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#### **ILLUSTRATOR:**

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Camille wants to rake a pile of leaves that will reach her knees, the perfect height to jump into. When problems with her rake and the wind arise, Camille keeps raking and measuring until her pile of leaves is just the right size!

Ages: 2 to 5 years

ATOS Level: n/a

Lexile: AD 430L

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## Leaves to My Knees

What will Camille do when lots and lots of leaves whoosh away in a big breeze?

Topics: comparing, measuring

#### **Activities To Do Together:**

Before you read the book Leaves to My Knees with your child:

- Point to the picture of Camille holding the rake. Ask your child what they think Camille is doing.
- Talk about the time of year when many trees lose their leaves. Ask your child what else happens in the fall.

As you read Leaves to My Knees with your child:

- Compare Camille, Jayden, and Daddy. Who is tallest? Who
  is shortest? What do you notice about the sizes of their
  rakes?
- Talk about the challenges Camille faces and how she handles them.
- Talk about the different ways Camille measures the depth of the pile of leaves: to her ankles, to her boots, to her knees.
   Talk about how the depth of the leaves changes when Camille and her dad rake them into piles. Did the number of leaves in the yard change or just the way they look?
- Notice the leaves that Jayden is holding in his hands. How are they different? How are they the same?

When you are done reading Leaves to My Knees:

- Encourage your child to find an object that is the same height as their knees and to have fun finding other objects that are the same height, width, or length as other parts of their bodies.
  - In the story, Camille is very determined. Ask your child where they saw examples of Camille's determination.
     How would the story have been different if Camille had stopped raking when twigs and acorns got stuck in her rake or when the wind blew the leaves away?
  - •Go back and look for the animals in the story. What types of animals do you see? How are they the same? How are they different? What do you think the animals want?



## Conversations During Daily Routines with Infants and Toddlers:

- 1. Traveling time Compare the sizes of the vehicles you see around you. What's larger? A bus, a bike, or a car? How else are they different and the same?
- Cooking time Explore and compare the sizes of mixing bowls or other containers. Talk about which are large and which are small. Let your infant or toddler discover which bowls fit inside other bowls.
- 3. Play time Arrange toys by height and talk about the difference in the toys' sizes.
- 4. Outside time Make a collection of natural objects, stones, leaves, shells, pinecones, etc. Sort them by size, color, or shape.
- 5. Dressing time Compare the sizes of the shoes, mittens, or socks worn by the people in your family.

#### **Questions for Mathematical Thinking:**

- 1. What did Camille and Jayden do differently in the story?
- 2. What did Camille and Jayden enjoy doing together?
- 3. Someone is determined when they want to do something and don't let anything stop them from doing it. How do you know that Camille was determined?
- 4. Do you think a pile of leaves that reached your knees would be the perfect size to leap into? Why or why not?
- 5. Why do you think Daddy's, Camille's, and Jayden's rakes made different sounds?
- Did the amount of leaves in Camille's yard change in the story? Describe the ways in which the leaves did or did not change throughout the story.

#### **Early Math Project Resources:**

Visit <u>Leaves to My Knees</u> (www.earlymathca.org/leaves-to-my-knees)

Follow this <u>link</u> or visit earlymathca.org/external-resources for additional online resources.



#### Vocabulary

Math words found in the story: big, down, into, largest, little, many, measuring, more than, size, smaller, some, up

#### Related math words:

bigger, bigger than, biggest, depth, equal, feet, inches, large, larger, larger than, measure, narrow, narrower, narrower than, narrowest, ruler, small, smaller than, smallest, tall, taller, tallest, volume, wide, wider, wider than, widest, yard, yardstick

# Words to build reading comprehension:

acorn, business, freeze, guard, leap, perfect, pile, rake, serious, shoulder, tightly, twigs, yanks, woosh

**Spanish Title:** Hojas hasta las rodillas

Related Books: Up to My Knees by Grace Lin; Actual Size by Steve Jenkins; Super Sand Castle Saturday by Stuart J. Murphy; Red Leaf, Yellow Leaf by Lois Ehlert

Click this link to the World Catalog or enter https://bit.ly/3MuquHS to find Leaves to My Knees in the public library.

#### DISCOVERING THE MATH: BOOK GUIDE

#### **Math Connections:**

The book *Leaves to My Knees* supports rich mathematical conversations with children and their understanding of several important early math concepts.

Young children benefit from plenty of practice noticing the attributes or characteristics of objects. Encourage them to notice and talk about the size, shape, texture, color, and purpose of many objects. This is a precursor to sorting objects into sets and provides practice determining what belongs together and what does not. An understanding of common attributes is an important mathematical concept. This early practice prepares children for later success with data analysis, logic, recognizing sets (even numbers, numbers divisible by five, prime numbers, etc.) and grouping algebraic terms.

Throughout the book, there are opportunities to compare objects by attribute. Camille mentions the difference in size between her coat and Jayden's coat saying, "I've got my big jacket on. Daddy helps Jayden with his little jacket that used to be mine." Talk with your child about how the two coats are the same and different. Make other comparisons. Notice the difference in height between Jayden, Camille, and Daddy. Compare the lengths of the rakes. Compare the piles of leaves that Jayden, Camille, and Daddy make.

Leaves to My Knees also supports understanding and exploration with informal measurement. In the story, Camille makes a pile of leaves that she describes alternately as up to her ankles, up to her boots, and up to her knees. Encourage your child to notice the sizes of different objects and to describe how these objects measure up to their own body. Ask your child to find something that is up to their ankles, up to their boots, and up to their knees. How would your child describe the height of a table? Is it up to their waist, up to their shoulders, etc.? Ask your child to compare the distance from their toes to their knee with the distance from their fingers to their elbow. Which is longer? How do they know? Have fun exploring how your child measures up to objects around them. Your child may enjoy figuring out their own height in cereal boxes, soup cans, spoons, or blocks. As a fun challenge, ask them to figure out the height order of family, friends, and pets. Ask your child what else can be used to measure things.



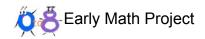
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You might also ask your child to chose three or four objects to compare, perhaps three favorite toys or a group of rocks or sticks. Use comparison vocabulary, words like **bigger**, **longer**, **heavier**, **narrower**, **wider**, **taller**, **thicker**, and **shorter** when comparing the objects. If comparing a group of sticks, you might lay them side by side so it's easy to compare lengths. Pick a stick from the group and ask your child to find a longer stick, a shorter stick, or a thicker stick. Explore the weights of different objects too. Have your child guess which object is heaviest and ask them to explain why they think that. Then encourage them to pick up the objects to see if their guesses were correct. Consider weighing the objects with a scale. Arrange the objects by weight, from lightest to heaviest.

You may want to explore the capacity and volume of different containers. Encourage your child to pour a cup of water into several different containers, perhaps a short wide glass and a tall narrow glass. The liquid takes on the shape of the container but the amount of liquid doesn't change. If your child thinks one of the containers has more water, encourage them to check with a measuring cup. You can also try this with beads, sand, or pebbles. Notice the differences when these objects are spread out on a table versus placed in a tall narrow container. Discuss how they look different and how their depths are different even though the amounts are the same. In *Leaves to My Knees* the amount of leaves didn't change, but the leaves looked different when they were in a thin layer spread across the yard and when they were raked into deep piles. Have fun raking a pile of leaves and noticing how the depth and appearance changes according to the way the leaves are raked.

Talk with your child about the challenges Camille experiences in *Leaves to My Knees*. Ask your child what they can do when they encounter a problem. Talk about the types of things they can solve for themselves and the types of things that may require support from others. When the big breeze comes and blows away the pile of leaves, Camille wonders if she will ever be able to rake a pile of leaves to her knees. Camille's big pile of leaves just reaches her ankles. Instead of giving up, Camille throws off her jacket, grips her rake tightly, and rakes up all of the leaves that had blown away plus some new leaves. Talk about why it's important to keep trying even when things are difficult. Children's capacity for learning math is tremendous.

Most children will encounter some math concepts that require effort and persistence to master. It's important that they internalize that practice, effort, and not giving up are a part of the learning process.



### DISCOVERING THE MATH: BOOK GUIDE

| Age Level          | Related Infant Toddler Foundations, Preschool Foundations and CA State Standards                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infant/<br>Toddler | Cause and Effect The developing understanding that one event brings about another Spatial Relationships The developing understanding of how things move and fit in space Classification The developing ability to group, sort, categorize, connect, and have expectations of objects and people according to their attributes Attention Maintenance The developing ability to attend to people and things while interacting with others and exploring the environment and play materials |
| Preschool/<br>TK   | Measurement 1.0 Children demonstrate awareness that objects can be compared by length, weight, or capacity, by noting gross differences, using words such as bigger, longer, heavier, or taller, or by placing objects side by side to compare length.                                                                                                                                                                                                                                   |
| Kindergarten       | Measurement and Data K.MD 1 Describe and compare measurable attributes                                                                                                                                                                                                                                                                                                                                                                                                                   |

