## Zero the Hero

## About the Story

In this hilarious and math-rich story, Zero thinks he is a Hero but the other numbers don't agree. After all, you can't count nothing. And if you add 0 to another number or subtract 0 from it, nothing happens. Sometimes the numbers even think Zero is a donut or the letter O. But one day, when they are captured by vicious Roman Numerals, the numbers cry out for help. Zero the Hero comes to their rescue. What is his magic power?


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## Words to Learn

MATH WORDS
ten ones, circular, random, divisor, times tables, infinity, round off, round down, round up, odd, Roman numerals, ones, tens and hundreds places OTHER WORDS
glamorous, virtually, invisible, frustration, extinction, realization, confidence, oblivion, encountered, gladiators

## About the Math

There is lots of math in this book. Your child can learn what the number 0 cannot and can do:

- Adding 0 to a number does not change it.
- Subtracting 0 from a number does not change it.
- Multiplying any number by 0 results in 0 .
- You can't divide any number by 0 .
- Writing a 0 to the right of any number produces a tens number (and then hundreds and thousands...).
- Rounding up and down sometimes requires a number with 0 on the right.

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## Math Talk During Reading

TALK ABOUT THE ROLE OF ZERO IN MULTIPLYING
"Multiplying 7 by 2 is like adding 7 two times. How much is 7 times 0? Why?" (Zero, because you're not adding 7 at all.) "How much is 0 times 7? Why?" (Zero, because seven zeros add up to nothing.)

TALK ABOUT THE FRUIT STORY PROBLEM
"What is the problem the numbers are trying to solve? Why do they need Zero?"

TALK ABOUT THE ROUND-OFF PROBLEM
"What are 1 and 3 trying to do? What is rounding down? What are 2 and 8 trying to do? What is rounding up?"

Try to come up with some of your own questions and comments, too!

## Activity After Reading

MAKE UP NUMBER STORIES
Help your child make up a story about numbers. Among the questions you can ask: "Can you think about an adventure that numbers might have? What do numbers do to have fun? Does something strange or weird or scary happen? Are the numbers happy or sad?"


## BOOK PRIZE

The Mathical Book Prize recognizes math-inspiring literature for kids ages 2-18. Prize-winning books are selected by a committee of teachers, librarians, mathematicians, and others. To get the Mathical List, plus reading guides, book reviews, and more, see mathicalbooks.org

PreK WINNERS:
Baby Goes to Market by Atinuke Crash! Boom! A Math Tale by Robie H. Harris
8: An Animal Alphabet by Elisha Cooper Have You Seen My Dragon? by Steve Light Lia \& Luís: Who Has More? by Ana Crespo One Fox: A Counting Book Thriller by Kate Read

1 Smile, 10 Toes by Nelleke Verhoeff ONE Very Big Bear by Alice Brière-Haquet

GRADES K-2 WINNERS:
Absolutely One Thing: Featuring Charlie and Lola by Lauren Child The Animals Would Not Sleep by Sara Levine

Max's Math by Kate Bank Nothing Stopped Sophie: The Story f Unshakable Mathematician Sophie Germain by Cheryl Bardoe

One Big Pair of Underwear by Laura Gehl Pigeon Math by Asia Citro

Sheep Won't Sleep: Counting by 2s, 5s, and 10 s by Judy Cox

## Uma Wimple Charts Her House

 by Reif Larsen and Ben GibsonPreK HONOR TITLES:
Animal Shapes by Christopher Silas Neal Circle Under Berry by Carter Higgins Count the Monkeys by Mac Barnett
Count with Maisy, Cheep, Cheep, Cheep! by Lucy Cousins

Goodnight, Numbers by Danica McKellar
I Know Numbers by Taro Gom
Marta! Big and Small by Jen Arena
A Mousy Mess by Laura Driscoll One Happy Tiger by Catherine Rayner 100 Bugs! A Counting Book by Kate Narita One Is a Piñata: A Book of Numbers by Roseanne Greenfield Thong

Over in a River: Flowing Out to the Sea by Marianne Berkes
Press Here by Hervé Tullet
Round by Joyce Sidman
Shape Up, Construction Trucks
by Victoria Allenby
What Will Fit? by Grace Lin
GRADES K-2 HONOR TITLES:
Billions of Bricks: A Counting Book about Building by Kurt Cyrus Bird Count by Susan Edwards Richmond
The Boy Who Loved Math by Deborah Heiligman
Cao Chong Weighs an Elephant by Songju Ma Daemicke
Counting on Katherine: How Katherine Johnson Saved Apollo 13 by Helaine Becker
Counting the Stars: The Story of Katherine Johnson, NASA Mathematician by Lesa Cline-Ransom
Count on Me by Miguel Tanco

The Girl With a Mind for Math: The Story of Raye Montague by Julia Finley Mosca How Many Jelly Beans? A Giant Book of Giant Numbers! by Andrea Menotti
Is $\mathbf{2}$ a Lot?: An Adventure with Numbers by Annie Watson and Rebecca Evans

Lifetime: The Amazing Numbers in Animal Lives by Lola M. Schaefer
Shapes, Reshape! by Silvia Borando 3x4 by Ivan Brunetti

We Are One: How the World Adds Up
by Susan Hood
When Sophie Thinks She Can't
by Molly Bang
Zero the Hero by Joan Holub
HALL OF FAME TITLES:
Anno's Counting Book, Mitsumasa Anno Hippos Go Berserk! by Sandra Boynton One Grain of Rice: A Mathematical Folktale by Demi
The Very Hungry Caterpillar by Eric Carle

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