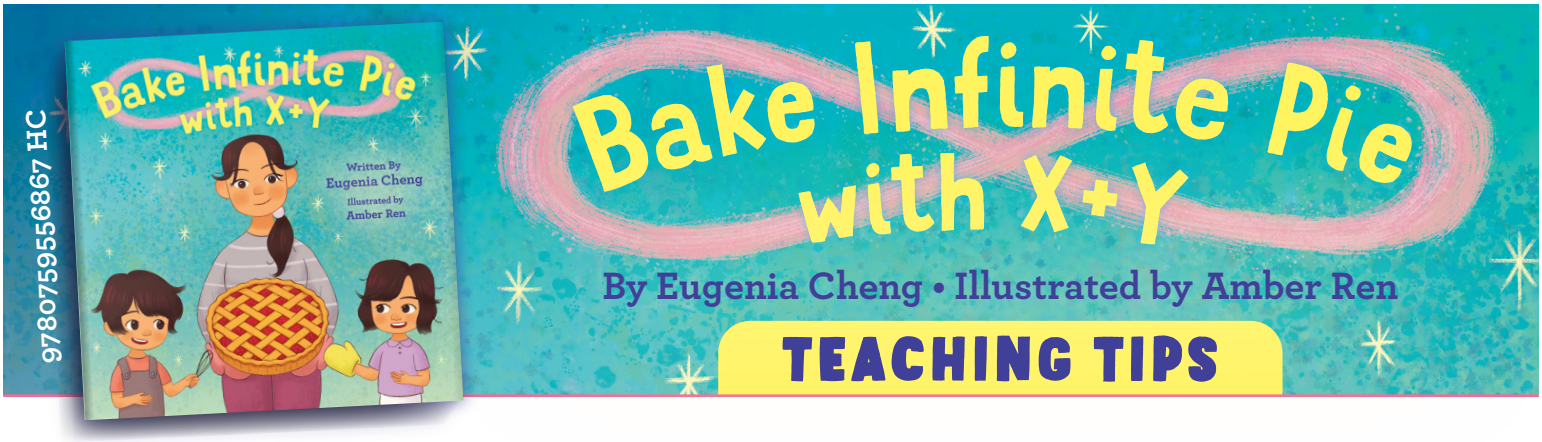
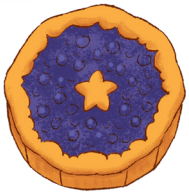



Readers respond in multiple ways, including: making connections to themselves, their communities, and their literacy experiences; pursuing their curiosity through discussion, inquiry, and self-expression; and changing their attitudes and behaviors. This guide provides suggestions and resources for supporting and extending students' authentic reading responses. Select activities and resources that best meet the needs and interests of your students.



## READ AND DISCUSS

Read aloud *Bake Infinite Pie with X + Y*, and discuss the book with students. What information or ideas stood out? What questions do students have? Collect and organize their questions and ideas on chart paper or an online platform like Flipgrid, and/or invite students to record their thinking in their notebooks. Where can students go to answer their questions or learn more? Generate a list of resources students might use for inquiry such as websites, other books, school library databases, and people in your community. Students can add specific resources under these categories later. Students' questions and a list of accessible resources provide a foundation for deeper inquiry and focused discussion. This guide includes several resources for reading and discussing the book.

## PERSONAL CONNECTIONS

Urge students to look in their daily lives for the mathematical concepts in this book. For example, X and Y create *cross sections* while cutting fruit for pies. Where can students find examples of fractals, polygons, and other concepts? Walk around the school grounds and search for examples of various shapes in the environment. Students can take photos or sketch the examples they find. Invite students to share and discuss their observations with a partner. Students can reflect in their notebooks on what they have learned.

## MATHEMATICAL CONNECTIONS

Use the list of mathematical concepts from the back matter of *Bake Infinite Pie with X and Y* (or another grade level list of concepts) to create a topic list. Collaborate with your librarian to gather resources such as nonfiction books and websites. Organize students into inquiry groups and invite them to explore the class's list of questions gathered from reading the book. What interests students about infinity? What do they want to know about concave and convex shapes, Zeno's Paradox, or other ideas? What other questions do they have? Students can create short presentations such as videos or digital posters sharing what they have learned or collect their ideas in a group platform or document.

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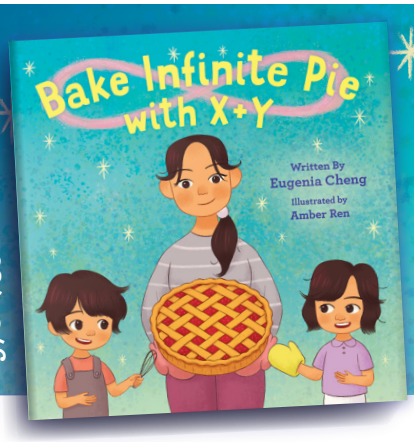



# Bake Infinite Pie with X+Y

By Eugenia Cheng • Illustrated by Amber Ren

## TEACHING TIPS

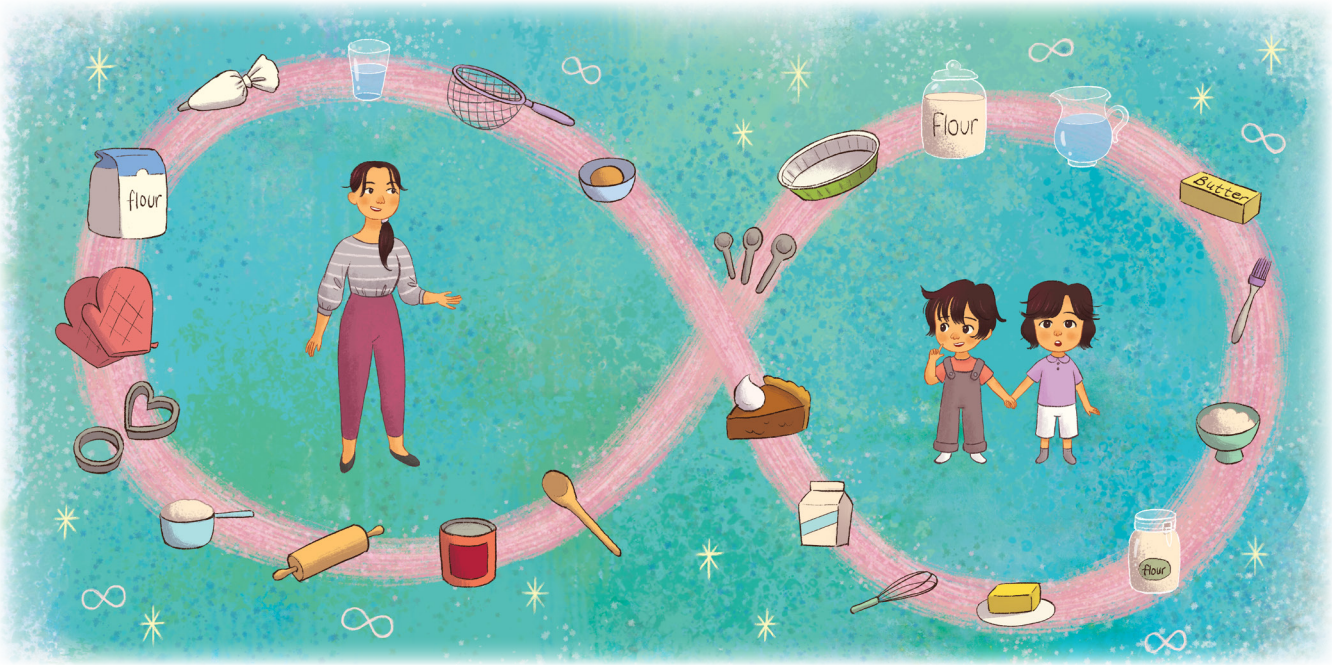
## INTERDISCIPLINARY CONNECTIONS

The author and illustrator of this text incorporated nonfiction information and text elements such as facts about infinity, graphs, and geometry. Invite students to look through their writing notebook entries and find one story or poem they would like to elaborate with factual information or detail, such as interesting facts about a setting or event, more specific words for nouns, or illustrations or text features that show information like diagrams or charts. Students may conduct research or add their background knowledge of events, locations, and people to include more detail. Invite students to collect examples of informational details and facts from fictional and narrative texts and other media. Students can share these found examples during writing groups or discussion.

## ADDITIONAL RESOURCES

National Council of Teachers of Mathematics: Geometry:
https://www.nctm.org/Standards-and-Positions/Principles-and-Standards/Geometry/

The Kid Should See This: What Is Infinity? A Mathematician Explains in This Elevator Pitch:
https://thekidshouldseethis.com/post/what-is-infinity-elevator-pitch-video




These Teaching Tips were prepared by Donalyn Miller. Find her at bookwhisperer.com, theauthorvillage.com, on Twitter at @donalynbooks, and on Facebook at www.facebook.com/donalynbooks.