



Create Your Own "Millionaire's Club": Great Books to Read

Aker, Suzanne. *What Comes in 2's, 3's and 4's?* Simon and Schuster, 1990.

This book introduces readers to things in the world that come in sets of 2, 3, and 4 by showing a delightful range of objects: two images in the mirror, two pieces of bread on a sandwich, and two ways to go on a seesaw. There are three lights on a traffic light, three primary colors, and three meals to eat each day. Students will want to make their own lists of objects that come in particular sets, and then use the ideas to do some calculations regarding millions.

Alexander, Martha. *Where Does the Sky End, Grandpa?* Harcourt Brace Jovanovich, 1992.

Grandpa and his young grandchild take a walk and ask many questions about the world: where is forever, how far can birds fly, does the sky ever end, does the sea go on forever? Such questions can lead to some interesting large number explorations.

Anno, Mitsumasa. *Anno's Mysterious Multiplying Jar.* Philomel, 1983.

Anno's marvelous jar leads to some large numbers in a hurry. Readers look into a jar that contains a sea with one island; on the island are two countries; within each country are three mountains; on each mountain are four kingdoms, and so on. It's a story about factorials and how they grow to be very large!

_____. *Anno's Magic Seeds.* Philomel, 1995.

A young lad named Jack encounters a wizard who gives him two golden seeds. Jack eats one, and isn't hungry for a year. He plants the other, and it produces two more seeds. This is a story of seeds that keep producing, and the mathematical consequences.

Barry, David. *The Rajah's Rice.* W. H. Freeman, 1994.

When Chandra, the official bather of the Rajah's elephants, saves them from a serious illness, she requests a reward more costly than the Rajah realizes. She points to a checkerboard hanging on the

wall and asks that she be given one grain of rice for the first square on the board, two grains for the second square, and double that amount each day until the 64 squares on the board are used. When the Rajah eventually runs out of rice and realizes the impossibility of the request, he agrees to give the villagers back their land in exchange for being released from his promise to Chandra.

Dee, Ruby. *Two Ways to Count to Ten.* Holt, 1988.

In this story the lion, mighty king of the jungle, is getting tired and must pick a successor. He holds a contest, challenging the other animals to throw his javelin into the air and count to ten before it hits the ground. In turn the animals try and fail—until the clever antelope counts by 2s and wins the contest.

Firch, David. *The King's Chessboard.* Dial, 1988.

This book tells the same tale as *The Rajah's Rice*, but the characters are different. In this case the king wishes to reward his grand counselor for all his wise advice. The counselor requests a reward—based on the doubling principle—using the squares of the king's chessboard. The king learns to be a bit more humble when he realizes the impossibility of granting such a costly reward. (A similar story is told in Helena Pittman's *A Grain of Rice*. Bantam, 1992.)

Giganti, Paul. *Notorious Numbers.* Scholastic, 1994.

This is a good companion to Aker's book. With some larger numbers, it provides a numerical look at the world and invites students to find items in their own experience that are grouped in particular ways.

Hertzberg, Hendrik. *One Million.* Random House, 1993.

This wonderful resource is a book composed of one million dots! It also presents interesting facts that help students compare the relative size of large numbers.

Lasky, Kathryn. *The Librarian Who Measured the Earth.* Little, Brown, 1994.

This book provides a fascinating glimpse into the life of Eratosthenes, the famous Greek scholar who made many discoveries about Earth (and who also was the chief librarian at the great library in Alexandria, Egypt). This is the story of how Eratosthenes calculated the circumference of Earth—a measurement that was only 200 miles different from our own calculations today.

Mathews, Judith. *Two of Everything.* Albert Whitman, 1993.

A poor farmer digs up an ancient pot from his field, drags it home, and tosses his purse with his last five gold coins inside it for safe keeping. After a day, he discovers that the pot contains two identical purses with five coins in each of them. The farmer and his wife grow rich by continually placing coins in this magic doubling pot. They even inadvertently fall into the pot themselves but all ends happily when the two husbands and two wives become good friends and live next door to one another in identical houses.

Nesbil, E. *Melisande.* Harcourt Brace, 1989.

A princess cursed by an evil fairy is born beautiful but bald. When she is granted one wish, she asks for golden hair that is a yard long, which will grow an inch every day and twice as fast when it is cut. The wish leads to some problems of mathematical proportions!

Schwartz, David M. *G Is for Googol: A Math Alphabet Book.* Tricycle Press, 1998.

This exploration of math words leads to problem solving and mind-bending mathematical activities. Some of the entries are common math words: B is for Binary, P is for Probability. Other entries are delightful and humorous surprises: I is for If, and W is for When are we ever gonna use this stuff, anyway?

_____. *How Much Is a Million?* Lothrop, Lee & Shepard, 1985.

A beautifully illustrated book with speculations and wonderings about millions: the height of one million kids on one another's shoulders; the size of a bowl for one million goldfish; the time it would take to count from one to one billion; and more. The inspiration for this book!

_____. *If You Made a Million.* Lothrop, Lee & Shepard, 1989.

Marvelosissimo the Mathematical Magician leads readers on a jubilant journey to help them understand the mathematics of money and the connections between earning, saving, and spending—beginning with a penny and ending with a million dollars. Readers also learn about the weight of one million dollars in quarters, and the height of one million dollar bills.

Thaler, Mike. *Owly.* Harper and Row, 1982.

Little Owly wants to know everything, and so he asks his mother to tell him how many stars there are in the sky, how many waves there are in the ocean, how high the sky is, how deep the ocean is. These wonderings may inspire students to pose some of their own big number questions, and then to research the answers.

Veltman, John. *Binary Power.* Dale Seymour Publications, 1992.

An excellent resource book for teachers that discusses geometric progression.

Wells, Robert. *Is a Blue Whale the Biggest Thing There Is?* Albert Whitman, 1993.

The message of this book is that the universe is a big place and so we need big numbers to describe it. The book tells about progressively larger things: blue whales, Mount Everest, the earth, the sun, stars, galaxies. It compares these gigantic things in imaginative ways. For example, 100 earths stuffed into a bag would not come close to the size of our sun. Students can use some of their own data to make other big number comparisons.

More about literature and mathematics—good reading for teachers!

Illingworth, Mark. *Real-Life Problem Solving.* Scholastic Professional Books, 1996.

Piccirilli, Richard. *Write About Math.* Scholastic Professional Books, 1996.

Whitin, David J. and Sandra Wilde. *It's the Story that Counts.* Heinemann, 1995.

_____. *Read Any Good Math Lately?* Heinemann, 1992.