

Finding the Joy in Mathematics Through Children's Literature

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“It is impossible to be a mathematician without being a POET in soul.” – Sofia Kolvalevskaya

As a mathematics educator, I am always looking for ways to evoke curiosity and bring joy to students through mathematics. One way I can see this happening is by combining storytelling with mathematics. In this way, students are provided opportunities to engage with mathematics outside of what they perceive as mathematics time in class. In addition, combining storytelling with mathematics provides students who love mathematics a way to connect with reading.

The Mathical Prize for books provided the inspiration for the selected titles in this issue (<http://www.mathicalbooks.org>). These books evoke the spirit of love and joy in mathematics. One book is awarded for each of the grade-band categories: pre-K, grades K-2, grades 3-5, grades 6-8, and grades 9-12. For this issue, I chose a selection of books from among the most recent winners that encompasses the variety of mathematical aspects that exists in children's literature, from counting to operations to geometry. These stories can spark children's inquisitiveness and show how our world (and beyond!) is filled with mathematics. The criteria for winners according to Mathical Book Prize committee is as follows:

Books are chosen to support students' pleasure reading by encouraging the independent pursuit of the joy, beauty, and power of mathematics in the world around us. Titles are suited for library collections, informal learning settings, and classroom studies. Both literary merit and mathematical interest must be present for a book to be eligible for the prize. Creative approaches that embrace math as logic and problem solving, math as the finding of patterns, and math as critical and artistic thinking, are encouraged. (<http://www.mathicalbooks.org>)

With these criteria and with sponsor of the award as the Mathematical Sciences Research Institute with educator partnerships with the National Council of Teachers of Mathematics and the National Council of Teachers of English, I found the winning titles hard to choose from. Since we began the process of reviewing the books, the 2019 winners have been announced. I encourage you to peruse the website and check out the many exciting books, some of which have accompanying educator guides with activities for students. I have found this website to be inspirational, as the intersection of mathematics and children's literature supports children's engagement with mathematics.

The first book, reviewed by Elif Karslı Çalamak and Lynn Navin, is *Baby Goes to Market* by Atinuke, illustrated by Angela Brooksbank, which won the 2018 Mathical Prize for Pre-K. The author tells the mathematical subtraction and counting story of a baby and mother as they journey through a market in southwest Nigeria.

The second book, reviewed by Julie Smith Sodey and Keely Rutan, is *Sheep Won't Sleep: Counting by 2s, 5s, and 10s* by Judy Cox and illustrated by Nina Cuneo, which won the 2018 Mathical Prize for grades K-2. The author tells a tale of Clarissa, who is troubled by lack of sleep and relies on skip counting, both forward and backward, to help her slumber.

The third book, reviewed by Kelly C. Johnston and Jennifer Bordenkircher, is *Hundred Billion Trillion Stars* by Seth Fishman, illustrated by Isabel Greenberg, which won the 2018 Mathical Prize for grades 3-5. This brilliantly illustrated book investigates phenomena on earth and in the cosmos through the use of large numbers.

The fourth book, reviewed by Melissa Comer and Julie Krause, is *Absolutely One Thing* by Lauren Child, which won the 2017 Mathical Prize for grades K-2. The author tells the story of siblings Charlie and Lola and their interpretations of being able to buy one thing (one thing each or one thing for both) on a shopping trip.

The fifth book, reviewed by Diana Chang and Gabriel Ward, is *Which One Doesn't Belong?* by Christopher Danielson, which won the 2017 Mathical Prize for grades 3-5. Danielson uses pictures of shapes to challenge readers to find which one does not belong, with the delightful surprise of each shape having reasons for how it could be the one chosen.

I hope our readers will find these works as powerful as I did and share them with children in order to pass along the joy that I feel when teaching and learning mathematics. These books represent the wonder, power, and usefulness of mathematics and support students in seeing mathematics as ever-present and relevant to their lives.