'groups of'. Includes a challenge on last page.

Use: multiplication problem solving, writing equations, fractions

Level: Gr. 3, 4

"Eating Fractions" Bruce McMillan Scholastic

Photographs of food showing halves, thirds and fourths. Recipes in the back.

Use: fractions

Level: JK, SK, gr.1

"A Feast for Ten" Cathryn Falwell Scholastic

A family goes shopping and prepares food, always finding numbers of things from 1 to 10.

Use: counting to 10

Level: JK, SK, gr.1

"15 Irresistible Mini-Plays for Teaching Math" Sheryl Ann Crawford Scholastic

A collection of reproducible read aloud plays, for emergent readers using rhyme, repetition and predictability. Each play features a central math theme.

Use: variety of math concepts ie. Geometry, numbers, patterns

Level: SK, Gr. 1, 2

"The Fly on the Ceiling: A Math Mystery" (A Step 3 book) Dr. Julie Glass Random House

A story about Rene Descartes and his discovery of the Cartesian Coordinate System as he tries to organize his house.

Use: Cartesian grid system

Level: Gr. 3, 4, & 5

"Fun With Numbers" Massin Les Chats Peles Creative Editions
Harcourt Brace & Company

Includes some history of counting and numbers; numbers in ancient Egypt; the calendar year; using zeros and more.

Use: introduction to Roman Numerals, place value, metric measures

Level: Gr. 5, 6, 7, & 8

" G of for Google: A Math Alphabet Book" David Schwartz

Math concepts from simple to very complex are explained and illustrated for each letter of the alphabet.

Use: teacher ideas, student reference

Level: Gr. 6, 7, 8

"Get Up and Go" Stuart J. Murphy Scholastic

Math Start Series: A cumulative accounting of the various minutes it takes a girl to get up and be off to school. Includes a helpful hints page at back.

Use: time lines, writing equations, adding

Level: Gr. 2, 3, 4

"Give Me Half" Stuart J. Murphy Scholastic

Math Start Series: Brother and sister argue over sharing food and end up dividing everything in half.

Use: halves, equivalent fractions

Level: Gr. 1, 2

"The Greedy Triangle" Marilyn Burns Scholastic

The greedy triangle continually wants more sides. As a side is added, he becomes a new shape.

Use: geometry (includes names of shapes and where found in environment)

Level: Gr. 1, 2, 3, 4

"Grey Rabbit's Odd One Out" Alan Baker Kingfisher

Grey rabbit has to sort his possessions, each time finding the one that doesn't fit.

Use: introduction to sorting by various attributes

Level: JK, SK, Gr.1

"Hershey's Fractions Book, The " Jerry Pallotta Scholastic

Workmen manipulate a Hershey bar that is divided into twelfths to illustrate various fractions. Additional pictures deal with other fractions

Use: fractions, adding fractions, equivalent fractions

Level: Gr. 3, 4, 5

"How Much is A Million?" David M. Schwartz Scholastic

The wizard performs magic with everyday objects to try to illustrate millions, billions and trillions.

Use: estimating, conceptualizing millions, billions, trillions

Level: gr.3, 4, 5,

"Log Cabin Quilt" Ellen Howard Holiday House

A pioneer story in which the family use the dead Mother's quilting scraps to chink the log cabin walls and in doing so, revive her memory.

Use: math/art lessons on symmetry and patterns

Level: Gr. 3

"M&M's Counting Book, The" Barbara Barbieri McGrath
Charlesbridge Publishing

Colourful pictures of M&M's with statements, numbers and words to show math concepts.

Use: counting to 12, colours, sets as introduction to multiplication as repeated addition, shapes, writing equations and simple problem solving.

Level: SK and Gr. 1, 2, 3.

"Miss Bindergarten Celebrates the 100th day of Kindergarten" Joseph Slate Dutton Children's Books

A wonderful story about the many hundred things the children and the teacher bring in for 100's Day.

Use: 100's Day celebrations, conceptualizing 100

Level: JK, SK, gr. 1, 2

"Monster Math" Series: Hello Math Reader by Grace Maccarone
Scholastic

Level 1 (JK -Gr.1) Level 2 (SK -Gr.2) Level 3 (Gr. 1 -2) Various titles include "Picnic", "School Time" "Not Enough Room". Easy to read books with math themes such as counting, counting backwards from 10, and telling time to the hour, geometry, probability, money and measurement. Activity suggestions at back of book

Use: number sentences for 10, with buttons; problem solving; telling time; making own booklets

Level: JK, SK, Gr. 1, 2,

"Mouse Count" Felicia Law and Suzanne Chandle Octopus Books

Introduces a variety of math concepts using pictures of mice - individual pictures -no story line

Use: patterns, dividing, problem solving and multiplication

Level: Gr.2

"More M&M's Math" Barbara Barbieri McGrath Scholastic

The yummiest way to learn math by counting M&M's.

Use: multiplication, division and problem solving

Level: Gr. 2, 3

"On Beyond a Million, An Amazing Math Journey" David M. Schwartz Doubleday

Professor X teaches how to count quickly using powers of ten, which he refers to as power counting. Pictures illustrate some of these large number concepts.

Use: powers of ten, scientific notation, large number concepts

Level: Gr. 7, 8

"One Hundred Hungry Ants" Elinor J. Princzes Scholastic

Story told in rhyme about 100 hungry ants marching to a picnic in different configurations.

Use: arrays for 100, different equations for 100

Level: gr. 1, 2, 3

"One is Canada" Mazine Trottier HarperCollins Publishers Ltd.

A counting book to ten but with a distinctive Canadian flare. A cumulative story with notes about each number and illustration at the back.

Use: math; Canada Day, Canadian History

Level: Gr. 1, 2, 3, 4, 5, 6

"One Little Monkey" Stephanie Calmenson Parents Magazine Press

Simple counting to 10 done in rhyme to tell the story of a group of jungle animals

Use: counting

Level: JK, SK

"One Monkey Too Many" Jackie French Koller Scholastic

Through the antics of monkey climbing on various transports, children can learn to add one more.

Use: adding one more, writing equations for +1, counting

Level: JK, SK, Gr.1

"One, Two, Skip a Few First Number Rhymes" Scholastic

Fun little rhymes for reciting and/or reading simple numbers..

Use: math and reading

Level: JK, SK, gr. 1, 2 and 3

"Please Try to Remember the First of October!" Theo. LeSieg
Random House

A "Cat in the Hat" style book about an never-to-be month when all the main character's wants will come true.

Use: calendar

Level: JK, SK

"Reese's Pieces Count by Fives" Jerry Pallotta Scholastic

Colourful construction vehicles transport Reese's pieces by one's to ten and then by fives to one hundred.

Use: counting by fives, number sentences for numbers to ten

Level: Gr. 1, 2

"A Remainder of One" Pinczes

The story of ant soldiers trying to march in even lines but Joe keeps ending up with a remainder of one, until he finally finds an array that works.

Use: multiplication, arrays, remainders

Level: Gr. 2, 3, 4

"Roll Over! A counting song" Merle Peek; ill. Clarion Books

Animals from the border in a child's bedroom help with the classic counting backwards song, "Roll Over"

Use: counting backwards from 10

Level: JK, SK

"Spaghetti and Meatballs for All! A Mathematical Story"

Marilyn Burns Scholastic

After inviting 32 people for dinner and planning how the tables will be arranged, each group that arrives rearranges things.

Use: problem solving, perimeter and area and perimeter.

Level: gr. 4 to 8.

"Selina and the Bear Paw Quilt" Barbara Smuckers Lester

Publishing

Quilt patterns form the borders in this loving book about a grandmother's quilting and quilting traditions during pioneer time.

Use: patterning, symmetry, pioneer

Level: Gr. 3

"Spunky Monkeys on Parade" Stuart J. Murphy Scholastic

Colourful monkeys parade across the pages while students count by groups of 3, 4 and 5. Includes helpful hints at the back.

Use: counting by 2's, 3's and 4's, arrays

Level: Gr. 1, 2

"Three Sides and the Round One" Margaret Friskey Children's Press

Each shape brags about its various uses in the environment.

Use: introduces geometric shapes; circles, spheres, ovals, squares, cubes, rectangles, triangles, cylinders, and cones in the environment

Level: JK, SK, Gr. 1

"Weighing the Elephant" Ting-xing Ye Annick Press

When all of the minds in the country cannot determine how heavy a baby elephant is, seven-year-old Hei-dou problem solves.

Use: problem solving.

Level: gr. 4 and up

Other recommendations from various sources:

"Amanda Bean's Amazing Dream: A Mathematical Story"
Cindy Neuschwander

Amanda has problems counting fast enough. Her teacher tells her that

multiplying is faster than counting but Amanda is not convinced.

Level: K to Gr. 5

"Anno's Counting Book" Mitsumasa Anno

"Anno's Flea Market" Anno Mitsumasa Putman

At this flea market, items are grouped by categories.

Use: sorting

Level: SK, Gr. 1, 2

"Anno's Mysterious Counting Jar" Mitsumasa Anno

"Anno's Mysterious Multiplying Jar" Mitsumasa Anno Putman

Anno explores groups of ten and factors of ten with her mysterious multiplying jar.

Uses: multiplication, counting by 10's

Level: Gr. 1, 2, 3

"April Rabbit, The" David Cleveland Scholastic

Students can count the rabbits as a new one arrives in David's life each day in April.

Use: counting

Level: JK, SK, Gr. 1

"Book of Think: or How to Solve A Problem Twice Your Size, The" Marilyn Burns

"Bunches and Bunches of Bunnies"

"Cloak for a Dreamer, A" Marilyn Burns

A tailor's sons each use different geometric shapes (rectangles, squares, triangles and circles) to make a cloak.

Level: SK, Gr. 1, 2

"Counting Caterpillars and Other Math Poems" Betsy Franco

"Doorbell Rang, The" Pat Hutchins Morrow

Two children much figure out how many cookies will be left for them when an increasing number of friends drop by.

Use: subtraction, writing equations, problem solving

Level: Gr. 1, 2

"Flat Stanley" Jeff Brown

"Gator Pie" Louis Mathews

"History of Counting" Denise Schmidt-Bresserat

"If You Made a Million" David Schwartz Morrow

An exciting book that begins with one dollar and continues to a million.

Use: large numbers

Level: Gr. 1, 2, 3

"Joy of Pi" David Blater

"King's Commissioners, The " Marilyn Burns

✓ The King's Royal Advisors and the Princess show the King how to count his commissioners by 2's, 5's, and 10's.

"Math Curse" Jon Scieszka

"Mathematicians are People, Too" Luetta Reimer and Wilbert Reimer

"Measuring Penny" Loreen Leedy

As a homework assignment, Lisa measures her dog Penny using everything from rulers to dog biscuits.

Use: measurement (standard and non-standard)

Level: Gr. 1, 2, 3,

" Million Fish? More or Less, A" P. McKissack

" \$1.00 Word Riddle Book, The" Marilyn Burns

Students used mathematical thinking and addition to solve the riddles in this colourful book.

Use: multiplication, addition, problem solving

Level: SK, to Gr. 5

"One Grain of Rice" Demi

Demi, a young girl from India, show how doubling a grain of rice with end with a rather

large surprise.

Use: multiplication

Level: Gr. 3, 4, 5,

" Rajah's Rice, The " David Barry Freeman

"A Mathematical Folktale from India" A variation of the young girl who finds that doubling can lead to an incredible amount.

Use: geometric progression, multiplying

Level: Gr. 4, 5, 6

"So Many Cats!" Beatrice Schenk de Reigniers Houghton

Cat arrive singly and in groups to add to this delightful book.

Use: counting

Level: JK, SK

"2X2=BOO: A Set of Spooky Multiplication Stories" Loreen Leedy

Teacher Resources:

"Books You Can Count On" Rachel Griffiths

"Math and Literature" Marilyn Burns

"Read Any Good Math Lately?: Children's Books for Mathematical Learning K-6"

David Whitin

"It's the Story that Counts: More Children's Books for Mathematical Learning K-6"

David Whitin

"Using Picture Books in the Math Curriculum, Prekindergarten through Second Grade" Carol Otis Hurst & Rebecca Otis

Picture Books + Maths = Fun

<http://www.ala.org/ala/booklinksbucket/PictureBooksPlusMath.pdf#search=%22math%20picture%20story%20book%22>