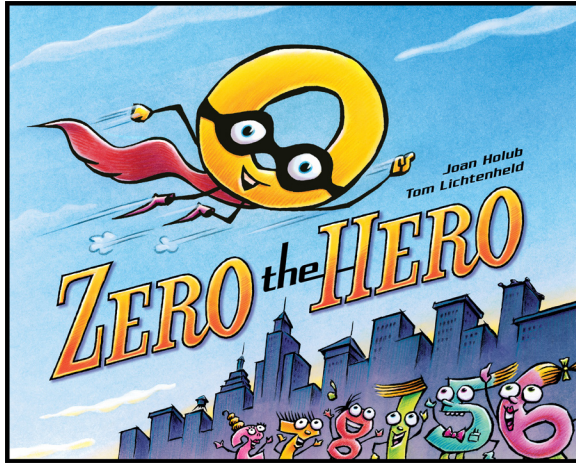


A TEACHER'S GUIDE for

ZERO the HERO



By JOAN HOLUB & *New York Times* Bestselling Artist TOM LICHTENHELD



ZERO THE HERO
ISBN 978-0-8050-9384-1
\$16.99 ~ Ages 6 to 12 & up
Christy Ottaviano Books |
Henry Holt | Macmillan

ABOUT THE BOOK

Zero. Zip. Zilch. Nada.

That's what all the other numbers think of Zero. He doesn't add anything in addition. He's of no use in division. And don't even ask what he does in multiplication. (Hint: Poof!)

But Zero knows he's worth a lot, and when the other numbers get into trouble, he swoops in to prove that his talents are innumerable.

**Peek inside the book &
view the animated book trailer at**

<http://us.macmillan.com/zerothehero/JoanHolub>

WHAT PEOPLE ARE SAYING

Tiny visual jokes and graphic elements keep this mathematically accurate book humming with humor, nudging the funny bone of the confident and mathphobic alike. Read this aloud to whet the new reader's appetite, but there is just so much to see that only a slow reading, with a magnifying glass in hand, will do.

~ *Horn Book*, Robin L. Smith, January/February 2012

While the story would hold all on its own, the tongue-in-cheek humor combined with Lichtenheld's wonderfully personified cast of characters (complete with sassy speech bubbles and expressive faces) makes this a book kids will reach for again. A hero and some villains and good winning over evil (oh, and all that educational stuff, too), all wrapped in humor and tied with a comic bow—what could be better?

~ *Kirkus Reviews*, December 2011

This tale not only reinforces mathematical principles, but also has a great message about friendship and personal feelings. It can be read aloud, alone, or performed as reader's theater.

~ *School Library Journal*, Lia Carruthers, Roxbury Public Library, Succasunna, NJ

ABOUT THE AUTHOR

Joan Holub has 5 purple socks, 4 questions, 3 best friends, 2 brown eyes, and has written 1 book about 0. She's the author of over 100 other books including *Shampoodle*, *Vincent van Gogh Sunflowers and Swirly Stars*, and is co-author of the *Goddess Girls* tween series. www.JoanHolub.com

ABOUT THE ILLUSTRATOR

Tom Lichtenheld loves drawing pictures and telling stories. His books include 3 New York Times bestsellers: *Duck! Rabbit!*, *Shark vs. Train*, and *Goodnight, Goodnight, Construction Site*. He has 42 tubes of paint, 71 crayons, 37 paintbrushes, and 2 cats in his studio on the 2nd floor. His favorite number is 9 because it's odd. www.TomLichtenheld.com

INTERACTIVE READ ALOUD

Packed with humor, puns, wordplay, and number fun, *Zero the Hero* is perfect for a read aloud.

Read the book first before reading it aloud to children. This will ensure that speech balloons and character side comments will be read with expression during the read-aloud. Identify opportunities for discussion and for pauses to assess comprehension.

Hold the book so children can see the funny details and number characters. Pose questions throughout the reading to enrich and enhance children's experience.

Move through the book at a pace that allows listeners to absorb the story text and the funny things the numbers say in speech bubbles and asides. *Fun fact:* On the page where Zero hears his friends call for help, turn the book upside down to see the numbers the word "help" forms.



DISCUSSION QUESTIONS

- Why do you think it might be fun to be a superhero? If you could be a superhero, what kind of super abilities would you choose to have?
- If you could be any number, which number would you choose? Why?
- Use your imagination to discuss where Zero went and what he did there when he rolled away to infinity after he multiplied his friends into nothingness.
- How did Zero feel when his friends wouldn't play with him at the beginning of the book? What could they have done better to make him feel included?

ZERO THE HERO & SCIENCE CURRICULUM

- Super heroes can't really fly. What can? Kites. Planes. Helicopters. Birds. Discuss how birds can fly. (Hint: Birds have light, hollow bones and strong chest muscles. The shape of its wings and the way a bird beats them against the air helps lift it into the air. A hummingbird can hover in place by moving its wings about 70 times a second. Eagles can soar on moving currents of air. Most birds can fly, but a penguin and ostrich are birds who cannot.)

ZERO THE HERO & MATH CURRICULUM

Numbers vs. Roman Numerals

- Compare how each of the numbers **1** through **10** corresponds to Roman numerals **I** through **X**. In the spread with the big clock, note the tiny characters in the bottom corners of the two pages. The artist came up with these funny ideas! What do they tell us about Roman numerals vs. numbers? (Hint: Numbers can do the same job with fewer digits.)

Zero as a Placeholder

- Discuss the fact that there is no zero in the Roman numeral system as a placeholder number. That's why, when the number **1** suggests, "Maybe we could teach you how to do math using ones, tens, and hundreds places," the Roman numeral **I** says, "Roman Numerals don't do math. We just count."
- Use the fruit-counting spread to discuss the concept of zero as a placeholder to make 10 or 100.



Number-Operation Drama

- Form groups of five children. Assign each child number and have them act out the four scenes of subtraction, addition, division, and multiplication from the book.
- Why did the other numbers get frustrated with Zero during addition and subtraction?
- Why did the number 5 refuse to be divided by Zero? What did 5 mean when he said, "What would be the point?"
- Why did the other numbers fear extinction during multiplication if Zero was around?

NUMBER FUN

- **1** said he got mistaken for a pickle. **8** said he got mistaken for a snowman. Go through numbers 1 through 9 and discuss everyday objects they resemble.
- Watch the animated trailer to see what objects Zero is mistaken for. The trailer can be viewed at either of these links:

<http://us.macmillan.com/zerothehero/JoanHolub>

or

http://www.youtube.com/watch?v=Kjj712t5_Kc

After viewing, ask children to name other objects that Zero resembles. Which are shaped most like him? (A pizza is round, but doesn't have a hole in the middle. A rigatoni noodle when viewed from one end looks like a Zero.

Other Zero-like objects might be a ring, a wheel, a lifesaver, a hula-hoop.)

RELATED BOOKS

The Grapes of Math by Greg Tang

Math Curse by Jon Scieszka

Wumbers by Amy Krouse Rosenthal and Tom Lichtenheld

Riddle-iculous Math by Joan Holub



ART: Make ZERO THE HERO masks

For one mask, you'll need:

- 1 craft stick
- 1 paper plate
- black paper for mask (or white paper)
- tape and gluestick/glue
- scissors
- markers, crayons, and/or paints

Optional:

- decorative items if desired (small feathers, glitter, stickers)
- 5 inch square of red felt, fabric, or paper can be added as a cape

1. Use the mask shown at right as a pattern to cut a mask out of black paper. (Or print the mask at right on white paper and cut out.) Cut out eye holes.

2. Cut out the center of the paper plate leaving 2 to 2 1/2 inches of its outer ring for decorating. (Hint: Gently fold plate in half—do not make a hard fold. Make a starting cut midway along the long folded edge. Then open the plate and use the cut you made to start cutting the middle out.)

3. Child decorates the paper plate ring and mask as desired.

4. Glue or tape the mask across the ring

5. Tape one end of the craft stick to the bottom center of the ring. Use the stick to hold the finished mask.

6. Tape or glue a 5-inch square of red fabric, felt, or paper at the bottom of the plate to act as Zero's cape.



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Art © 2012 by Tom Lichtenheld

