

Choosing Books You Can Count On



Pat Dickinson

THE BOOKS LISTED HERE are particularly effective in helping children see number in many different contexts, formats, and configurations. They are listed in order of numerical complexity.

Number concepts

Bang, M. 1983. *Ten, nine, eight.* New York: Mulberry. This book helps children see numbers in many different contexts—on our bodies (10 small toes, 4 sleepy eyes, 3 loving kisses on cheeks and nose, 2 strong arms); on our clothes (7 empty shoes, 5 round buttons); and in the immediate environment (9 soft friends, 8 square windowpanes).

Bawden, J., & H. Pask. 1989. *1 one-year-old, Counting children 1 to 10.* New York: Henry Holt.

The author helps children grapple with the concept that numbers are constant even though they can be used in many different contexts (for quantity of objects, for age, for the number of children in a group, and so on).

Anno, M. 1977. *Anno's counting book.* New York: Crowell.

This wordless book helps children see that numbers are used in many contexts, such as the 12 months of the year. It begins with a blank, snowy landscape, labeled 0, followed by the first month, labeled 1, which shows many occurrences of single objects. Children delight in finding all the objects on each page that match the number for that month.

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Mallat, K. 1998. *Seven stars more!* New York: Walker.

A child counting objects to fall asleep makes this an inviting bedtime book. Although the text focuses on the same topic each time it is not highly repetitive or predictable. The book's mathematical value is in the variety of objects counted on each page, ranging from stripes on the child's shirt, to the books she has read, to her own toes. This variety helps broaden children's number concepts. A good companion book for Dale's *Ten Out of Bed*, Rathman's *Ten Minutes Until Bedtime*, and Molly Bang's *Ten, Nine, Eight*.

Brainwaves Ltd. 1997. *Mr. Bear's apple tree: A magic counting book.* Brookfield, CT: Millbrook.

A great book for dealing with one less, as the honeybees steal apples ones by one from Mr. Bear's apple tree. The unique textural qualities of the book encourage children to touch and count the diminishing number of apples. An accompanying rhyme appears on each page.

Wildsmith, B. 1995. *Brian Wildsmith 1 2 3.* Brookfield, CT: Millbrook.

Wildsmith's artistic skills are the highlight of this book, which introduces numbers as many forms and combinations of geometric shapes. In the final pages, children are encouraged to find and count the shapes on each page.

Maccarone, G. 1998. *Monster math picnic*. Toronto: Scholastic.

In a fun format this book explores all the number combinations that add up to 10.

Crowther, R. 1999. *Robert Crowther's most amazing hide-and-seek numbers book.* Cambridge, MA: Candlewick.

Using an intriguing "lift the flaps" concept, this book presents numbers from 1 to 20 in interesting configurations and then moves to counting by 10s all the way to 100 creatures. It encourages meaningful counting of higher numbers.

Akers, S. 1990. *What comes in 2's, 3's, and 4's?*New York: Simon & Schuster.

This book encourages children to consider different ways to think about each of the numbers in the title. Teachers might introduce the book by asking students to think about what does come in 2's, 3's, and 4's. A natural follow-up activity would be to have children work individually or in pairs to write books about other numbers (What comes in 5's, 6's, 7's? 8's, 9's, 10's?).

Crews, D. 1992. *Ten black dots.* Toronto: Scholastic. This book encourages children to think of black dots in many different configurations for specific number concepts. It is an excellent resource for use with activities such as dot plates and card games based on various configurations of dots.

LeSieg, T. 1961. *Ten apples up on top.* New York: Random House.

An amusing Dr. Seuss book that follows three animals who compete to have the most apples on top of their heads. Each starts with one, followed by two, and so on.

Carlstrom, N.W. 1996. *Let's count it out, Jesse Bear.* New York: Simon & Schuster.

The numbers from 10 to 20 are difficult number concepts for children to learn. This book deals with the numbers from 1 to 19 in a fun way and also covers the concept of "one more."

Pinczes, E.J. 1993. *One hundred hungry ants.* Toronto: Scholastic.

One hundred ants marching single file to a picnic problem solve how to get there sooner by organizing themselves differently. The mathematical concepts explored in their reorganization make the book worthwhile for a primary classroom.

Bogart, J.E. 1989. *Ten for dinner.* Richmond Hill, ONT: Scholastic Tab.

An interesting character and story line provide an opportunity to represent the number 10 in many different configurations. After first reading for fun, teachers can ask children to represent each page. When they have finished representing the pages of the book, they might see how many other ways they can represent the number 10.

Merriam, E. 1993. *Twelve ways to get to 11.* New York: Simon & Schuster.

As the title suggests, this book considers 12 diverse ways to "get to" 11, encouraging children to think flexibly about number. As a follow-up, children can work in pairs or groups to create their own versions (ten ways to get to 9, nine ways to get to 10, and so on).

Wells, R. 2000. *Emily's first 100 days of school*. New York: Hyperion.

This is an excellent book to encourage children to see how numbers are used in a variety of relevant and meaningful ways every day. A perfect complement to hundredth day events!

Writing story problems

Maccarone, G. 1998. *Monster math picnic*. Toronto: Scholastic. (See description above.)

Grossman, B. 1996. *My little sister ate one hare.* New York: Crown.

Each page of this silly book provides an opportunity for children to generate a number story (for example, "My little sister ate 4 shrews. She ate their smelly socks and shoes. She ate 3 ants, 2 snakes, 1 hare").

Walton, R. 2000. *One more bunny: Adding from one to ten*. New York: Lothrop, Lee, & Shepard.

Whimsical illustrations portray the many ways to add up to a given number. For example, on the "8 little bunnies" page, there are 4 eggs in one nest and 4 in another; 7 morning glories on one tree and 1 on another; 6 worms on one branch and 2 on another. Rich with possibilities, this is a great book to reinforce the concept of "one more than." Children will love to write stories to go with the illustrations.

Hutchins, P. 1986. *The doorbell rang.* New York: Mulberry.

This cumulative tale has a mathematical twist. After the first read, children should be encouraged to represent mathematically what happens on each page, and then discuss their representations. The final page creates a new mathematical challenge to be represented.

Baker, K. 1999. *Quack and count.* New York: Harcourt Brace.

The repetitive rhymes that introduce all the different combinations for the number 7 will help children to remember the number combinations ("slipping, sliding, having fun, 7 ducklings, 6 plus _____" "splashing as they leap and dive, 7 ducklings, 2 plus _____"). This is another great book to have older primary children replicate independently, in pairs or in small groups. (Following the model in this book, see if children can make up rhyming patterns for all the combinations of 6, 8, 9, 10, 11, 12, and so on.)

Bogart, J.E. 1989. *Ten for dinner.* Richmond Hill, Ont: Scholastic Tab. (See description above.)

Inkpen, M. 1998. *The great pet sale.* London: Hodder. A delightful story about a boy who goes to buy a pet at a "closing out sale" and is met by a persuasive rat who begs to be the "chosen one." Each animal the boy encounters costs a penny more. When he comes to the Komodo Dragon, it costs 25 cents. The combination of all the animals in the pet store is \$1.00, exactly what the boy has in his pocket. The final picture of the boy being followed by a colorful variety of 20 animals (*plus* a rat) could lead to a delightful discussion of what happens when the boy arrives home. The literacy appeal is wonderful and the problem-solving possibilities are endless.

Schwartz, D.M. 1999. *If you hopped like a frog.* New York: Scholastic.

This book begins with a child's imagining what it would be like to be all different kinds of animals (frog, ant, snake, dinosaur, chameleon, shrew, and so on) and then considering the mathematical implications of these transformations. If you hopped like a frog, you could jump from home plate to first base in one might leap; if you were as strong as an ant, you could lift a car!

Counting backward, skip-counting, counting higher numbers

Bang, M. 1983. *Ten, nine, eight.* New York: Mulberry. (See description above.)

Yektai, N. 1996. *Bears at the beach counting ten to twenty.* Brookfield, CT: Millbrook.

Here's an opportunity to focus on the difficult concept of the numbers from 10 to 20 and the fact that they do not fit the pattern for all other counting. Making these differences explicit will help children who struggle to understand why they have difficulty remembering these numbers.

Sloat, T. 1991. *From one to one hundred.* New York: Penguin.

A delightful visual book that encourages children to count a variety of objects on each colorful page from 1 to 10, and then from 10 to 100.

Cuyler, M. 2000. *100th day worries.* New York: Simon & Schuster.

A child worries over what collection of 100 things she can bring in to celebrate the hundredth day of school. The book might encourage children to make their own collections.

Pinczes, E.J. 1993. *One hundred hungry ants*. Toronto: Scholastic. (See description above.)

Slate, J. 1998. *Miss Bindergarten celebrates the 100th day.* Toronto: Scholastic.

A wonderful addition to a set of hundredth day books, with the added feature of moving through the collections of each child in a class from A to Z (from Adam to Zachary). Throughout the book the preparations that Miss Bindergarten makes for the hundredth day provide challenging visual/mathematical puzzles (How many ways has Miss Bindergarten prepared the room? Can you find them all?). The classroom is full of many other mathematical activities—calendar, months of the year, graphs about teeth, graphs showing predictions about baby fish, growth measurements, and number charts posted on the walls.

Jocelyn, M. 2000. *Hannah's collections*. Toronto: Tundra.

Hannah is challenged when her teacher asks children to bring a collection to school because she has so many (for example, paper clips, Popsicle sticks, buttons, miniature books, ladybugs, little creatures, keys, stamps, feathers, leaves, seashells, barrettes, rings). Her deliberations can be a wonderful way to invite children to consider what they will bring to school for hundredth day celebrations. Her delightful solution is a celebration of the creativity of childhood.

Wells, R. 2000. *Emily's first 100 days of school*. New York: Hyperion. (See description above.)

Ryan, P.M., & J. Pallotta. 1996. *The crayon counting book.* Watertown, MA: Charlesbridge.

A rhyming book that explores numbers, number concepts, higher numbers, skip-counting, the teens, even numbers, and odd numbers within the familiar context of children's crayons. It's fun!

Lotteridge, C.B. 1986. *One watermelon seed.* Toronto: Oxford University Press.

This fun book deals with the concepts of multiples of 10 within the context of planting and growing fruits and vegetables. It is fun for the children to count how many seeds they plant originally, and how many fruits and vegetables they harvest as a result.

Ryan, P.M. 1996. *One hundred is a family.* New York: Hyperion.

This delightful book explores the concept of family while also developing the concepts of 1 to 10, and then 10 to 100, within an environmental message.

Halsey, M. 1994. *Three pandas planting: Counting down to help the earth.* Toronto: Maxwell Macmillan.

Counting backwards from 12 to 1, this book promotes children's caring and concern about protecting the environment.

Chewning, R. 1994. *You can name 100 dinosaurs!* New York: Scholastic.

A treat for dinosaur lovers, this book explores dinosaurs by historic periods. Excellent illustrations help children develop higher-number concepts while encouraging labeling, categorizing, and scientific investigations.

Chewning, R. 1994. *You can name 100 trucks!* New York: Scholastic.

For kindergarten children whose interests lie in construction, blocks, and the sandbox, this is an excellent book to challenge them to count and see how many trucks are actually represented in the book while introducing the concept of 100 objects.

Chewning, R. 1997. *You can name 100 cars, trains, boats and planes!* New York: Scholastic.

Again, a delightful book for children to explore the concept of 100, while learning to categorize and label a large variety of transportation vehicles.

Some extras

Minters, F. 2001. *Too big, too small, just right.* New York: Harcourt.

With fun illustrations related to measurement for the very young child, this book extends mathematical vocabulary through clever illustrations and vocabulary such as "too big, too small, just right" and "too short, too tall, just right."

Van Fleet, M. 1998. *Spotted yellow frogs: Fold-out fun with patterns, colors, 3-D shapes, animals.*New York: Dial Books for Young Readers.

Colorful patterns are clues to the animals hidden behind each geometric shape in this book designed for emergent readers.

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