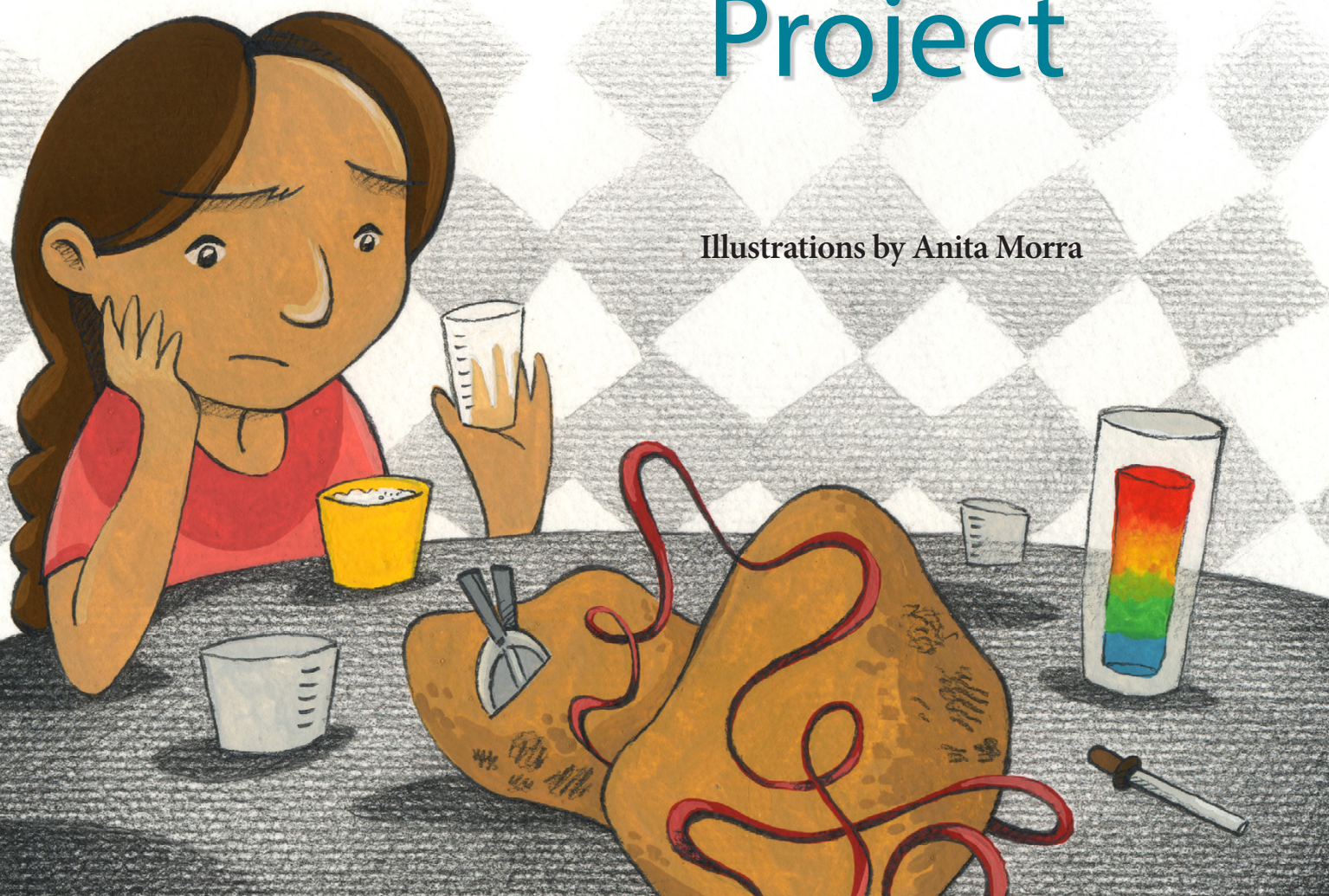


# The Perfect Project

Illustrations by Anita Morra









# Asha's House

Asha stared at the potatoes sitting on her desk. They looked more like aliens than food. She had shoved a penny straight through a potato's thin brown peel and it rose out of the potato like the spine of a stegosaurus. Then she spiked the largest of the potatoes with a long nail and struggled to wrap a wire tightly around it. She thought the experiment looked like the work of a mad scientist. She imagined the wires writhing around like the tentacles of an octopus. Forget about the science fair, she would be enshrined in history forever if her potatoes came to life. Just as Asha was imagining a photo of herself and

her miracle potatoes on the cover of a magazine, her little brother, Nigel, barreled into the room and rushed to Asha's side.

"Asha, I feel sick," he said.

Asha ignored him and returned to her project, pouting as she fiddled with the wires connecting the potatoes to the back of an old clock. She picked up the clock and shook it; she jiggled the wires; she tapped the clock's display, but nothing she did made the battery work—the clock stayed blank. Her potato battery was a total failure. Nigel wriggled close to Asha and elbowed her in the back.



“Asha, I don’t feel good. I need my medicine.”

“Your 10 days are done. You can’t have any more,” Asha said without looking up from her work.

“But there’s more in the bottle,” he said, swaying back and forth. Each time he moved, he jostled the table, causing Asha’s potatoes to totter.

“The doctor said 10 days. You can’t take more than the doctor tells you to,” Asha said through gritted teeth. She bit her lip and read through the directions for the experiment again, slowly tracing each sentence with her finger to be sure she hadn’t missed any details. She had

already been through the experiment four times and she could not figure out why she couldn’t make it work.

“Can I have some of your medicine?” Nigel said, butting into the silence.

Asha shot him a frustrated glare. “Can’t you see I’m busy?”

Nigel tugged at Asha’s arm with clammy hands. “But my tummy hurts.”

“My medicine isn’t for tummy aches, it’s for allergies,” Asha said with an exasperated exhale. “I only take it when the pollen makes my nose stuffy and my eyes watery. You don’t even have allergies. It could hurt you.”

“It can’t hurt me,” Nigel said poking





at the potatoes. “Daddy bought it at the grocery store.”

Asha grabbed the potatoes and pushed them out of Nigel’s reach. “It *can* hurt you, smarty-pants. Everything in the grocery store isn’t made for everyone. Some of the medicine you buy without a doctor’s prescription is safe for you and some of it is not.”

“But, Ashaaaaaaa.”

Asha put her hands over her ears and jumped out of her seat. “I’m not giving you my medicine, Nigel. Little kids can’t take big kids’ medicine.”

“I’m not a little kid,” Nigel whined.

“If you weren’t a little kid, you would

know that you have to take medicine that is right for your age and right for your sickness,” Asha said as she stalked across her room. She wrenched her door open and pointed to the hallway. “Go tell Dad about your tummy and get out of my room. I have a lot of work to do.”

Nigel pouted and shuffled out of Asha’s room. Asha stood staring at the mess on her desk. She felt all the optimism she had begun the project with wither away. She leaned down and swept the potatoes and clock off her desk with a wide swipe of her arm. This project was a disaster.

# Rebecca's House

Rebecca pulled her baby cousin, Anthony, onto her lap and took a selfie with him. She felt something cold and wet dripping down her arm. She looked down and saw that Anthony was dripping droplets of saliva from his mouth onto her skin.

“Ewwww,” she said and rubbed her arm on the sofa so hard, she felt it heat up from the friction. Suddenly the house phone rang and Anthony started wriggling wildly in Rebecca’s arms. She felt a tiny burst of panic percolate in her stomach, but she took a deep breath, put Anthony down on the living room rug, spun around the sofa, and ran to the console table to get the phone.

“Hello,” Rebecca said, watching Anthony closely as he crawled across the living room rug at top speed. She rushed back around to the rug when she saw him poking his hand under the sofa.

“Becca, it’s Asha. Help me!”

“Help you? I need you to help me! I’m babysitting my baby cousin,” Becca said when she heard her best friend’s voice.

“Well, my potato battery won’t work. I hate the science fair.”

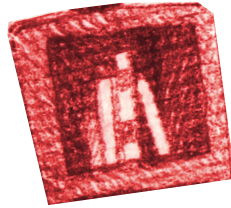
“Ball!” Anthony said, bumping his head against the couch as he tried to reach farther and farther underneath it.

Rebecca dropped down to her hands and knees and groaned when the phone clattered to the floor.









“Sorry,” she said picking up the phone again and peering under the couch.

She grunted as she stretched her arm into the mysterious darkness under the couch. As she felt around she found a pencil with a troll eraser, then she discovered the case to her cell phone, and finally, she recovered Anthony’s ball.

“So switch projects,” she said, holding the ball out to Anthony and flopping onto the couch. Anthony gurgled, grabbing the ball and shaking it up and down.

“Do you know how long it took me to decide on the stupid potato battery?!?” Asha said. “What’s your project?”

“I’m making density columns,” she said, making a funny face at Anthony.

“That sounds scary. Is it hard?”

“You can’t take my project!” Rebecca frowned and watched as Anthony disappeared around the other side of the couch.

“I’m not going to steal your project, but Ms. Randolph said we can work in groups,” Asha pleaded.

“So you want to join my group?”

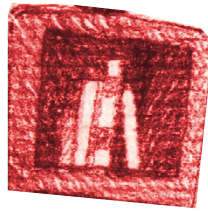
“Thanks, Becca. You’re the best,” Asha squealed.

“Not so fast. We’re doing the project today. Can you come to Nicky’s house in an hour?”

“Hold on, let me ask my dad.”

Rebecca leaned her head against the back of the couch until she heard an ominous rattling sound. She pulled herself up and walked to the opposite side of the couch to check on Anthony. He was





leaning on the sofa, holding a bottle of pills in his chubby hands, and babbling while shaking the bottle up and down.

“Where’d you get that?” Rebecca asked, grabbing the medicine bottle.

Anthony giggled and reached for the medicine. Rebecca quickly scanned the floor and saw her grandmother’s purse tucked under the side table. The purse was wide open and Anthony’s hands were buried inside it as he dug in the bag searching for something new to entertain himself. Rebecca slipped her hands through the purse straps and lifted it up, swooping it over Anthony’s head. She toted the purse to the bookshelf, dropped the medicine into it, and placed it on the top shelf.

“Becca, are you still there? My dad said I could go.”

Rebecca jumped when she heard Asha’s voice again, then she laughed. “You scared me, I forgot you were there. I’m glad you’re going to be on our team. We’ll get a better grade if you make the poster.”

“I’ll make whatever you need,” Asha said. “Just no more potatoes, please!”

When the best friends got off the phone, Rebecca nervously walked around the room three times, everywhere Anthony could reach to make sure no other medicine or vitamins were sitting out. She was determined to be the perfect babysitter for her baby cousin.







# Pharmacy

When Nicky's mom disappeared into the medicine aisle, Nicky sprinted after her. "Mom, we got the food coloring. Where are you going?" Nicky huffed.

Nicky's mom shot him a frosty look over her shoulder. It was the same look she had given him at breakfast that morning when he had grabbed the last slice of bacon before she'd had any. In fact, it was the look she always gave him when she thought he was being selfish. "Nicky, you're not the only person in this family who needs help. Your dad's not feeling well—I have to get him some medicine for his stomach," she said without slowing her stride.

"But Dad always has an upset stomach. Can't he use the medicine we already have? We're going to be late. Asha and Becca are coming at two o'clock."

Nicky's mom stopped short and checked her watch. "The medicine at the house is expired. Besides, it's only one o'clock. It'll just take five minutes."

Nicky rushed past his mom, swiped a box of medicine off the shelf, and thrust it at her, waving it under her nose. "I found the perfect one," he said. "Let's grab this one and go."

Nicky's mom pushed it away. "Slow down, Nicky," she said and picked up two other boxes of medicine.



Nicky frowned and slipped the medicine back onto the shelf. "But why can't we get that one? It says right on the front what kind of medicine it is."

Nicky's mom let out a loud sigh and flipped the boxes she was holding upside down so that she could read the Drug Facts labels printed on the back.

"Are you going to read everything on the boxes?" Nicky groaned.

"Of course I am. Not all medicines are the same. Some medicines can't be taken at the same time as other medicines. Some medicines you can't take if you have certain illnesses or conditions. I want to make sure this medicine is okay for Dad. You don't

want him to get even sicker from taking the wrong medicine, do you?" Nicky's mom asked and resumed reading the warnings on the back of the boxes.

Nicky sighed. To entertain himself, he circled around his mother, juggling tiny jars of food coloring as he shuffled around her. He stopped juggling abruptly when a colorful display grabbed his attention across the aisle. He dropped the food coloring into his mom's shopping basket and rushed over to the display to pull out two long-handled bath brushes. He stuck the brushes into the neck of his T-shirt and balanced an orange bath sponge on his head.





"I'm going to eat you," he growled. He held his arms out stiff as flagpoles and started walking like a zombie toward his mother. Nicky's mom laughed and tucked the medicine boxes under her arm while she pulled her phone out of her purse.

"Say 'rotting brains,'" she said. Nicky made a grotesque face as his mother snapped a photo of him in his improvised costume. Her fingers moved quickly over the glassy face of the phone as she punched in a text. "I'm sending this to your dad. It might cheer him up."

Even Nicky cheered up when he saw that his mom was leaving the medicine

aisle, but then she made a sharp left, walking away from the cash registers, and Nicky's shoulders slumped.

"Where are you going now?" he whined.

"Your dad is taking two other medicines that aren't listed on the label. I just need to ask the pharmacist if this medicine is okay for him."

"But what about my project!?"

"Go grab some snacks for your friends. I'll be right over there," she said pointing to the pharmacy counter. "I promise, I'll be ready by the time you get back."

"We're never going to get home," Nicky grumbled and trudged away.

# Nicky's House

Nicky and Asha leaned on the kitchen table while Rebecca stood over them, marking the materials on the checklist. "Sugar, food coloring, droppers. Where are the measuring cups?"

Nicky's cheeks got red. "I forgot to check the checklist before I did my chores. They're all in the dishwasher."

Asha refused to think that they would not be able to finish this project. There must be something else we can use, she thought to herself. She pushed herself away from the table and looked around.

"What about those?" she asked, pointing to a stack of leftover medicine

dosing cups on the counter.

"Me and my dad were going to make a recycled robot out of them."

Rebecca walked over to the counter and picked up one of the cups.

"It'll take longer," she said. "We need half a cup of water; these cups measure teaspoons."

"So we convert," Nicky shrugged. "Forty-eight teaspoons in a cup."

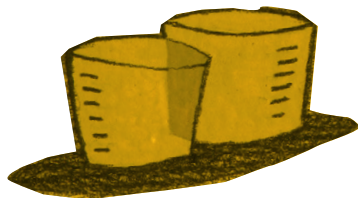
"How on Earth do you know that?" Asha asked.

Nicky rubbed his hands together and said in a creepy voice, "I am a mad scientist, measurements are my specialty."









Asha rolled her eyes.

“Just kidding. My dad’s a baker. He’s always switching measurements.” Nicky pointed to a conversion chart on the refrigerator.

“How’s about we act like real scientists and finish this experiment?” Rebecca asked. She peered at the measurement lines on the cup. “To get to half a cup we need...”

“Twenty-four teaspoons!” Nicky yelled. He picked up a stack of cups and threw one to Asha and kept one for himself.

“But my cup only measures three teaspoons,” Asha said.

“Mine goes up to four,” said Rebecca.

“So you’ll need to fill it...” Nicky said.

“Eight times,” Asha said, snapping her fingers.

“And I’ll fill mine six times,” Rebecca said.

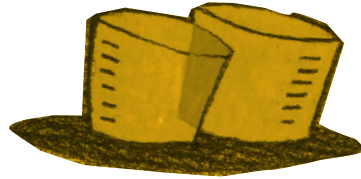
Nicky raced Asha and Becca to the sink and they took turns dumping half a cup of hot water into glass jars, using the tiny plastic dosing cups to measure the amount of water. They each mixed different amounts of sugar into their water, stirring until the sugar dissolved. Then Nicky poked his finger into each mixture to taste.

“Yuck,” said Asha.

“They all look the same, but the last one is way sweeter. Now for the fun part,” Nicky said, reaching for the food coloring.

They all scrambled to pick their favorite color. The kitchen was quiet as they focused on adding food coloring to the sugar water—each jar got its own





color. When all the water was colored, they carefully poured the liquid into the tall glass, one color at a time.

“Oh no, not another bad project,” Asha said, squinting at the glass. Their experiment looked nothing like the picture. The colors were piled on top of each other in uneven layers. Their yellow layer was only a sliver, while the red seemed to take up half the glass.

“You know what this means, don’t you?” Rebecca asked them seriously like she had discovered a secret. “All these cups have the same labels, but the amount they measure is different,” she said.

“That must be why we don’t have the same amount of every color,” said Asha.

“And that must be why my mom

keeps telling me I can’t take the right amount of medicine if I don’t use the cup that came with the medicine,” Nicky said.

“I know what we’ll do,” Rebecca said. “We’ll all use the same cup.”

“We’re starting over?” Asha moaned.

“Cheer up,” Nicky said poking Asha with his elbow. “We’ll get it right this time, then we can have some snacks!”

Asha joined Rebecca at the sink. As she rinsed out her jar to start over, she daydreamed about making the perfect density column. She promised herself that she would make the most fantastic science fair poster ever. Then she started measuring out half a cup of water while imagining all three of them holding first-prize medals at the end of the science fair.

# Reading Response Questions

1. Describe the way the story is organized. Why do you think the author organized it that way?
2. What is the central idea the author intended to convey? How do you know?
3. What two events in the story demonstrate Asha's attitude toward science projects? Does her attitude change during the story?
4. What is the difference between Asha's and Nicky's knowledge about over-the-counter (OTC) medicine? Cite evidence from the text that supports your answer.
5. Identify three important actions you must take to safely use or store OTC medicines. What events in the story demonstrated these actions? Cite evidence from the text that supports your answer.

## Suggested Activity

Rebecca, Nicky, and Asha learned about the importance of careful measurement. Try this project to explore the concept of **density**, which is **mass** (the amount of atoms in an object) divided by **volume** (how much space that object will occupy).

**Materials:** Four different colors of food coloring, tablespoon(s), a 16-oz. measuring cup, sugar, four microwave-safe cups, a tall cup or glass, an eyedropper.

- ➡ Fill the measuring cup with 2 cups of hot water, then measure half a cup into each of the four cups.
- ➡ Add 2 tablespoons of sugar to the first cup, 4 tablespoons of sugar to the second, 6 tablespoons of sugar to the third, and 8 tablespoons of sugar to the fourth.
- ➡ Stir each cup until the sugar dissolves. If it doesn't, get an adult to microwave the cups for 30 seconds and stir again. If the sugar still won't dissolve, try adding 1 tablespoon of warm water. (*Use caution with hot liquids.*)
- ➡ Now, add 2 drops of a different color of food coloring to each cup. Sugar molecules are made up of many **atoms**. The more sugar you add, the more atoms the water will contain. It will be denser, too. Less dense liquids float to the top of denser liquids.

Which of your solutions is the densest? The one with the most sugar in it, right?

- ➡ Put the densest sugar solution in the bottom of the tall cup or glass. Use the dropper to gently drip the next densest liquid on top of the really dense layer. (Drip the sugar solution against the side of the cup just above the surface of the liquid.) Add the next dense layer, and finally the least dense, which only contains 2 tablespoons of sugar per half cup.

What happens if you mix the layers up? They won't separate like oil and water would, because the sugar will disperse (spread) equally through the mixture.

Source: The Kitchen Pantry Scientist, <http://kitchenpantryscientist.com/?p=2625>



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