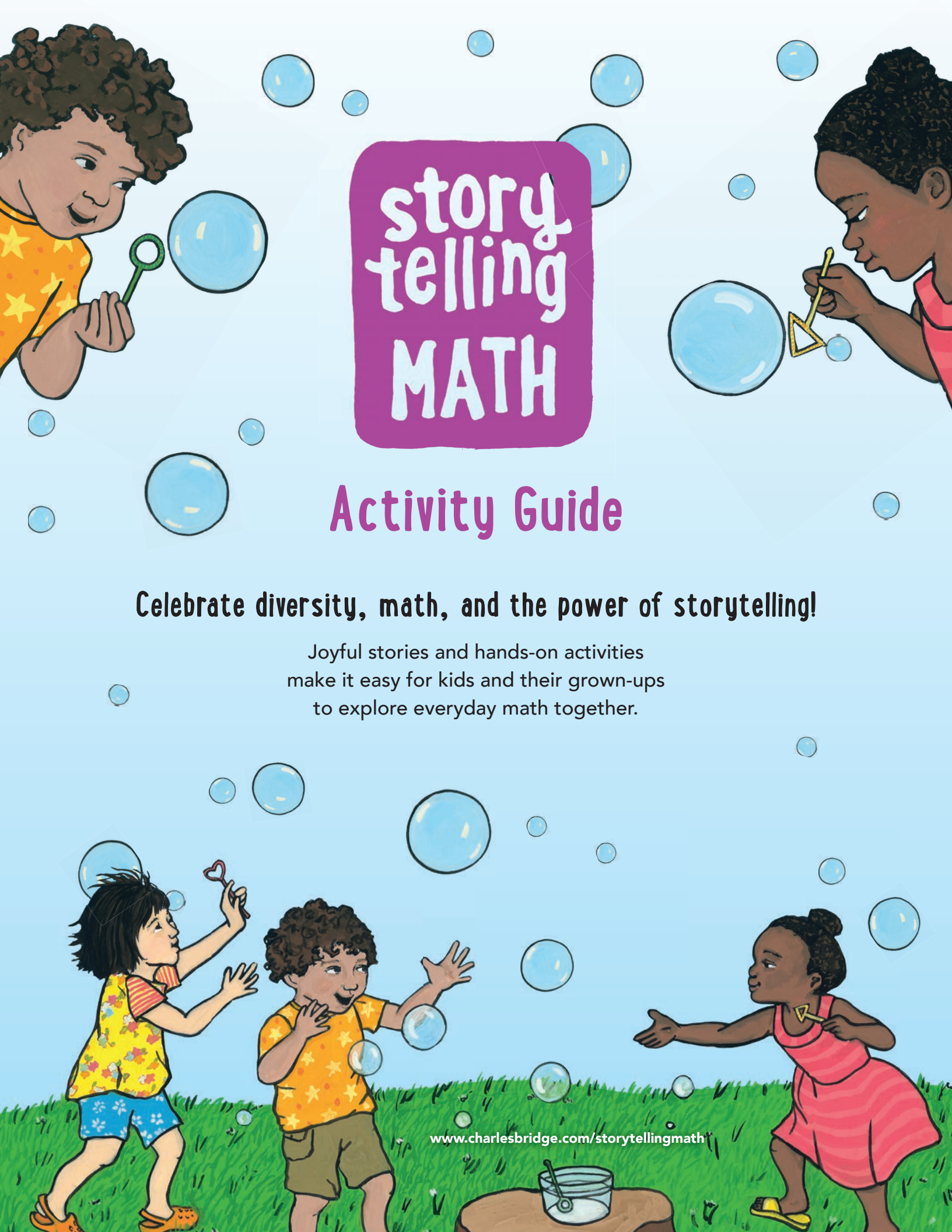


Activity Guide

Celebrate diversity, math, and the power of storytelling!

Joyful stories and hands-on activities
make it easy for kids and their grown-ups
to explore everyday math together.

www.charlesbridge.com/storytellingmath

Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together.

www.charlesbridge.com/storytellingmath

Circle! Sphere!

Math activities by Marlene Kliman, TERC

978-1-62354-124-8 BD
e-book available

About the Book

Time to blow bubbles! Manny's wand is a circle. Olivia's wand is a triangle. Mei's wand is a heart. What shape will their bubbles be?

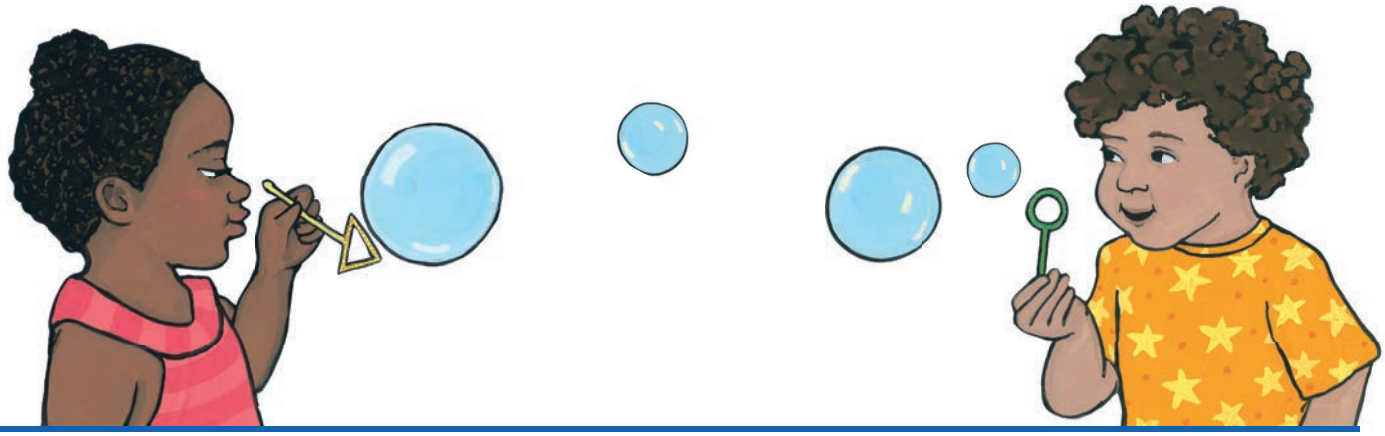
About the Math

Young children learn about shapes as they explore everyday objects. They discover that cereal boxes stack because of their flat sides, that balls roll because they are round all over, and that paper-towel tubes are open on both ends. Like Manny, Olivia, and Mei, they find that some things, such as wands, are flat, while others, such as bubbles, are not. These kinds of experiences give children a hands-on foundation for later study of geometry.

Douglas Clements
Kennedy Endowed Chair in Early Childhood Learning, executive director of the Marsico Institute for Early Learning and Literacy, and Distinguished University Professor, University of Denver

About the Author-Illustrator

Grace Lin is a *New York Times* best-selling author and National Book Award finalist who has won a Caldecott Honor, a Newbery Honor, and a Theodor Seuss Geisel Honor. www.gracelin.com



Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214
 Funded in part by a grant from the Heising-Simons Foundation.

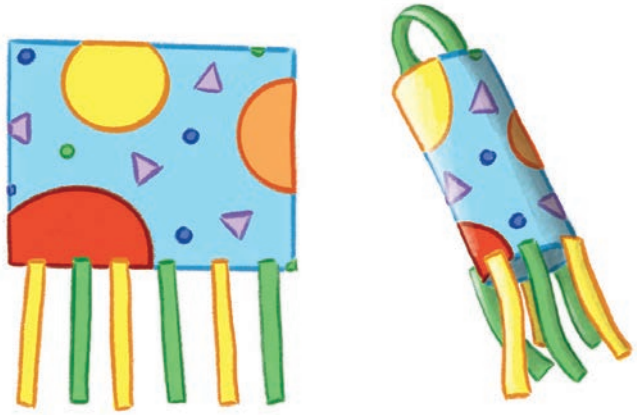
Circle! Sphere!

Math Activities

Explore geometry with these activities!

Make a Windsock

Help children decorate a sheet of paper and glue long, thin strips along the bottom. Wonder out loud: "How can we make this flat piece of paper into a tube? What will happen if we put these edges together?" Tape the edges together and add a handle. Ask: "What will happen if we blow on our windsock?" Try it to find out!



Bubble Up!

Gather a variety of bubble blowers: straws, kitchen spatulas with holes, and wands of different sizes and shapes. You can also make wands from pipe cleaners. For each blower, ask children to predict: "What shape do you think the bubbles will be? What size?" Then have them try it!

Squash It!

Help children make a ball, donut, or other shape with play dough. Then wonder together: "What shape do you think this will be if you squash it flat? Why do you think so?" Invite children to squash it. Describe the resulting shape. "Look, it's a flat circle!"

Play the Shape Game

Secretly choose an object in the room. Then give a set of clues, including some about its shape. Help children find the object.

- I'm thinking of something in the room.
- It's flat on the top.
- It's flat on the bottom.
- It's curved on the sides.

Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214
 Funded in part by a grant from the Heising-Simons Foundation.

Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together.

www.charlesbridge.com/storytellingmath

The Last Marshmallow

Math activities by Marlene Kliman, TERC

978-1-62354-126-2 BD
e-book available

About the Book

Time for cocoa! Olivia and Mei have three big marshmallows to share. Olivia gets one, and Mei gets one. How will they share the last marshmallow?

About the Math

"One for you, one for me, and one more . . ." As Olivia and Mei discover, sometimes sharing fairly can be a challenge. If one child ends up with one marshmallow and the other with two, they know it's not fair, even if they can't count yet! When children find ways to share, they begin to develop real-world understanding of division and fractions.

Douglas Clements
Kennedy Endowed Chair in Early Childhood Learning, executive director of the Marsico Institute for Early Learning and Literacy, and Distinguished University Professor, University of Denver

About the Author-Illustrator

Grace Lin is a *New York Times* best-selling author and National Book Award finalist who has won a Caldecott Honor, a Newbery Honor, and a Theodor Seuss Geisel Honor. www.gracelin.com

Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214
 Funded in part by a grant from the Heising-Simons Foundation.

story telling MATH

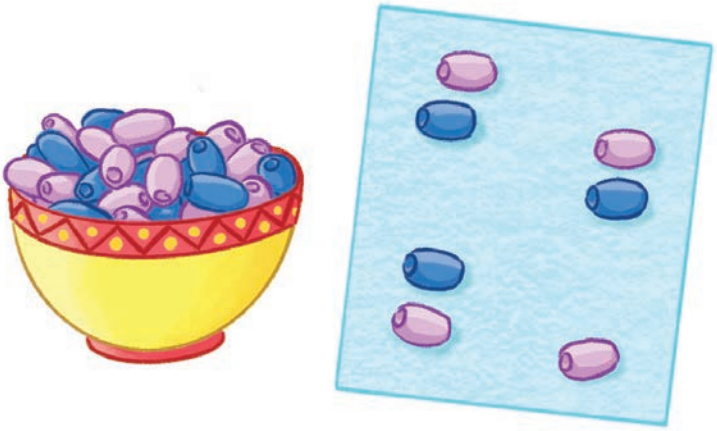
The Last Marshmallow

Math Activities

Explore sharing equally with these activities!

More, Less, or Same?

Fill a small bowl with large beads in two colors. (Pompoms, beans, or other small objects work, too.) Ask children to take a handful. Wonder together about whether you have more of one color. Then help children match the beads up to check.

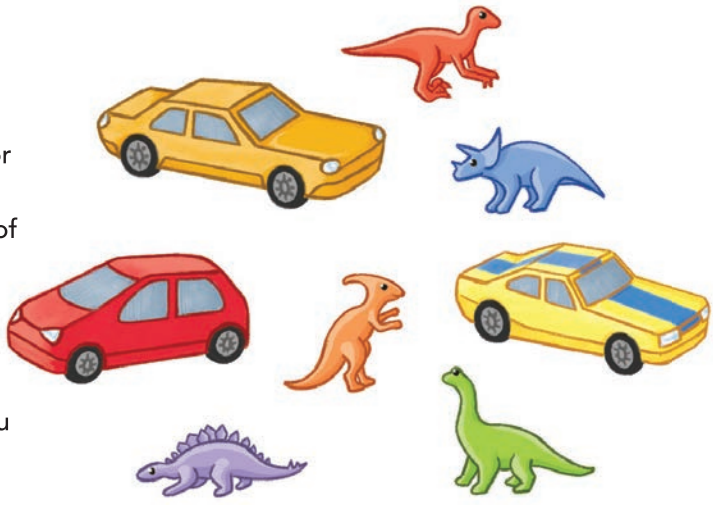


Take One and Pass It Around

Gather a few people around a table and put out a plate with two more muffins than people. (Any snack-sized food will do.) Invite children to predict: "Are there enough for everyone to have one? Will there be any left over?" Pass the plate around and try it!

Match Up

During playtime, look for opportunities to invite children to match items one for one. "Do we have enough hats for each teddy to get one? Show me." "The dinosaurs are going on a trip. Can we put one in each car, or do some of them need to double up?"



Point Out Pairs

From bicycle tires to socks, pairs are all around us. As you go about the day with children, describe the pairs you see and wonder together about any extras: "These two chopsticks make a pair. There's another chopstick all by itself. Let's look for its partner."

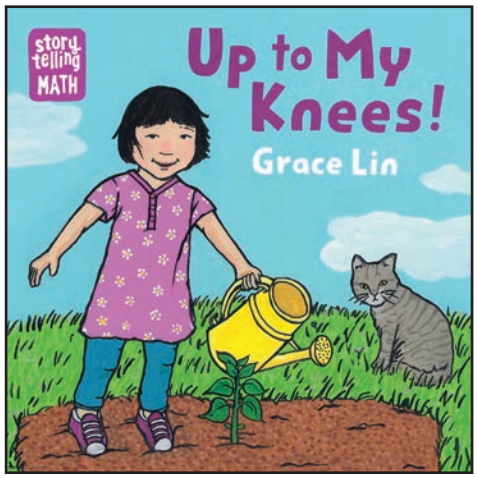
Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214
 Funded in part by a grant from the Heising-Simons Foundation.

Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together.

www.charlesbridge.com/storytellingmath

Up to My Knees!

Math activities by Marlene Kliman, TERC



978-1-62354-123-1 BD
e-book available

About the Book

Time to garden! Mei plants a seed and watches it grow. Soon the little plant is up to her toes, then her knees, then her waist. How tall will it get?

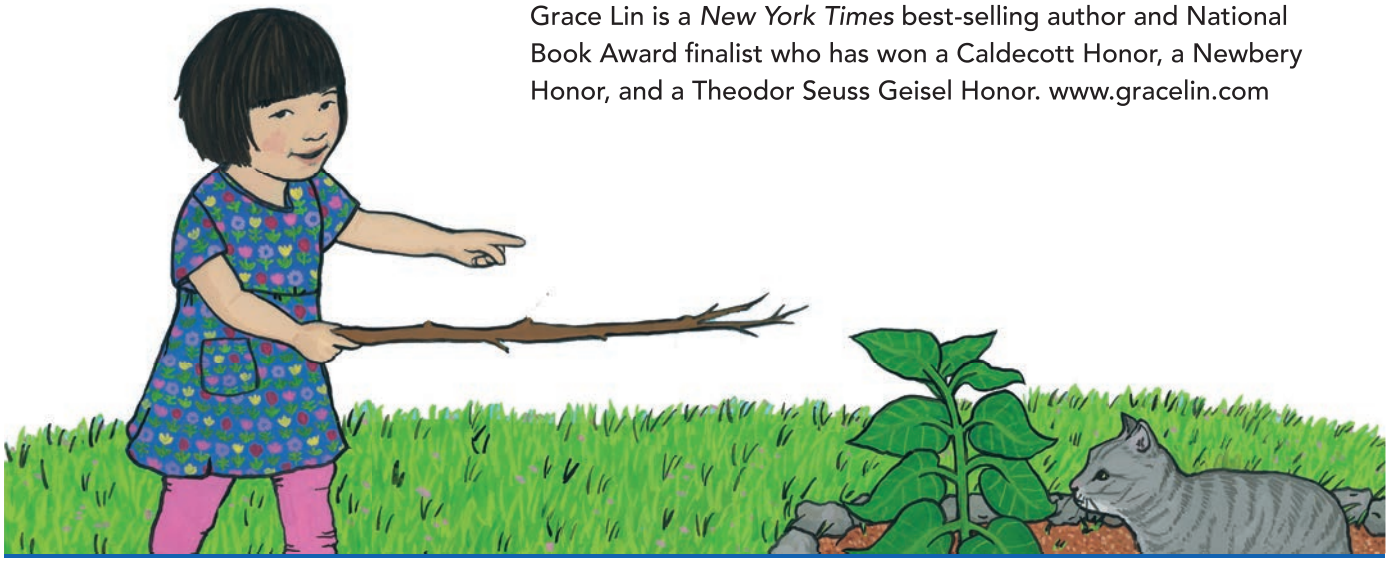
About the Math

Young children learn about measurement as they compare the sizes of things around them. In this story, Mei explores measurement as she compares the height of the plant to the height of her toe, knees, waist, and shoulders. At the end of the story, she finds that the plant is even taller than she is! Experiences like these help children make sense of rulers and yardsticks in later years.

Douglas Clements
Kennedy Endowed Chair in Early Childhood Learning, executive director of the Marsico Institute for Early Learning and Literacy, and Distinguished University Professor, University of Denver

About the Author-Illustrator

Grace Lin is a *New York Times* best-selling author and National Book Award finalist who has won a Caldecott Honor, a Newbery Honor, and a Theodor Seuss Geisel Honor. www.gracelin.com



Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214
 Funded in part by a grant from the Heising-Simons Foundation.

story telling MATH

Up to My Knees!

Math Activities

Explore measurement with these activities!

A Tower as Tall as I Am

Help children use blocks or empty boxes to build a tower as tall as they are. As children build, wonder out loud, "How can we tell if the tower is as tall as you?" Have children stand next to the tower to compare.

Up to My Knees

Visit a park or green space to find a plant as high as your child's knee. Return to visit the plant every few weeks and ask: "Is the plant still as high as your knee? How can you tell if the plant is growing?"

Hands Together

Hold your hand up against your child's hand. Talk together about how your hands compare in size, using words such as *wider, longer, taller, smaller,* and *thinner.* Point out that both hands have the same number of fingers!

Talk About Tall

Help children notice heights in everyday life. Look for opportunities to compare heights of familiar things. "The baby doll is taller than the giraffe!" "That shelf is over your head, but you can reach it by stretching your arm up!"

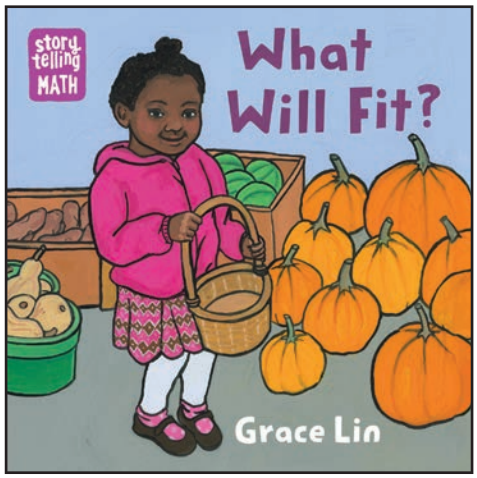
Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214

Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together.

www.charlesbridge.com/storytellingmath

What Will Fit?

Math activities by Marlene Kliman, TERC



978-1-62354-125-5 BD
e-book available

About the Book

Time for the farmers' market! Olivia is searching for something to fill her basket. What will fit just right?

About the Math

As children figure out "what will fit," like Olivia does in this story, they build their spatial sense. They learn how shapes fit together in different ways. Spatial sense is important in science, math, and everyday life. We use spatial sense when we read maps, figure out how to fit a container in a refrigerator, and decide if two shoes in different positions are a pair.

Douglas Clements
Kennedy Endowed Chair in Early Childhood Learning, executive director of the Marsico Institute for Early Learning and Literacy, and Distinguished University Professor, University of Denver

About the Author-Illustrator

Grace Lin is a *New York Times* best-selling author and National Book Award finalist who has won a Caldecott Honor, a Newbery Honor, and a Theodor Seuss Geisel Honor. www.gracelin.com

Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214

What Will Fit?

Math Activities

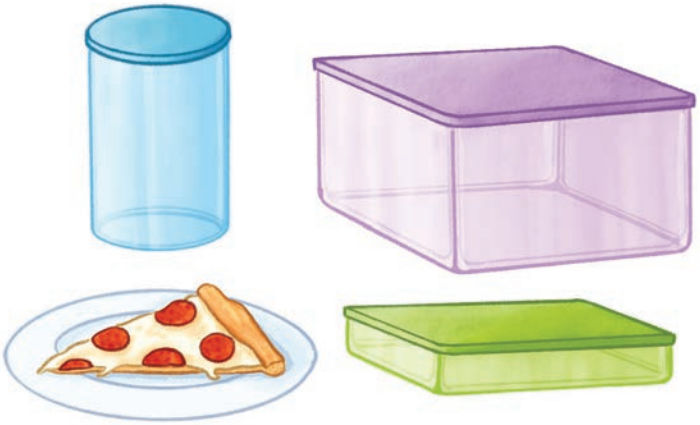
Explore spatial sense with these activities!

Piggy Bank

Cut a slot about 1¼" x 2¼" (about 3 cm x 5.5 cm) in the lid of an empty oatmeal container. Snap the lid back on. Gather a few small items—some that fit through the slot and some that are a little too large. As children investigate what fits, draw their attention to sizes and positions. "The crayon doesn't fit when it's sideways. What will happen if you turn it?"

Save It for Later

Got leftovers? Put them on the table with a few clear plastic containers of different sizes and shapes. Invite children to predict which containers are too small to hold the leftovers, which are way too big, and which are about right. Then experiment together to find the container that works best.



Find a Fit

Gather a few plastic cups of different sizes and encourage children to explore what fits inside them. "Could that green ball fit inside the red cup?" "Do you think your hand could fit inside that tiny cup?" Try it and see!

Shake It!

Talk about *empty, half,* and *full* as you make a shaker together. You'll need a clear plastic container with a very secure lid, a bowl of dried beans, and a scoop. Help children scoop beans into the container until it is about half full. Secure the lid and invite children to shake the shaker to music!

Charlesbridge 9 Galen Street • Watertown, MA 02472 • www.charlesbridge.com • (800) 225-3214