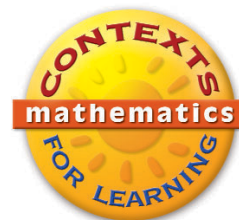


# Investigating Number Sense, Addition, and Subtraction

## READ-ALOUD SUMMARIES



*“The heart of the math workshop consists of ongoing investigations developed within contexts and situations that enable children to mathematize their lives”*

Catherine Twomey Fosnot

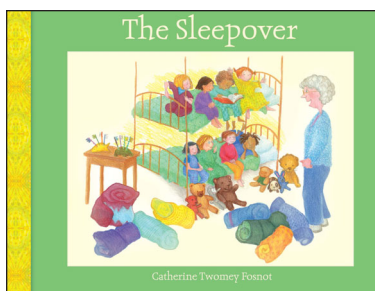
Building learning around rich, instructionally-sound contexts was an overarching goal during the development of the *Contexts for Learning Mathematics* series. Throughout the series context is used to set the stage for learning. It establishes a terrain that will intrigue children and ignite their imaginations. The contexts are situations children can imagine—either realistic or fictional—that enable them to reflect on what they are doing and apply mathematical thinking to their own world.

Contexts for investigations are typically developed with stories and pictures. These are carefully crafted to involve students in meaningful investigations of the big ideas, strategies, and models that shape mathematical thinking.

- ☀ The images and texts are engaging and include age-appropriate children using mathematics to solve real-world problems.
- ☀ The numbers referenced represent landmark numbers or number relationships that are significant and telling.
- ☀ The models and metaphors within a context make relationships and strategies more tangible and explicit.

The contexts for the eight units in *Investigating Number Sense, Addition, and Subtraction* (Grades K–3) are established through eight engaging read-aloud books (15” x 12”) that meld humor, intrigue, and good math sense.

## The Sleepover



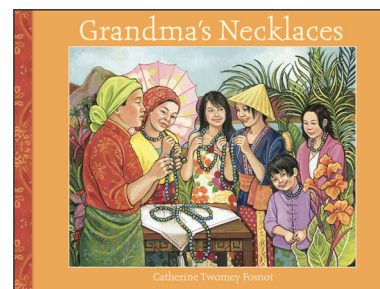
Sarah loves to play tricks on her aunt Kate. And she has some tricks up her sleeve when Aunt Kate comes to baby-sit for her pajama party. Every time Aunt Kate leaves the room, Sarah and her friends sneak up and down her bunk beds. Aunt Kate is mystified by what she sees when she returns and begins to think she is losing--and then gaining--children!

*The Sleepover* is designed to be used with the *Contexts for Learning Mathematics* unit *Bunks Beds and Apple Boxes*. The story sets the stage for a series of mathematical investigations in which students explore part-whole relations.

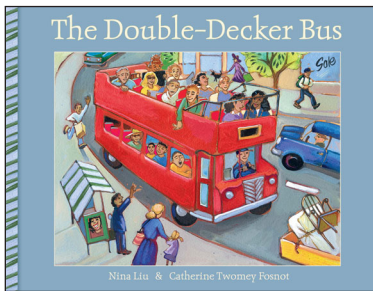
## Grandma's Necklaces

In *Grandma's Necklaces*, a young girl learns of the beautiful glass bead necklaces her grandmother made many years ago. While others tried to make similar necklaces, none could match the beautiful patterns in Grandma's necklaces. As the little girl sets out to design necklaces of her own, she discovers that it is not just the beads that are special, the numbers are too!

*Grandma's Necklaces* is designed to be used with the *Contexts for Learning Mathematics* unit *Beads and Shoes, Making Twos*. The story sets the stage for a series of mathematical investigations in which students explore doubling and pairing as well as even and odd numbers.



## The Double-Decker Bus



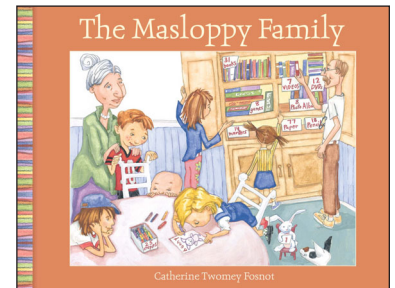
*The Double-Decker Bus* is the story of a young girl who dreams of driving a double-decker bus, just like her father! As she watches the double-decker bus pass by her window, she likes to figure out how many passengers are sitting in the red and white seats. Sometimes the bus goes by so quickly that she doesn't have time to count, but she works out ways to use the colors of the seats to quickly figure out how many passengers are onboard. She even helps her father figure out a how many empty seats there are on the top deck--even though he can't see them!

*The Double-Decker Bus* is designed to be used with the *Contexts for Learning Mathematics* unit of the same name. The story sets the stage for a series of mathematical investigations in which students explore early addition and subtraction on the arithmetic rack.

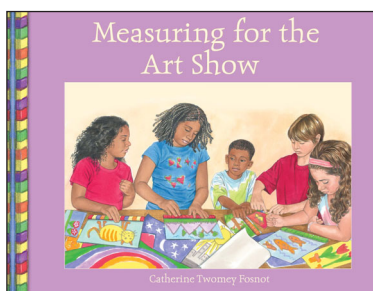
## The Masloppy Family

The Masloppy family is a large, endearing family that lives in an equally large and endearing house. But the house is so big, and the family is so large, that they find it difficult to keep track of things. Everyone is forever losing, misplacing, and looking for things. One of the children, Nicholas, decides to sort, organize, and take inventory of things in the house. Thanks to Nicholas the Organizer, life in the Masloppy household is much smoother thereafter.

*The Masloppy Family* is designed to be used with the *Contexts for Learning Mathematics* unit *Organizing and Collecting*. The story sets the stage for a series of mathematical investigations in which students explore quantity, counting and grouping, and early place value.



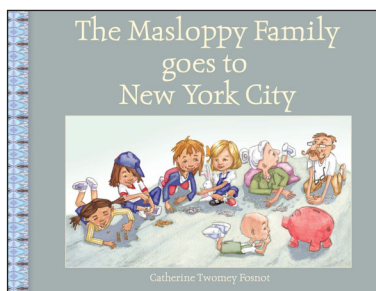
## Measuring for the Art Show



Tamika and her classmates want to help their teacher prepare for a school art fair. But the work seems overwhelming. They need to organize and measure all of the art, and then they need to create a sign for every piece. But when Tamika discovers a way to simplify the work, and the community steps in to help, the result is an art show worthy of the finest gallery!

*Measuring for the Art Show* is designed to be used with the *Contexts for Learning Mathematics* unit of the same name. The story sets the stage for a series of mathematical investigations in which the open number line is developed and students use it to explore double-digit addition.

## The Masloppy Family Goes to New York City



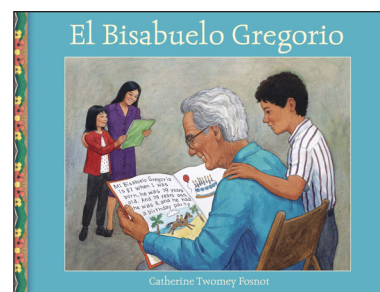
The Masloppy family returns for another mathematics adventure. This story begins with the opening of the Masloppy family piggy bank! The family has been saving for a long time and now the bank is full. When Grandma Eudora opens the bank, a huge pile of coins spills to the floor. How will they ever count it all? And will they have enough to go on the vacation of their dreams? By figuring out a way to count and sort the coins, Nicholas the Organizer saves the day once again. Next stop, New York City!

*The Masloppy Family Goes to New York City* is designed to be used with the *Contexts for Learning Mathematics* unit *Trades, Jumps, and Stops*. The story sets the stage for a series of mathematical investigations in which students explore early algebra.

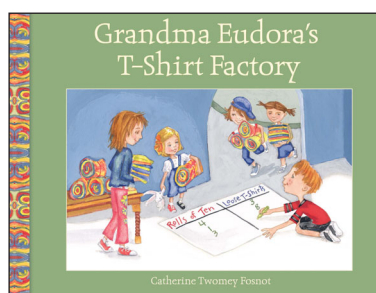
## El Bisabuelo Gregorio

On the day he turns eight, Carlos meets his great-grandfather, Bisabuelo Gregorio, for the very first time. Carlos' fascination with his great-grandfather's thick, beautiful silver hair leads him to wonder about how old his great-grandfather is and how many years it will take before he might have hair like that, too. As Carlos begins to investigate these questions, his family, and ultimately his entire school, become involved in exploring age differences.

*El Bisabuelo Gregorio* is designed to be used with the *Contexts for Learning Mathematics* unit *Ages and Timelines*. The story sets the stage for a series of mathematical investigations in which students explore some big ideas about subtraction.



## Grandma Eudora's T-Shirt Factory



Time for another math-filled adventure with the Masloppy family. When Itchy the dog spills bleach all over Uncle Lloyd's t-shirts, he prepares to be sent to the dog house. But Grandma Eudora thinks that Itchy has created the most beautiful t-shirts she has ever seen and decides to try to sell them. Soon business is booming and the Masloppys must figure out a way to organize and keep track of their growing inventory. Nicholas the Organizer steps in and soon Grandma Eudora's T-Shirt Factory is famous. And no one could be happier than Itchy the dog.

*Grandma Eudora's T-Shirt Factory* is designed to be used with the *Contexts for Learning Mathematics* unit *The T-Shirt Factory*. The story sets the stage for a series of mathematical investigations in which students explore place value, addition, and subtraction.