A HUNDRED BILLION TRILLION STARS

BY SETH FISHMAN
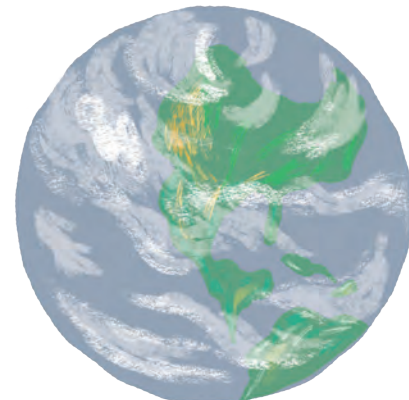## ILLUSTRATED BY ISABEL GREENBERG

ABOUT THE BOOK

The whole world is filled with big, enormous, gigantic, humongous, incredible numbers. Look all around you. You can see them in the sky, and in the grass, and in the forest, and in the ocean, and in the city. They are even in the pages of this book, just waiting for you—and your one and only imagination.

STORYTIME ACTIVITIES

- **FABULOUS FACTS:** This book is filled with fascinating facts about very large numbers! Have children choose one fact from the book. Ask them to record and illustrate their fact on a page. Then collate the pages into a book.

- **HOW MANY?:** The author explains that the numbers in this book are not exact because they are constantly changing, but research and science have enabled him to estimate them. Choose a small object (e.g., dice, shells, rocks, marbles) and fill a jar containing a hundred or less of the object. Have the children write down an estimate of the number of objects in the jar. Collect all estimates. Then open the jar and count the objects together. You can model counting strategies such as counting by twos or putting the objects into groups of ten. After you have determined the number of objects, display a hundred chart and circle that number. Then share the estimates and circle them on the chart. Discuss how accurate their estimates are, using the hundred chart to count by tens and ones.

- **ONE IN A MILLION:** Reproduce or display the image from the Author's Note which depicts the numbers sextillion, quintillion, quadrillion, trillion, billion, million, thousand, and hundred. Discuss the pattern of these names, how "mil" means thousand, "bi" means two, "tri" means three, "quad" refers to four, and so on. Then display some of the numbers from this book and practice reading them aloud.

- **GOOGLE IT!:** Write "Google" and "googol" on a chart. Ask the children if they know the difference between these two words. Explain that "Google" is a search engine on the Internet, but "googol" is a very large number made up of 1 and a hundred zeroes. Give the children paper and ask them to try writing the number googol!

- **GIVE ME SOME SPACE:** Provide resources (books, websites, videos) about our solar system. Then as a group or individually, children should conduct research about an aspect of space. Examples are making a model of our galaxy, creating a star chart of constellations, or researching one of the planets. Young children can draw or color a picture of the earth, depicting the land as green and the oceans blue. Culminate this activity with a "Space Show," during which children share their work with the rest of the group.

More printable activities available at hc.com/storytime

HOW MANY IS THAT?

There are a hundred billion trillion stars, but do you know how many zeros makes a billion? What about a trillion? Match the number to its word!

A) 1,000,000

B) 100

C) 1,000,000,000,000

D) 1,000,000,000

E) 1,000

F) 1,000,000,000,000,000

1) One thousand

2) One trillion

3) One billion

4) One hundred

5) One quadrillion

6) One million

Answers: A)6, B)4, C)2, D)3, E)1, F)5

ONLY ONE YOU!

Even though there are 100,000,000,000,000,000,000,000 stars, the author points out that there is only one you! Draw yourself on the outline of this bed, and decorate to match your individual style.