

Stuart J. Murphy

Stories, Math & More!

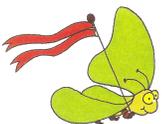
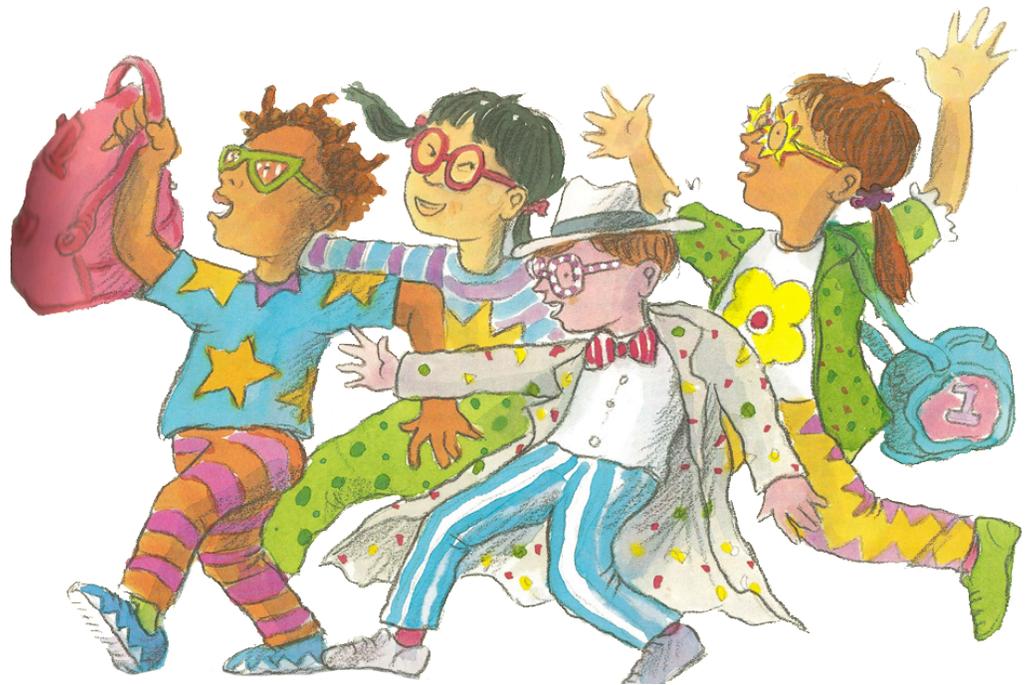
Math Skills are Life Skills!

Stuart J. Murphy's
MathStart

 Stuart J. Murphy's
I See I Learn

The
Main Street Kids' Club
a MathStart Musical

* **QuickLinks**



**A Special Activity Book for
The California Early Math Symposium**

Hello!



June, 2021

Last year—the first year for **The Early Math Symposium**—was a wonder! The team at the [California Early Math Project](#) had to pivot quickly, reimagining a relatively modest conference for 250 California educators into an online, international event with thousands of attendees tuning in from dozens of countries. With extraordinary creativity and energy—in the middle of pandemic!—they addressed a need no one had yet articulated, providing a platform for teachers from all over the world, kindred spirits in their commitment to giving their students a strong foundation in mathematics, to meet and exchange ideas.

I was invited to give a keynote ([here's the video!](#)). Anybody who knows me knows I *love* to talk about math, stories and visual learning, and do so all the time! But this talk was special. It was deeply moving to know that I was reaching so many educators—some of whom had to get up in the middle of the night to tune in!



In recent years there has been a lot of talk in educational circles about STEM (Science, Technology, Engineering and Math) and STEAM (just add art — I always do!). This is typically in reference to our increasingly technology-dependent world. But the importance of mathematics goes far beyond the job market. **Math skills are life skills.** Whether it is figuring out how much pizza to order for a party or basic financial literacy, we use math all the time, every day.



My background is in art. I studied illustration at the Rhode Island School of Design (RISD). After graduation, I worked as an art director for an educational publisher. It was an education! Back then illustration was seen as an add-on, something to think about only after the copy had been written. I thought that

was short-sighted and missed a giant opportunity, so I co-founded my own company to develop educational materials that leveraged visual learning strategies.

We are natural visual learners. From infancy we mimic behaviors we see around us. If you stick out your tongue at a newborn, she will return the gesture, sticking out her tongue at you! We are wired for this.

Examples of visual learning strategies include graphs, charts and illustrations that highlight comparisons.

Both of my book series, **MathStart** and **I See I Learn**, leverage visual learning strategies and stories—children love stories!—to **teach young children important life skills**.

The books are **also designed to help teachers and parents**, who are foundational in their children’s education. Many adults have been taught to fear math, that they’re not “good” at math. These books not only show them that they are better at math than they think, but also that math is fun!

Both series were vetted by teachers throughout the development process; and include activities designed to help adults extend learning beyond the story.

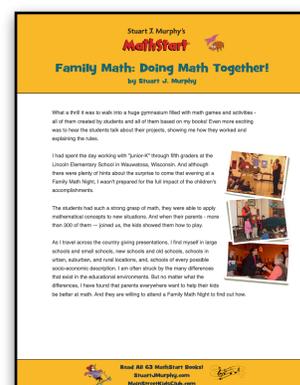
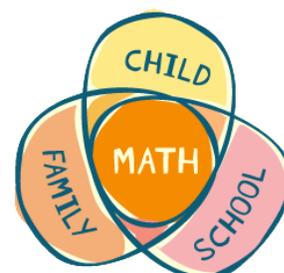
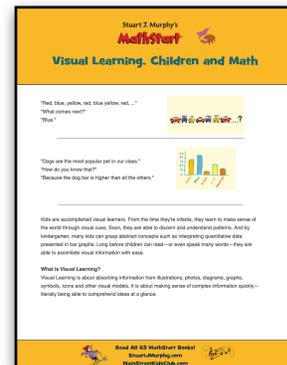
Children from a wide variety of backgrounds and cultures are represented throughout the MathStart series. Each of the books also includes a short bibliography of math story books by other authors. I have always said that if children enjoy learning through stories, then give them more story books!

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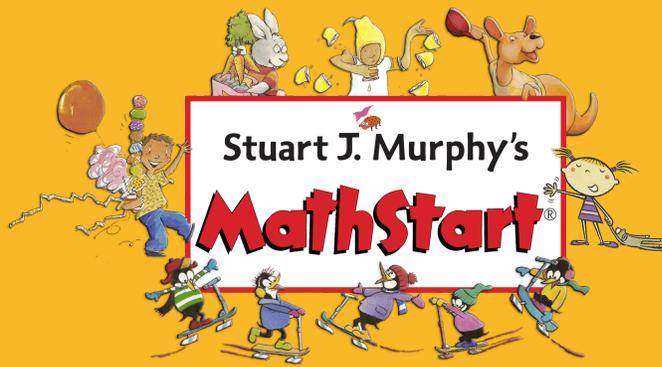
This special pdf book is split into two sections: **MathStart** and **I See I Learn**. There are lots of activity ideas—and links to more!

Have a wonderful Early Math Symposium everybody!

Stuart J. Murphy



* **QuickLinks**



MathStart is a series of 63 story books, each focused in a different mathematical concept, written for children ages Pre-K through Grade 3. The stories are split into three levels.

Taken separately, Level 1, which has 21 titles, ranks as one of the most comprehensive early math series available.

[We have free PDF Activity sheets for all 63 books on our website.](#)

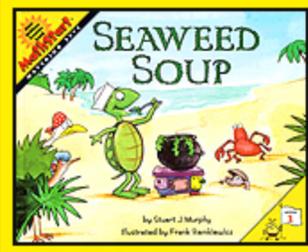
We have reproduced three—one from each level—in this book, but you can download all of them from the website .

Level 1 Ages 3+	Level 2 Ages 4+	Level 3 Ages 7+
Beep Beep, Vroom Vroom! (counting)	Animals on Board (addition)	Bitchof (counting)
The Best Bug Parade (comparing sizes)	The Best Vacation Ever (collecting data)	Down Down to Earth Back Shop (counting)
Bug Dance (directions)	Rigger, Ratter, Beest (game)	Discover Death (negative values)
Cross Shapes (recognizing shapes)	Captain Invisible and the Space Shapes (3-dimensional shapes)	Divide and Ride (dividing)
Double the Ducks (counting numbers)	Captain All Around (rounding)	Earth Day — Heavy! (measuring)
Every Buddy Counts (counting)	Eleaser Magic (subtraction)	Game Time (time)
The Greatest Symptom of All (operations)	A Fair Bear Share (grouping)	The Grumpy Giant (measurement)
Henry the Fourth (ordinals)	Get Up and Go! (time)	Hamster Change (length)
A House for Birds (understanding capacity)	Give Me Stuff (understanding values)	Jump, Jump, Jump! (directions)
It's About Time (hours)	Let's Fly a Kite (properties)	Lemonade for Sale (bar graphs)
Jack the Builder (counting on)	Mall Mania (addition strategies)	Less Than Zero (negative numbers)
Just Enough Carrots (comparing amounts)	More or Less (comparing numbers)	The Pesty Pet (counting numbers)
Leaping Lizards (counting by 5s and 10s)	Pepper's Journal (introduction)	Polly's Pet Pal (America)
Mighty Madde (understanding angles)	Probably Pizzas (probability)	Randy, Set, Hop! (counting operations)
Missing Mittens (odds and evens)	Racing Around (introduction)	Robin Time (reading a schedule)
Monster Musical Chairs (introduction)	Some Old Horse (making predictions)	Roses for Rhye (geometry)
One...Two...Three...Jambalaya! (number order)	Spooky Shapies on Parade (counting by 2s, 5s, and 10s)	Safari Park (coloring for children)
A Pair of Socks (matching)	Super Sand Castle Saturday (measurement)	Shark Submarine (introducing 2-digit numbers)
Rabbit's Pajama Party (counting)	The Sundaes Song (combinations)	Siggery Car Wash (odds and evens)
Seaweed Soup (matching sets)	Tally O'Malley (introduction)	Too Many Kangaroos (things to do)
3 Little Firefighters (counting)	100 Days of Cool (numbers 1 to 100)	Treasure Map (mapping)

HarperCollinsChildren'sBooks



**21 books
in Level 1**



Stuart J. Murphy's
MathStart

Seaweed Soup
Level 1 / Ages 3+
Matching Sets



Understanding sets is an important step in counting, as well as in learning about patterns.

Story Description

Turtle is such a generous and good friend that none of his buddies can say no when he invites them to lunch for a bowl of that "thick and green, gooey and slimy" delicacy, seaweed soup. Will he have enough matching place settings for everybody? Not to worry...this is one resourceful turtle. Understanding sets is an important step in counting, as well as in learning about patterns.

Illustrated by Frank Remkiewicz.

DC Standard 4.1, Matching Sets, One-to-One Correspondence: Children will demonstrate a beginning understanding of number and operations and how they relate to one another. **4.1.1:** Use one-to-one correspondence. **4.1.6:** Recognize quantities of small groups up to 4.

Activities

- While reading the story together, ask your child (or class) what things each new character will need in order to eat lunch. As each new guest arrives, count the number of cups, spoons, napkins, and bowls on the table. Discuss how each guest has 1 cup, 1 spoon, 1 napkin, and 1 bowl.
- Plan a party (real or make-believe) with a favorite soup as the main course. (The soup can be real or make-believe: Orange Basketball Bubblegum soup —yum!) With your child (or class), make up a guest list and figure out how many cups, spoons, napkins and bowls will be needed. To help children visualize place-settings, use paper or plastic cups, spoons and bowls.
- Get a package of plastic silverware (nothing too sharp!) and some plastic cups. Remove one of the forks and of the knives. Ask your child (or students) to make as many complete sets as they can. For incomplete sets, ask what they can find around the room that could serve as a substitute. Be creative, just like Turtle! Try it again, only this time return the fork and take away two spoons and a cup.



Read All 63 MathStart Books!
StuartJMurphy.com
MainStreetKidsClub.com

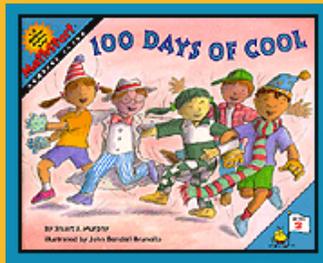


Buy Books
Here!

Understanding matching sets, or one-to-one correspondence, is part of the process of learning about counting, more than/fewer than, and how to recognize patterns and relationships. It is a foundational skill to understanding multiplication.



For FREE activity sheets for all 63 stories, plus videos and more, visit MathStart.net



Stuart J. Murphy's
MathStart

100 Days of Cool
Level 2 / Ages 6+
Numbers 1—100



Understanding the concept of 100 is a benchmark for children as they become familiar with percentages and place value.

Story Description

When Mrs. Lopez tells her class that they're going to celebrate "100 Days of School," Maggie hears "100 of Days of Cool" instead. Mrs. Lopez thinks that's a great idea, too. So for the next 100 days, Maggie, along with her buddies Nathan, Yoshi, and Scott, come up with 100 different ways to be cool. They wear funny glasses, fancy socks, decorate their bikes, even dress up in cloths from the wacky 1970s.

A number line is used to keep track of their progress.

Illustrated by John Bendall-Brunello.



Activities

- Make a number line similar to the one shown in the book on a long, thin sheet of paper. Fold the number line in half and in half again. Use the folds to show how day 25 is $\frac{1}{4}$ of the way to 100, day 50 is halfway, and day 75 is $\frac{3}{4}$ of the way.
- Look at a calendar with your child or students. Starting on January 1, find the 100th day of the year. Together, make a guess in which month the day will fall. What day of the week will it be? Then see if you got it right. Try the same thing again, this time counting from today's date or from a child's birthday to find the 100th day.
- Give your child or a group of students a set of dominos. Have them try to make "trains" (lines of matching dominos) with exactly 100 dots. How many trains can they make?



Read All 63 MathStart Books!
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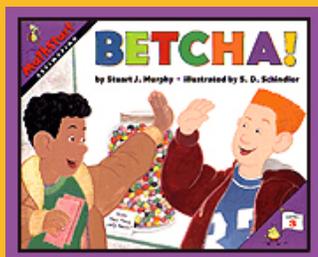


Buy Books
Here!

The math topic of becoming familiar with the numbers from 1 to 100 is an important benchmark for children as they begin to understand place value.

For FREE activity sheets for all 63 stories, plus videos and more, visit MathStart.net





Stuart J. Murphy's
MathStart

Betcha!
Level 3 / Ages 7+
Estimating



Knowing how to estimate is an essential skill that helps children determine approximate totals as well as check the reasonableness of their solutions to problems.

Story Description

At stake: two free tickets to the All-Star Game. And all you have to do is guess the correct number of jelly beans in a jar at the Planet Toys store. One particularly smart boy has an idea: Why guess when you can estimate? He plays a game with his buddy as they head over to the store on the bus. With four people per row, 10 rows, and a few folks standing in the aisle, he estimates that there are 43 people on the bus. "I didn't even need a pencil," he boasts. Knowing how to estimate is an essential skill that helps children determine approximate totals as well as check the reasonableness of their solutions to problems.

Illustrated by S.D. Schindler.

Activities

Read the story together and ask your child (or students) to describe what is going on in each picture. Ask questions throughout the story such as "What would you do to estimate how many people are on a bus?" and "How would you estimate the number of cars in a traffic jam?"

Together, make up your own *Betcha!* game. Pick something that is difficult to count, such as people in a long line, cars in a parking lot or cookies in a box. Help your child (or students) consider different strategies for making these estimates. Then check to see how close these estimates are to the real numbers.

Teacher Idea: You can use the *MathStart* books to introduce a concept as well as to reinforce a concept. An example would be "Betcha!" I usually read the book at the beginning of the year because we do estimation activities all year long. The kids can see how the kids in the story use different strategies for estimating. My students have to bring in their own estimation jars at least once a year. Everybody gets a chance. So it can be container of whatever—rocks, candies, straws. I've even had grass. They bring in all kinds of stuff. One kid brought in shark teeth from Florida, which was really neat. Sometimes I'll give the winning estimator a pencil or a piece of candy, but mostly it's about the glory.

—Richard Callan, Bunker Hill Elementary School,
Indianapolis, IN



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Here!

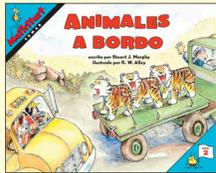
Learning how to make estimates based on numerical information is an important everyday life skill. You don't always need to know the exact number, but it is often helpful to know an "about" figure.

For FREE activity sheets for all 63 stories, plus videos and more, visit MathStart.net





edición en español



Animales a Bordo
(sumar)



El ascensor mágico
(restar)



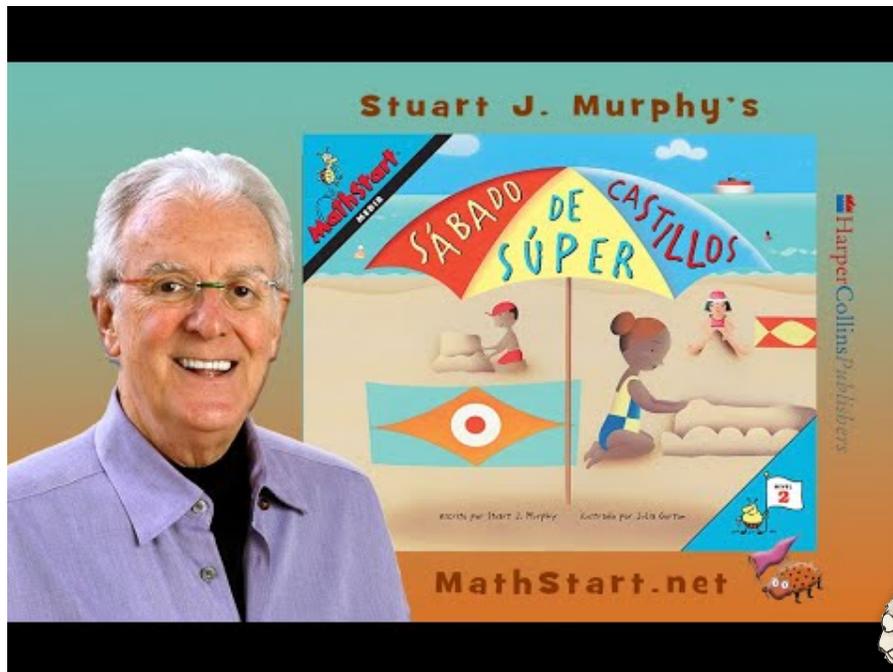
Jacobó, el constructor
(contar hacia adelante)



Sábado de Súper Castillos
(medir)



Suficientes Zanahorias
(comparar cantidades)



[Look for information about the Spanish books on the MathStart website!](#)



Meet the children from Miss Cathy's class at Ready Set Pre-K in See-and-Learn City!

Freda, Percy, Emma, Carlos, Camille and Ajay are the stars of the stories!

There are 16 books (8 in Spanish), divided into four domains:

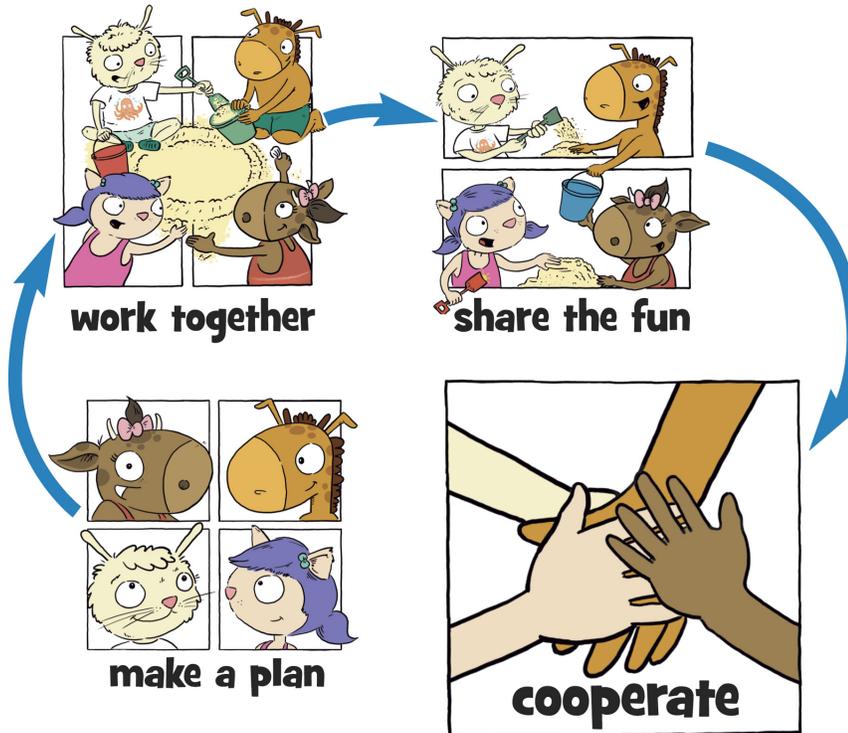
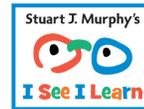
- social skills
- emotional skills
- health & safety skills
- cognitive skills

Children with good social and emotional skills are better prepared to learn everything, including math!

We have printed one Closer Look poster from each domain. **But you can download them all for free on our website—[I See I Learn](#)—where you will also find videos, puppets and more!**



Cooperation



A Closer Look

1. How do **you** cooperate with others?
2. Look at the pictures.
What happened when everyone started to work together?
3. How is working together better than working separately?
4. Work with a friend to draw a picture of a fort like the one Camille's team built.



Camille's Team covers the social skill of Cooperation, which is a benefit to classroom participation and working on group projects, like those encountered in the learning of mathematics.

Dealing with Frustration



A Closer Look

1. What do **you** do when you're upset?
2. What helps you feel better when you're frustrated or angry?
3. Draw a picture of how you feel when you're grumpy.
4. Draw a picture of how you like to feel.



Charlesbridge
iseeilearn.com

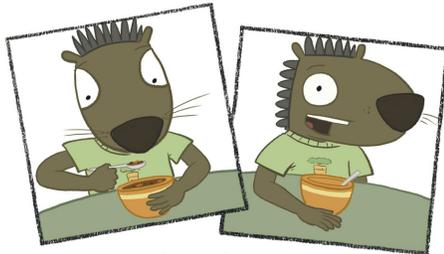
For happier, healthier, more confident children

Percy Gets Upset focuses on dealing with frustration, an emotional skill. Developing strategies for managing frustration and anger is important for handling any new learning situation, such as tackling a new math skill.

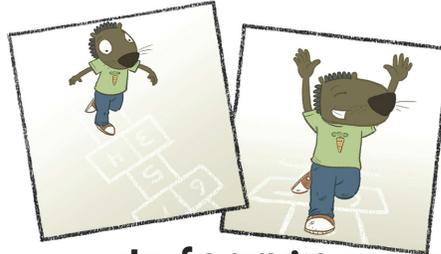
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How to stay happy and healthy



eat healthy meals



play for exercise



drink lots of water



enjoy healthy snacks



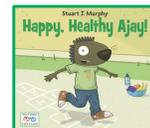
stay active

A Closer Look

1. How do **you** stay healthy?
2. What do you like to do for exercise?
3. What are some foods that are good for you?
4. Draw a picture of your favorite healthy snack.

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Health and
Safety Skills
Healthy Habits



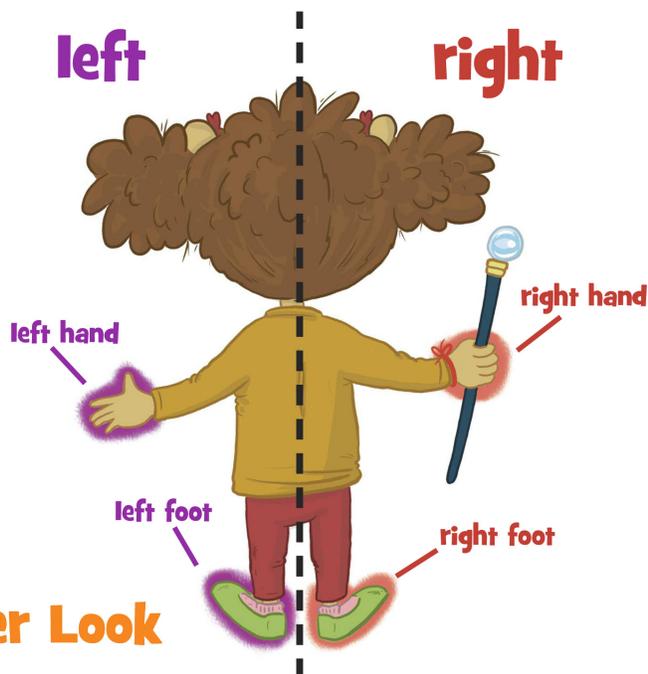
For happier, healthier, more confident children



Happy, Healthy Ajay! is about developing healthy habits, a critical health and safety skill. When children are healthy, they can better focus on their learning, including learning about math.

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Knowing Left and Right



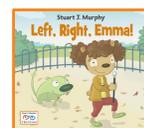
A Closer Look

1. Do **you** know left from right?
2. Get a pair of shoes. Which is the left shoe?
Which is the right shoe?
3. At lunchtime, look at your plate.
What food is on the left of your plate?
What food is on the right?
4. Draw a picture of a house.
Add trees and flowers on the sides.
Looking at the house, what is on the left?
What is on the right?



Cognitive Skills

Knowing Left and Right



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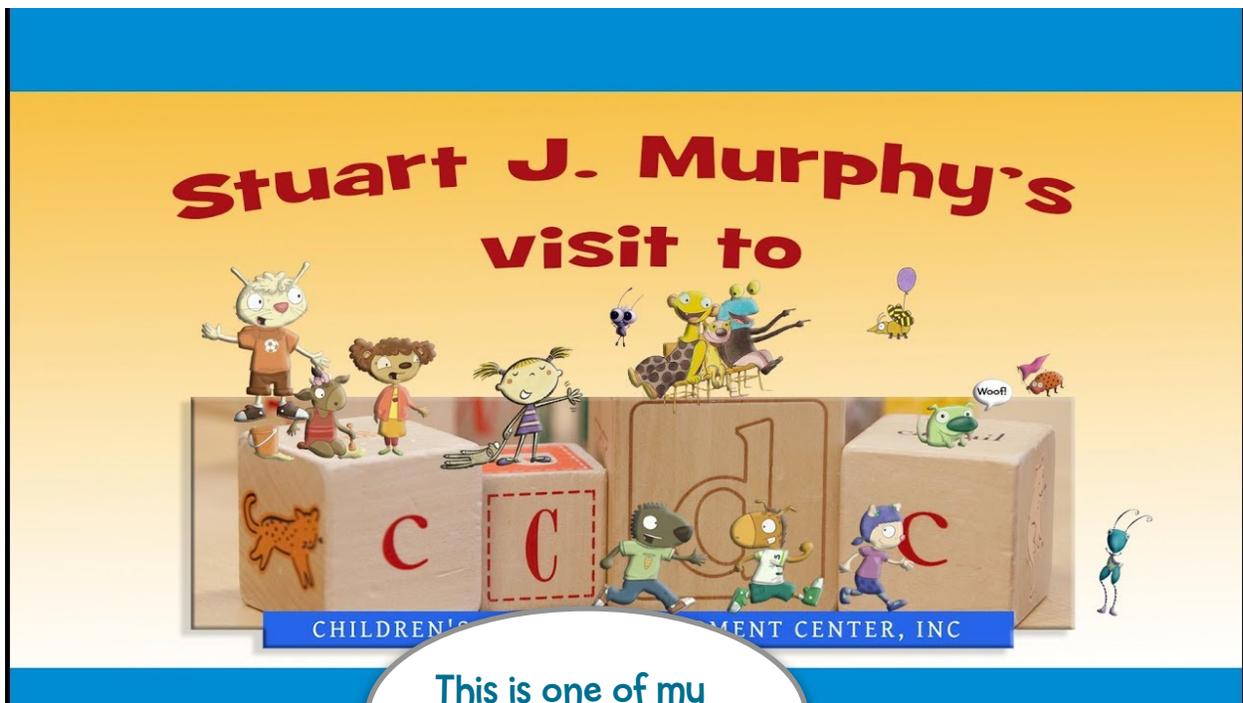
For happier, healthier, more confident children



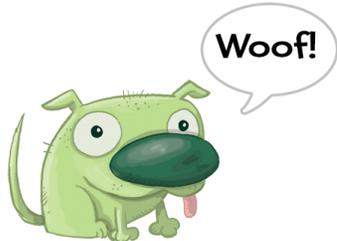
Left, Right, Emma! helps children learn their left from their right, an important basic skill and an early step in learning about direction.

For more FREE posters and videos, visit iseeilearn.com

Thank you!



This is one of my favorite movies!



Share this PDF Book with all your friends!