

Cassie's Beach Adventure

Science on the Go!

By Suneeta Mall

FableFlow Publishing



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First Edition, 2024

Based on original story by Suneeta Mall Enhanced with AI by FableFlow

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ISBN: 978-0-6456963-3-2

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A Note to Readers

Welcome to Cassie's adventure—a journey that transforms an ordinary trip to the beach into an extraordinary exploration of physics! Through Cassie's curious questions and her mum's thoughtful explanations, young readers discover that science isn't confined to laboratories or textbooks. It's everywhere around us, waiting to be noticed and understood.

This book introduces fundamental physics concepts—gravity, motion, speed, distance, and relativity—through experiences children encounter every day. When Cassie wonders why trees don't walk, when Caleb grows impatient in the car, when the world seems to rush backward outside the window, these become teachable moments that spark understanding. Each question leads to discovery, each observation unlocks a scientific principle, and each experiment proves that learning happens best when curiosity leads the way.

Parents and educators will find this book bridges the gap between wonder and knowledge. The concepts presented here align with Sir Isaac Newton's laws of motion, yet they're explained through playful dialogue, hands-on experiments, and memorable rhymes that help young minds grasp complex ideas. From bunny hops that demonstrate gravity to ball-tossing experiments that reveal relative motion, every activity invites participation and deeper thinking.

As you read together, encourage your young scientist to ask "why" and "how" just like Cassie does. Let their questions guide your conversations. Try the experiments together. Observe the world with fresh eyes. Most importantly, celebrate curiosity as the foundation of all scientific discovery. After all, every great scientist—from Newton to today's innovators—started as a curious child who dared to ask questions about the world around them.

Chapter 2: The Mathematics of Motion

The car doors chunked shut with satisfying clicks as Mum buckled Cassie and Caleb safely into their car seats. The leather was warm from the sun, and the car smelled like the coconut air freshener hanging from the rearview mirror. Mum slid into the driver's seat, adjusted her sunglasses, and turned the key.

The engine purred to life.

Before they'd even moved an inch—before Mum had even put the car in gear—Caleb's eager voice piped up from the backseat: "Are we there yet?"

The question hung in the air for just a moment before both Mum and Cassie burst into laughter.

"Caleb!" Cassie giggled, twisting in her seat to look at her little brother. "We haven't even started moving! Look—we're still in our driveway! You can see our house right there!"



View from inside the car showing the driveway and their house still visible through the windshield. In the foreground, 3-year-old Caleb with a toy dinosaur looks eagerly forward in his car seat while 6-year-old Cassie with brown hair twists around to look at him with an amused expression. Mum is in the driver's seat with sunglasses, smiling at the children's interaction. The car hasn't moved yet - the house is

clearly visible right behind them. The scene is warm and sunny with a coconut air freshener hanging from the rearview mirror. The illustration captures the humor of Caleb's impatience before the journey has even begun.

Caleb craned his neck to peer out the window, then slumped back with a dramatic sigh that seemed far too big for such a small person. "But I want to be at the beach now!"

"Patience, my little eager beaver," Mum said warmly, checking her mirrors. "We'll get there soon enough. I know waiting is hard sometimes, but good things are worth the wait."

But Cassie's mind had already latched onto something new. She stared out the window at their familiar street, trying to imagine the journey ahead. "Mum, how far away is the beach? Like... how much do we have to move to get there?"

"Excellent question! The beach is about ten kilometers from our house."

"Ten kilometers." Cassie repeated the words, but they felt empty, like saying a word in a language she didn't understand. She could picture ten cookies or ten toys, but ten kilometers? Her brain couldn't quite grasp it. She imagined a big floating question mark above her head, blinking like a neon sign.

Mum caught her confused expression in the rearview mirror and smiled. "A kilometer is a way of measuring distance—how far apart two places are. You know how we sometimes walk to Aqua Flora Park?"

Both children nodded. They loved that park with its water features and the tall slide that made your tummy flip.

"The distance from our house to the park is one kilometer. So imagine walking all the way to the park, turning around, and coming all the way back

home. Then doing that same walk again. And again. And again. If you did that five times total, you would have traveled ten kilometers. That's how far away Cronulla Beach is."

Cassie's eyes grew wide. *Five times?!* That seemed impossibly far. No wonder Mum was driving instead of walking!

But now her mathematical mind was churning, the gears turning like a curious clock. She held up her hands, fingers splayed wide, and began to work through the problem.

"So one trip to the park and back is two kilometers," she murmured to herself, folding down two fingers. "That's one round trip. Then another trip to the park and back—that's two more kilometers." She folded down two more fingers. "That makes four kilometers total after two round trips."

Her tongue poked out slightly as she concentrated, folding down another two fingers. "The third round trip is six kilometers... then eight kilometers after four trips..." One more pair of fingers. "And ten kilometers after five trips!"

She looked up triumphantly, all ten fingers now folded down. "I did it! I skip-counted by twos! Five round trips equals ten kilometers!"



Close-up view of 6-year-old Cassie in her car seat, her face showing intense concentration and then triumph. Her tongue pokes out slightly as she counts on her fingers, which are splayed in front of her. Around her head, a visual representation shows the mathematical journey: five small illustrations of the path from house to park and back, labeled with distances (2 km, 4 km, 6 km, 8 km, 10 km). The

numbers glow softly as she works through the problem. Her expression transforms from focused concentration to joyful understanding. The background shows the car interior softly blurred, keeping focus on Cassie's mathematical breakthrough moment.

"That's brilliant mental mathematics, Cassie!"
Mum's voice was warm with pride. "See how skip counting helps us understand big numbers?"

Cassie bounced in her seat and chanted:

Two, four, six—the rhythm
flows,
Eight, then ten—see how it goes?
Every number finds its place,
In this mathematical space!

"But Mum?" Cassie's brow furrowed again.
"Knowing it's ten kilometers still doesn't tell Caleb
when we'll get there. He wants to know when, not
how far."

"ARE WE THERE YET?" Caleb chimed in
right on cue, as if to prove Cassie's point.

Cassie started to respond with frustration, but
Mum gently interrupted. "Remember, Cassie, we
use kind words with our little brother. You were

three once too, and I'm sure you asked the same question!"

Cassie nodded sheepishly. "Sorry, Caleb. I was just trying to help you understand."

"That's better," Mum said warmly. "And you're absolutely right that we have a puzzle to solve!"

She paused at a stop sign, checking both ways before continuing. "We know how far we're going—that's our distance, ten kilometers. But to figure out when we'll arrive, we need to know something else: our speed. Speed tells us how many kilometers we travel in a certain amount of time."

"Vroom vroom!" Caleb interjected, making car noises.

"Exactly, Caleb! Vroom vroom! The faster we vroom, the higher our speed. Now, here's something fascinating about how cars actually

work." Mum's voice took on that special quality of someone about to share a truly interesting secret.

"You see these wheels?" She gestured to the front of the car, even though they couldn't see them from inside. "Every time a wheel makes one complete spin—one full rotation all the way around—the car moves forward. The distance it moves depends on something called the wheel's circumference."

"Circum-what?" Cassie stumbled over the new word.

"Circumference," Mum repeated patiently. "It's the distance all the way around the outside edge of something circular—like a wheel. Imagine you took a piece of string and wrapped it carefully around the wheel, just once, touching all along the outer edge. Then you took that string off and measured how long it was. That length is the circumference."

She pulled onto a straightaway where she could safely talk while driving carefully. "Here's the fun part: if a wheel's circumference was one kilometer—which would be a very big wheel, by the way—then every time that wheel spun around once, the car would move forward one kilometer."

Cassie tried to picture it in her mind: the wheel rolling, rolling, marking off distance with each rotation.

"So," Mum continued, "if that big wheel was spinning twice every minute, how far would the car travel in one minute?"

Cassie's eyes lit up. "Two kilometers! Because two spins times one kilometer each spin equals two kilometers!"

"Perfect! So in that case, the car's speed would be two kilometers per minute. We could write it as 2 km/min."

"Now for the really fun part—more skip counting! If we're traveling at 2 kilometers per minute, how many minutes would it take us to go 10 kilometers?"

Cassie closed her eyes, visualizing the problem.
"After one minute, we've gone two kilometers.
After two minutes, four kilometers. After three
minutes, six kilometers. After four minutes, eight
kilometers. And after five minutes... ten kilometers!
Five minutes!"



Dreamy illustration showing Cassie with her eyes closed, visualizing the math problem. Above her head floats an imaginative sequence showing a car wheel spinning in rotation. The wheel leaves behind a glowing trail marked with time and distance: "1 min = 2 km," "2 min = 4 km," "3 min = 6 km," "4 min = 8 km," "5 min = 10 km." At the end of the trail is a simple illustration of Cronulla Beach with sand and waves.

The wheel is shown with its circumference highlighted by a glowing string wrapped around it. The style is whimsical and educational, showing how Cassie's mind transforms abstract concepts into visual understanding. Caleb watches his sister with wonder while holding his toy dinosaur.

"Brilliant! So if we could travel at that speed, we'd reach the beach in just five minutes."

Caleb's face fell. "Five minutes is forever!"

"Well, here's the thing," Mum said gently. "In real life, we can't always go that fast. We have traffic lights that make us stop and keep us safe. We have other cars sharing the road with us. We have speed limits to keep everyone safe—especially children like you! Sometimes we go slower, sometimes a bit faster. Today, with all the stops and starts and careful driving, we'll probably average about one kilometer per minute."

She glanced at Cassie in the mirror. "So if we're going 1 kilometer per minute, and we need to travel 10 kilometers..."

"Ten minutes!" both children shouted together.

"That's right! So, Caleb, my impatient little one, instead of asking 'are we there yet?' every thirty seconds, can you wait at least ten minutes before asking again?"

Caleb considered this seriously, then nodded.
"Okay, Mummy. Ten minutes. I can wait ten minutes."

Cassie leaned back in her seat, feeling a warm glow of satisfaction. Mathematics wasn't just about numbers on paper—it was about solving real problems, answering real questions, understanding the world around her. She'd helped calm her brother's impatience using skip counting and multiplication!

She whispered softly to herself:

Distance, time, and speed unite,
Mathematical patterns shine so
bright!
Questions bloom in curious
brains,
Learning through life's fun
refrains!

The car rolled forward, wheels spinning
precisely, each rotation carrying them closer to
their seaside destination.

Chapter 3: The Relativity of Motion

As the car hummed along the familiar streets toward Cronulla, Cassie pressed her face against the cool glass of the window, watching the world slide past. The afternoon sun painted everything in shades of gold and amber. Front yards with their neat gardens, letterboxes standing like sentinels, and tall eucalyptus trees lining the road—all of it seemed to flow backward, as if the whole neighborhood was being pulled away from her on an invisible conveyor belt.

A particularly magnificent eucalyptus caught her eye, its silvery-green leaves rustling in the breeze. She watched it approach, draw alongside, and then swoop past, as if it were racing away from them at tremendous speed.

But that didn't make sense. Not one bit.

Cassie's eyebrows knitted together in that familiar way—the way that meant her brain was working on a particularly interesting puzzle. "Mum?" she began slowly, still staring at the retreating trees. "Something really interesting is happening."

"Oh? What's that, sweetie?"

"Well... we're the ones moving, right? The car is going forward, carrying us toward the beach. We're traveling."

"That's right."

"But..." Cassie gestured at the window, trying to capture the strangeness of it. "When I look out the window, it feels like we're sitting still and all the trees and houses and bushes are running backward! Like they're the ones moving, not us! Like the whole world is moving away from us instead of us

moving through the world!"



Cassie with her face close to the car window, looking out with wide, curious eyes. Outside the window, eucalyptus trees, houses, and gardens appear to be in motion, with subtle motion blur suggesting they're moving backward past the car. The afternoon sun casts golden light through the window onto Cassie's face, highlighting her expression of wonder and puzzlement. Her hand is pressed against the cool

glass. The perspective should show both Cassie's view from inside the car and the seemingly moving world outside, creating a sense of the relativity of motion. The art style should be warm and inviting, capturing that magical moment of scientific curiosity.

From his car seat, Caleb piped up, "The trees ARE running! I saw them! They're running away really fast!"

Mum's face lit up in the rearview mirror—that special expression that meant Cassie had stumbled onto something truly wonderful. "Oh, what a beautifully observant question! Have you noticed this too, Caleb? When you look out the window, does it feel like the trees are racing past?"

"Yes! Really, really fast!" Caleb confirmed, bouncing slightly in his safely buckled seat.

"Well, you've both discovered something that puzzled humans for thousands of years. It's about relative motion—how we observe things moving

compared to ourselves. Scientists all over the world, from many different cultures and countries, have studied this for centuries!"

Mum checked her mirrors and continued smoothly. "Let me explain it this way: right now, you, Caleb, and I are all in this car together. We're all moving at exactly the same speed—about one kilometer per minute, remember? We're traveling in exactly the same direction—toward the beach. So when you look at each other, what do you notice? Are you getting closer to each other? Farther apart?"

Cassie looked at Caleb. Caleb looked back at her. Neither of them had moved an inch relative to each other since they'd gotten in the car.

"We're staying the same distance apart," Cassie observed. "Even though we're both moving."

"Exactly! To each other, you appear to be still—not moving at all—because you're moving at

the same speed in the same direction. You're like two boats floating down a river together. The river is moving, carrying both boats along, but the boats stay side by side."

"So we're moving together?" Caleb asked.

"Precisely! Now, think about those eucalyptus trees outside. Are they moving at the same speed as us? Are they traveling down the road too?"

"No," Cassie said slowly, beginning to understand. "They're standing still. They're not going anywhere."

"Right! So while we're moving forward at one kilometer per minute, those trees are staying in one spot—zero kilometers per minute. Which means compared to us, it's like they're moving backward! We're zooming away from them, leaving them behind, so from inside our car it looks like they're rushing past us in the opposite direction."

Caleb clapped his hands and began to chant:

Still or moving? Watch and see,
It depends on where you be!
Trees stand still while we zoom
by,
But from our seats, they seem to
fly!

Mum glanced at a road sign as they passed it.
"Think of it this way: imagine you're standing still
and I walk past you. From your point of view, I'm
moving and you're still. But from my point of view,
I could think of it as if I'm staying in place and
you're moving backward past me! Motion is all
about perspective—about who's watching and

where they're standing."

Cassie's mind was spinning—not unlike the wheels beneath them. "So when I'm watching the trees go past, it's the same as if the trees were watching me go past?"

"Exactly! To them—if trees could watch—we're the ones zooming by. But to us, they're the ones sliding past. Both perspectives are true, depending on your point of view!"

A thoughtful glint appeared in Mum's eyes. "Now, would you like to do a special science experiment? This is something we can only do today because we're on a quiet road with very little traffic, and I'm saying it's okay for this one special learning moment."

"Yes!" both children chorused.

Mum reached into her bag—carefully, while keeping her eyes on the road—and pulled out a

small rubber ball. It was blue with white stars, perfectly sized for small hands. She passed it back to Cassie.

"I want you to toss this ball straight up in the air, Cassie. Not too hard, just a gentle toss. But first, let's think like scientists and make a prediction. Where do you think the ball will land? In your lap? Behind you? In front of you? What's your hypothesis?"

Cassie turned the ball over in her hands, thinking hard. They were moving forward at one kilometer per minute. When she threw the ball up, they'd keep moving forward. The ball would go up and come down, but in the meantime...

"I think it'll fall behind me," she said decisively. "Because while it's in the air, the car will move forward, leaving the ball behind. So it'll land on the seat behind me, or maybe even on Caleb!"

"That's good scientific reasoning! Let's test it.
Ready? Toss it up gently!"

Cassie took a breath and tossed the ball straight up. Up it went, spinning slightly, the white stars blurring together. She watched it reach the top of its arc, hover for the tiniest moment...

And then it dropped right back down into her hands.



Inside the car, Cassie sits in her seat with her hands raised, catching the blue ball with white stars as it drops back down to her. Her face shows amazement and surprise. Motion lines show the ball's path going straight up and straight back down. In the background, Caleb watches with delight from his car seat. Through the car windows, the world outside is slightly blurred, indicating the car's forward motion.

Small simple arrows or diagrams float near the scene showing the concept: the ball maintaining forward motion while also moving up and down. Mum is visible in the driver's seat with a smile, glancing in the rearview mirror. The illustration should capture the "aha!" moment of scientific discovery and the wonder of learning about motion.

"What?!" Cassie stared at the ball in shock. "It came back to me! But... but how? We moved forward while it was in the air! Didn't we?"

Caleb clapped his hands together. "Magic ball! Do it again!"

Mum laughed, a sound full of delight. "It does seem like magic, doesn't it? But there's a beautiful explanation. Think about this: before you tossed the ball, where was it?"

"In my hands."

"And where were your hands?"

"In the car."

"And how fast was the car—and everything in it, including you and the ball—traveling?"

The light of understanding began to dawn on Cassie's face. "One kilometer per minute."

"Exactly! So before you tossed it, the ball was already moving at one kilometer per minute, traveling in the same direction as the car. When you threw it up, you gave it upward motion, but it still had that forward motion from before. It's like the ball was on a moving walkway, and you made it jump—it jumps up, but it's still being carried forward by the walkway underneath."

"So while the ball was in the air," Cassie worked through it slowly, "it was still going forward at the same speed as me and the car?"

"Precisely! In the time the ball went up and came down—maybe just one second—you moved

forward a tiny bit. But the ball also moved forward that same tiny bit! So it came right back to your hands!"

Cassie whispered in wonder:

Forward speed stays locked in
place,
Even as the ball moves through
space!
Objects keep their motion true,
Unless a force changes what they
do!

Cassie tossed the ball again, watching it with new eyes. Up it went, carrying its forward motion

with it invisibly, and down it came, perfectly aligned with her traveling hands.

"But Mum," Cassie said, her eyes gleaming with the thrill of exploration, "what would happen if you slowed down the car right after I threw the ball?"

"Ooh, excellent prediction question! What do you think?"

Cassie closed her eyes, visualizing it. "The ball would still have the fast speed, but we'd be going slower. So the ball would go farther forward than us... and it would land in front of me!"

"Want to test it? We're on a nice quiet stretch, and I'll slow down very gently as soon as you toss. Ready?"

Cassie positioned her hands, gripping the ball.
"Ready!"

"Toss!"

The ball flew up. Mum eased off the accelerator smoothly, and the car began to slow. The ball arced upward, traced its path... and dropped onto the seat in front of Cassie, just as she'd predicted!

"I was right!" Cassie squealed. "The ball went ahead of us!"

Caleb bounced in his seat. "My turn! What if you go faster?"

"What do you think will happen, Caleb?" Mum asked, speeding back up carefully.

"The ball will land behind us!" he crowed.
"'Cause we'll be faster than the ball!"

"Let's find out! Cassie, toss it one more time, and I'll speed up just a little bit."

Cassie threw the ball. Mum pressed gently on the accelerator. The car surged forward just slightly, and the ball—carrying only the original

speed—fell short of Cassie's hands, landing exactly where Caleb had predicted.

"We're scientists!" Caleb declared proudly.

"You absolutely are," Mum agreed warmly.
"You made predictions, tested them with experiments, and learned about relative motion and speed. Now remember, we only did this special experiment because I said it was safe today. Never play with toys in a moving car unless a grown-up says it's okay for a special reason like learning science!"

Both children nodded seriously.

"Do you know what's amazing?" Mum continued. "Everything we've talked about today—how things move, why things fall, why motion looks different depending on where you're standing—all of these things were explained by one very curious person, just like you."

Through the windshield, Cassie could now see glimpses of blue between the buildings—the ocean! They were almost there!

"His name was Sir Isaac Newton," Mum continued. "He was born over three hundred years ago in England, but the discoveries he made still help us understand the world today. And you know what? Many other scientists from all over the world—from every culture and continent—have contributed to our understanding of motion and gravity too!"

"Was Newton a grown-up scientist?" Cassie asked.

"Eventually, yes. But before he was a grown-up, he was a child just like you—maybe even more curious! Everyone around him noticed that things fell to the ground. People saw apples drop from trees every autumn for thousands and thousands of years. But it was Isaac Newton who got really curious about why. He asked questions, he

experimented, he thought hard about the world around him."

The car slowed as they approached a traffic light. Mum looked at both children in the rearview mirror, her eyes warm with love and pride.

"People noticed that when you're traveling, things outside seem to move past you. But it was Isaac Newton who carefully studied these observations and explained the mathematics and physics behind it all. He didn't have any superpowers—he just had curiosity, patience, and a love of learning, like you two."

"Did he say anything cool?" Cassie asked.

"He said many cool things! But one of my favorites is this: 'If others would think as hard as I did, then they would get similar results.' Do you understand what that means?"

Cassie thought about it. "He's saying... he wasn't magic or super special. He just thought really hard about things?"

"Exactly! He's saying that anyone who asks questions, who thinks deeply, who stays curious and works hard to understand things—anyone can make discoveries and learn wonderful things. People of all ages, from all backgrounds, in all countries can be scientists!"

The light turned green, and they pulled forward. The salt smell of the ocean was drifting through the air vents now, mixing with the coconut air freshener.

"Another great scientist, Albert Einstein, said something similar. He said, 'I have no special talent. I am only passionately curious.'"

"Passionately curious," Cassie repeated. "That's like being really, really, really curious?"

"The most curious you can possibly be! And you know what? That's exactly what you two are. You don't just notice things—you wonder about them. You ask questions. You think hard about the answers. You're wearing your curious caps today, and I hope you wear them every single day."

Caleb reached up and patted his head, as if checking for an invisible cap. "Is my curious cap on?"

"It's on perfectly," Mum assured him. "And remember, being curious means asking questions, being patient while we learn, and being kind to others while they're learning too."

Through the windows, Cassie could now see the beach properly—the wide expanse of golden sand, the blue-green waves rolling in, the white foam of surf, the distant figures of people swimming and playing. They'd made it! Ten kilometers, approximately ten minutes (with some traffic delays), and countless discoveries later.



The family's car is parked at Cronulla Beach parking lot. Through the open car doors, both children are stepping out onto warm pavement, their faces full of joy and excitement. The beautiful beach spreads before them with golden sand, rolling blue-green waves, white foam surf, and distant figures of people playing. The children are looking toward the beach with wonder, while Mum stands beside the car

smiling warmly at them. Above the children's heads, whimsical "invisible curious caps" are suggested with light, sparkling effects. The afternoon sun bathes everything in warm, golden light. The scene captures the perfect blend of scientific discovery and childhood joy, showing the transition from the journey of learning to the adventure ahead. The art style should be bright, inviting, and celebratory.

Mum pulled into a parking spot and turned off the engine. But before anyone unbuckled, both children started singing spontaneously, their voices harmonizing in joyful anticipation:

Let's go marching to the shore,
Let's discover so much more!
Building castles in the sand,
Gravity gives us a helping hand!

They continued, their voices rising with excitement:

Questions bloom when we're
awake,
Discoveries we love to make!
Newton showed us motion's way,
Now we'll learn through
beach-time play!

Cassie took a breath and concluded:

Science helps us understand,
How we travel through the land!
Curious minds will always grow,
Learning more with each new
show!

"Come on, my little scientists," Mum said, opening the doors and letting in the full ocean breeze. "Let's go explore the beach with our curious caps firmly in place! And remember what we learned about staying safe—always stay where I can see you, and never go in the water without me right beside you."

Cassie stepped out onto the warm pavement, her mind full of gravity and relative motion and

walking palm trees and all the mysteries yet to be discovered. The beach stretched before them, full of possibilities.

The world, she realized, was full of questions waiting to be asked. And she couldn't wait to ask them all—with patience, kindness, and endless curiosity.

For Young Scientists:

Try This at Home (With a Grown-Up):

THE END

For curious minds everywhere— Keep asking, keep wondering, keep discovering! Remember: you don't need superpowers to be a scientist, just curiosity, patience, and a love of learning.

A Note for Parents and Educators:

This story introduces fundamental concepts in physics (gravity, relative motion, speed, and

distance) at an age-appropriate level. Consider discussing these topics further:

Learning Objectives Covered:

Cultural Note: This story is set in Australia (Cronulla Beach, NSW) and includes local references. Adapt location references as appropriate for your region while maintaining the core learning objectives.

About the Author

Suneeta Mall is passionate about inspiring young minds to explore the wonders of science through storytelling. With a gift for making complex concepts accessible and exciting for children, Suneeta believes that curiosity is the first step toward discovery.

Through the adventures of Curious Cassie, Suneeta introduces readers to the fundamental principles that govern our world, from the simple motion of a beach tricycle to the grand movements of planets in space. Her goal is to spark that special "aha!" moment in every child who reads her stories.

When not writing, Suneeta enjoys observing the natural world, finding inspiration in everyday moments that reveal the extraordinary science all around us.

This story has been enhanced and expanded using FableFlow, bringing Cassie's scientific adventures

to life with rich detail and engaging illustrations
that make learning an unforgettable journey.

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Acknowledgments

This book is dedicated to every curious child who has ever asked "Why?" or "How does that work?" Your questions are the seeds from which all great discoveries grow.

Special gratitude to Suneeta Mall, whose original vision brought Curious Cassie to life and created a bridge between complex scientific concepts and young, eager minds. Your passion for making science accessible and exciting shines through every page.

To the educators, parents, and caregivers who nurture curiosity in children—thank you for encouraging questions, celebrating wonder, and showing young learners that the world is full of fascinating mysteries waiting to be explored. You are the real-life Professor Possums, guiding the next generation of scientists, engineers, and innovators.

To Isaac Newton and all the scientists throughout history who have helped us understand the fundamental laws governing our universe—your discoveries continue to inspire awe and wonder in children and adults alike.

And finally, to every child reading this book: May you always stay curious, ask bold questions, and never stop exploring. The world needs your creativity, your wonder, and your unique perspective. Who knows? Perhaps you'll be the one to make the next great discovery!

Keep pedaling forward on your own quest for knowledge!

Join Cassie and her little brother Caleb on an amazing car ride to the beach where EVERYTHING becomes a science adventure! You'll discover why trees can't walk (well, most of them!), how to predict when you'll arrive at your destination, and why that ball in your hand might land somewhere totally unexpected. Get ready to see the world like a real scientist!

FableFlow Publishing

Sydney, Australia

ISBN 978-0-6456963-3-2



Draw upon a fable
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Where Stories Come to Life