

Around the World with

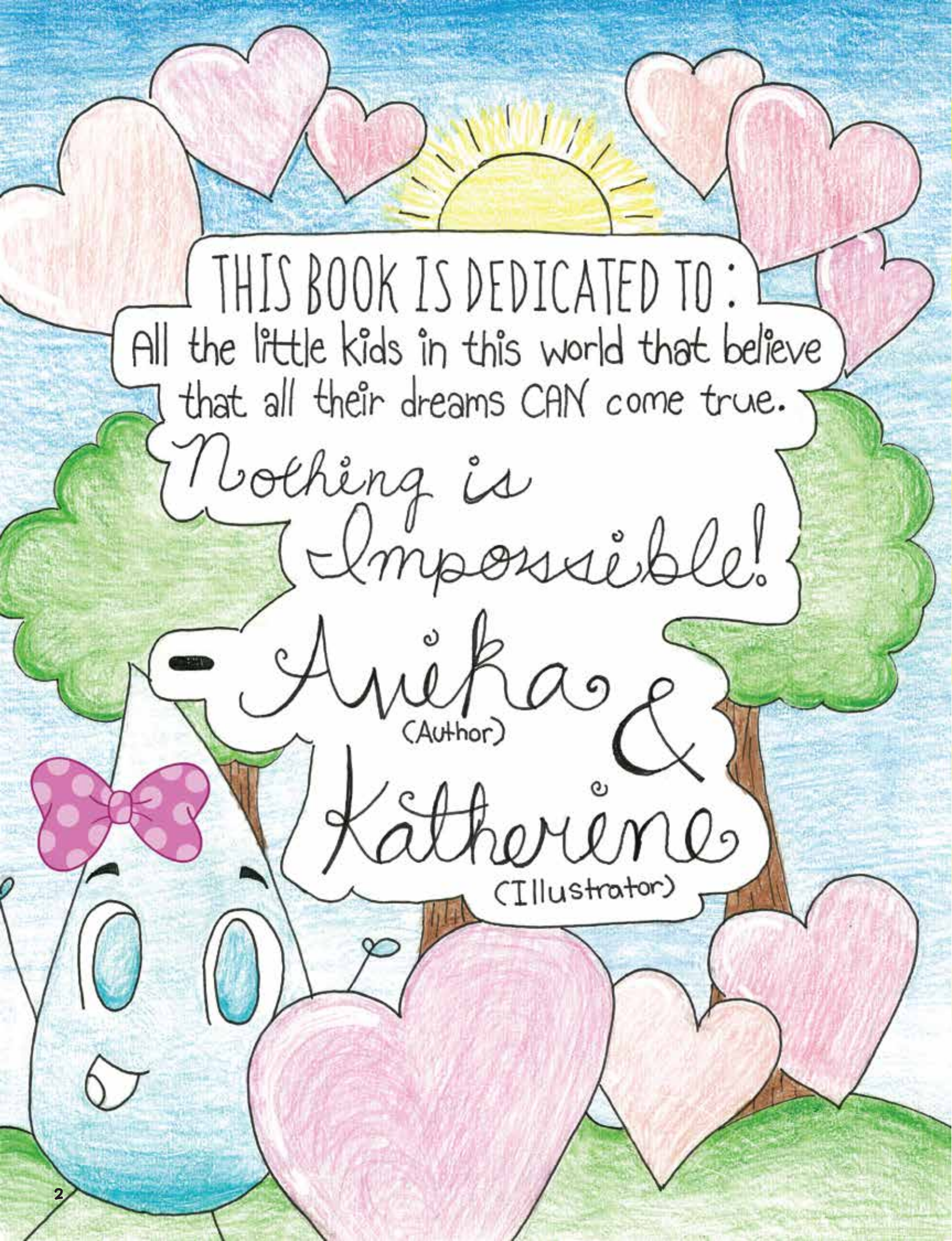


Written by:
Avika Patel

Illustrated by:
Katherine
Phung

Savvy the Water Drop!

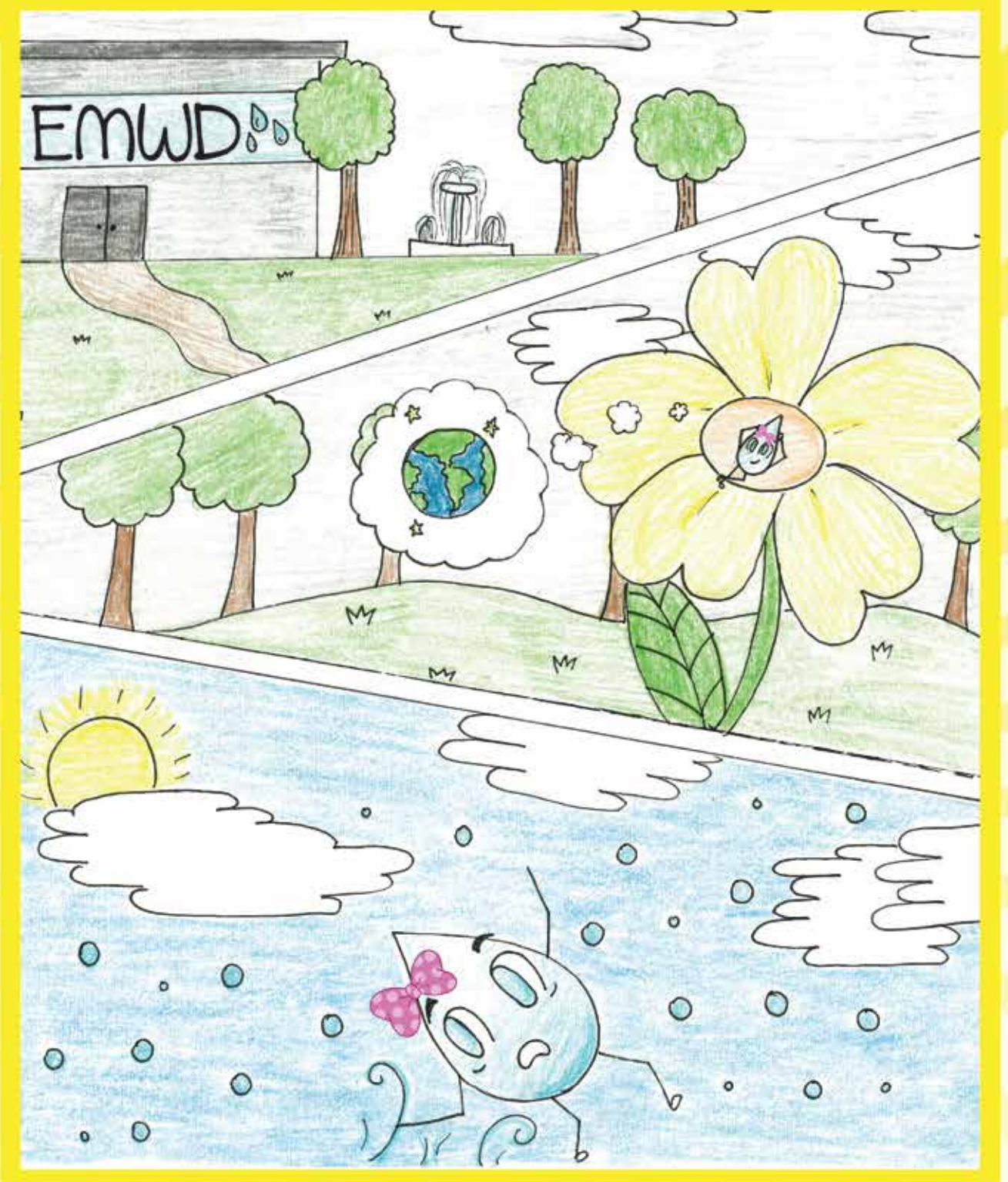




THIS BOOK IS DEDICATED TO:
All the little kids in this world that believe
that all their dreams CAN come true.

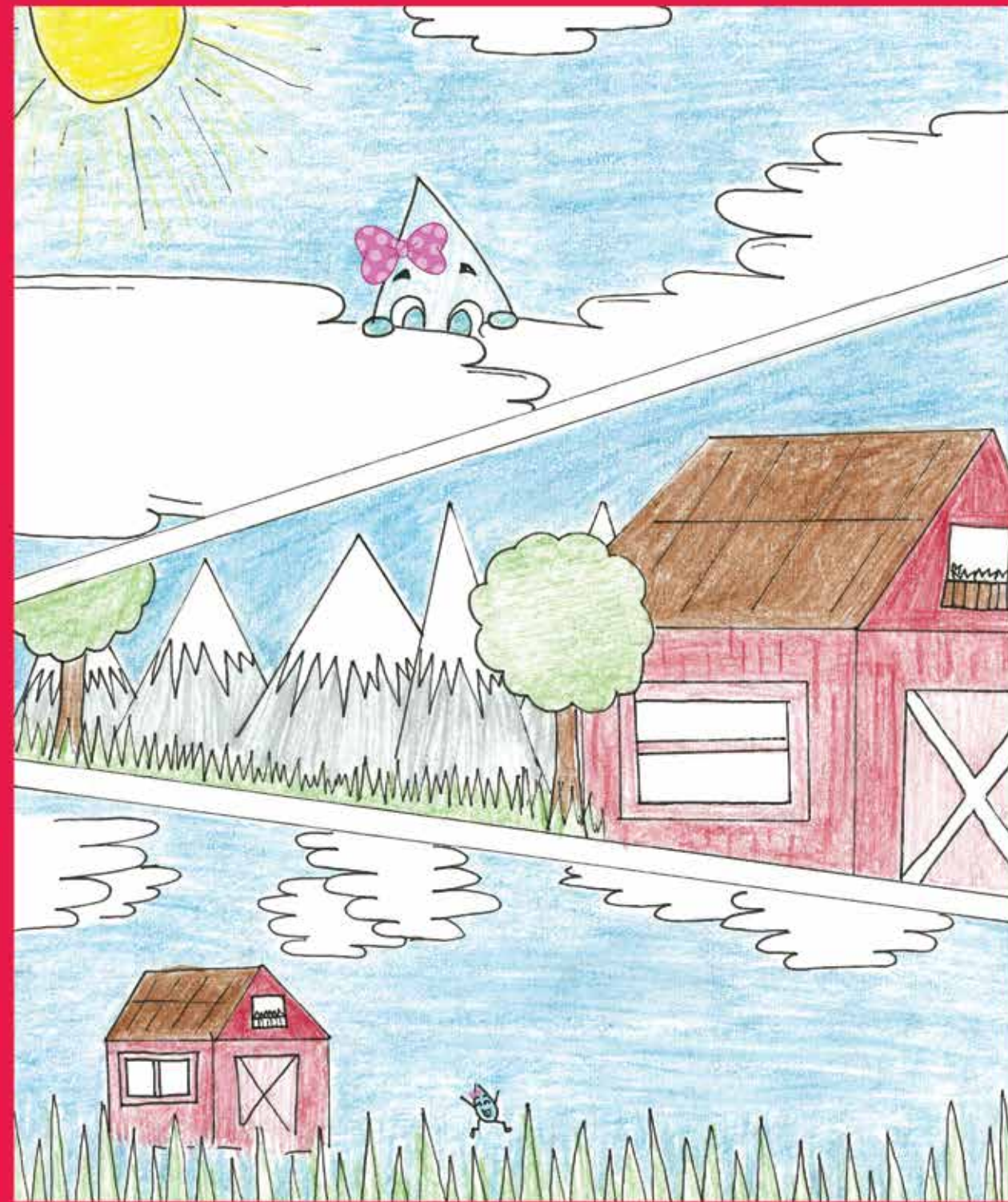
Nothing is
Impossible!

Anika &
(Author)
Katherine
(Illustrator)



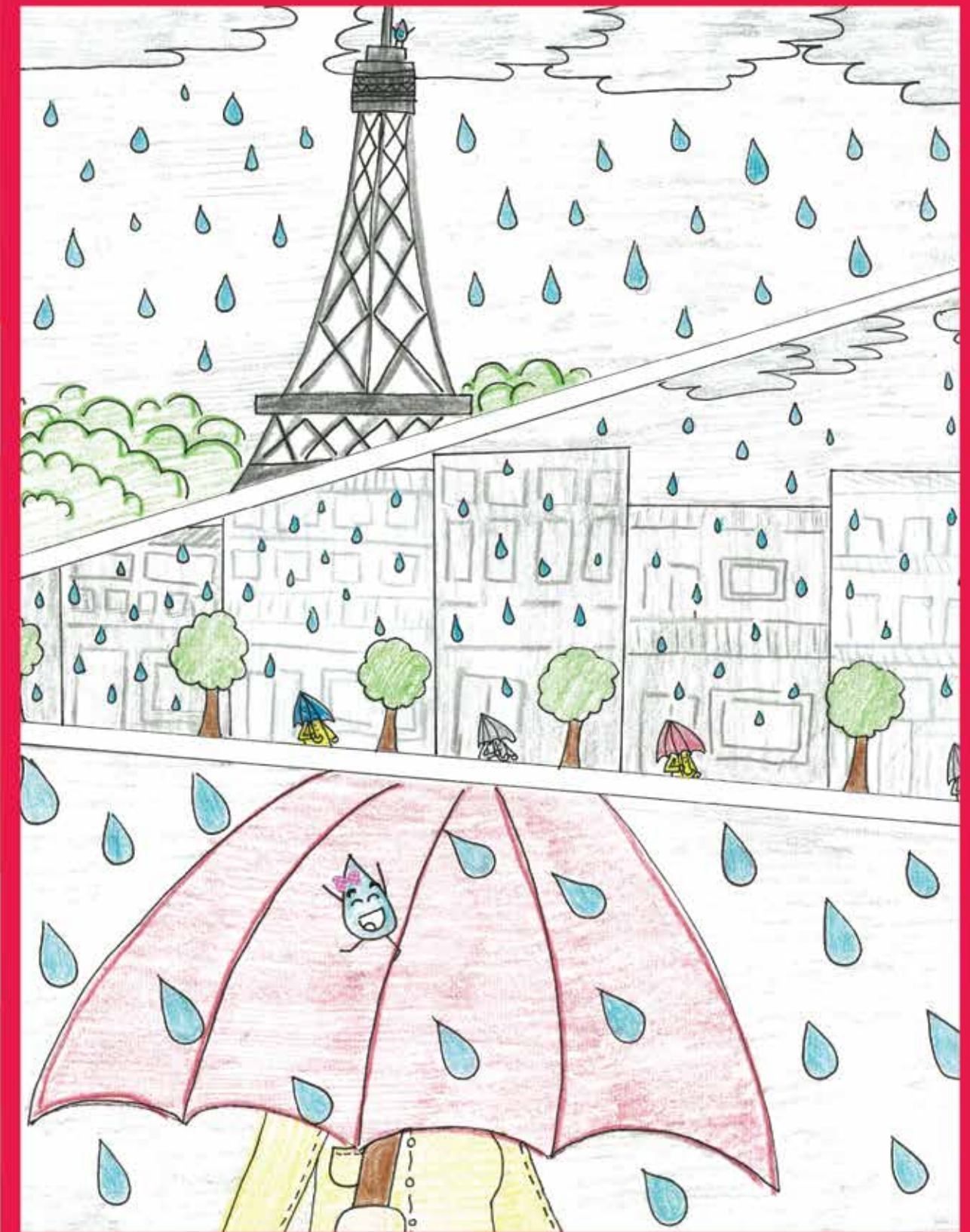
One cloudy day near the Eastern Municipal Water District, Savvy laid on a flower in the fields. She looked up at the dark, gray sky wondering what it would be like to travel. Soon the bright sun came out from behind the clouds. Admiring the light, Savvy looked at the sun and inspected it as it seemed to be getting slightly closer and brighter. The wind began to blow in her face, and she started to get butterflies in her stomach. Looking down, Savvy saw that the flower where she had been laying, was getting further and further away. Savvy was flying!!

"Oh no!" she cried out loud. "How will I get back down?!"

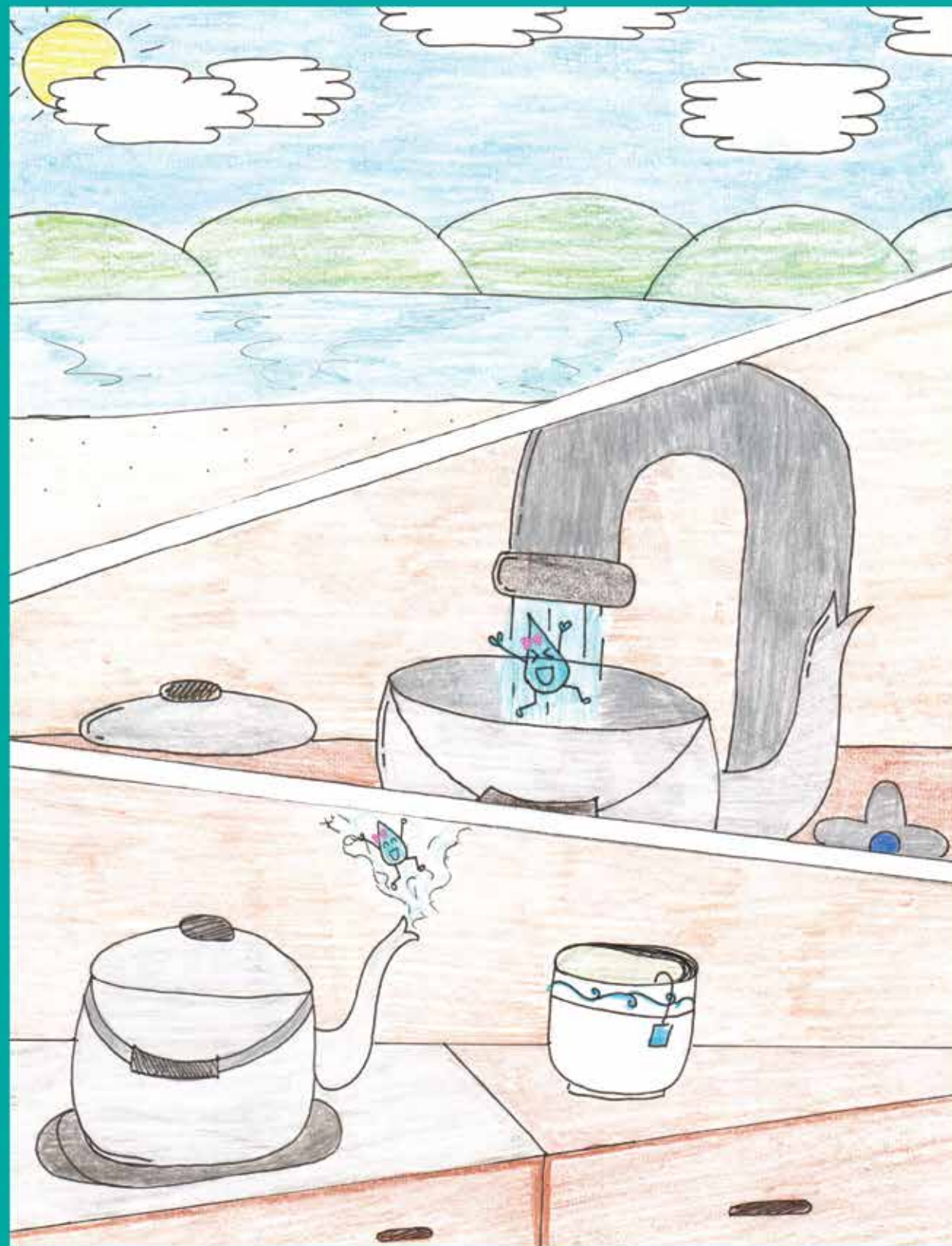


Savvy slowly began to transform into fog as she drifted higher. Eventually she landed in a cloud and wondered what would happen next. The wind began to blow again, and the cloud Savvy was in started to move. Suddenly, more and more water vapors like Savvy began to gather on the cloud. Finally, the cloud came to rest above the mountains of Germany.

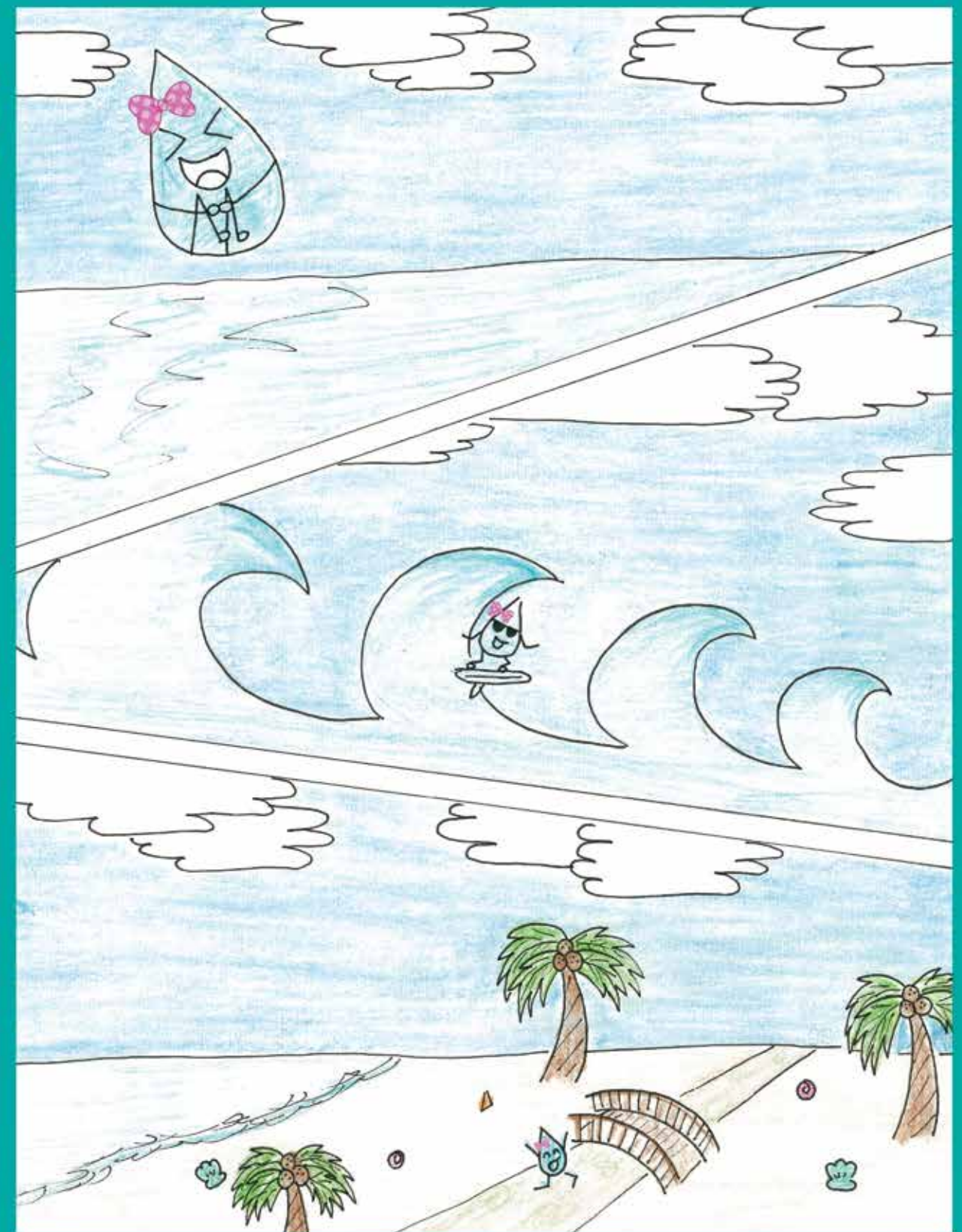
Savvy began to shiver and slowly she condensed back into water just like the other water drops. She fell from the cloud onto a farm. Jumping over blades of grass, Savvy smiled at her new home. But not long after, the sun came out, and once again Savvy flew upward.



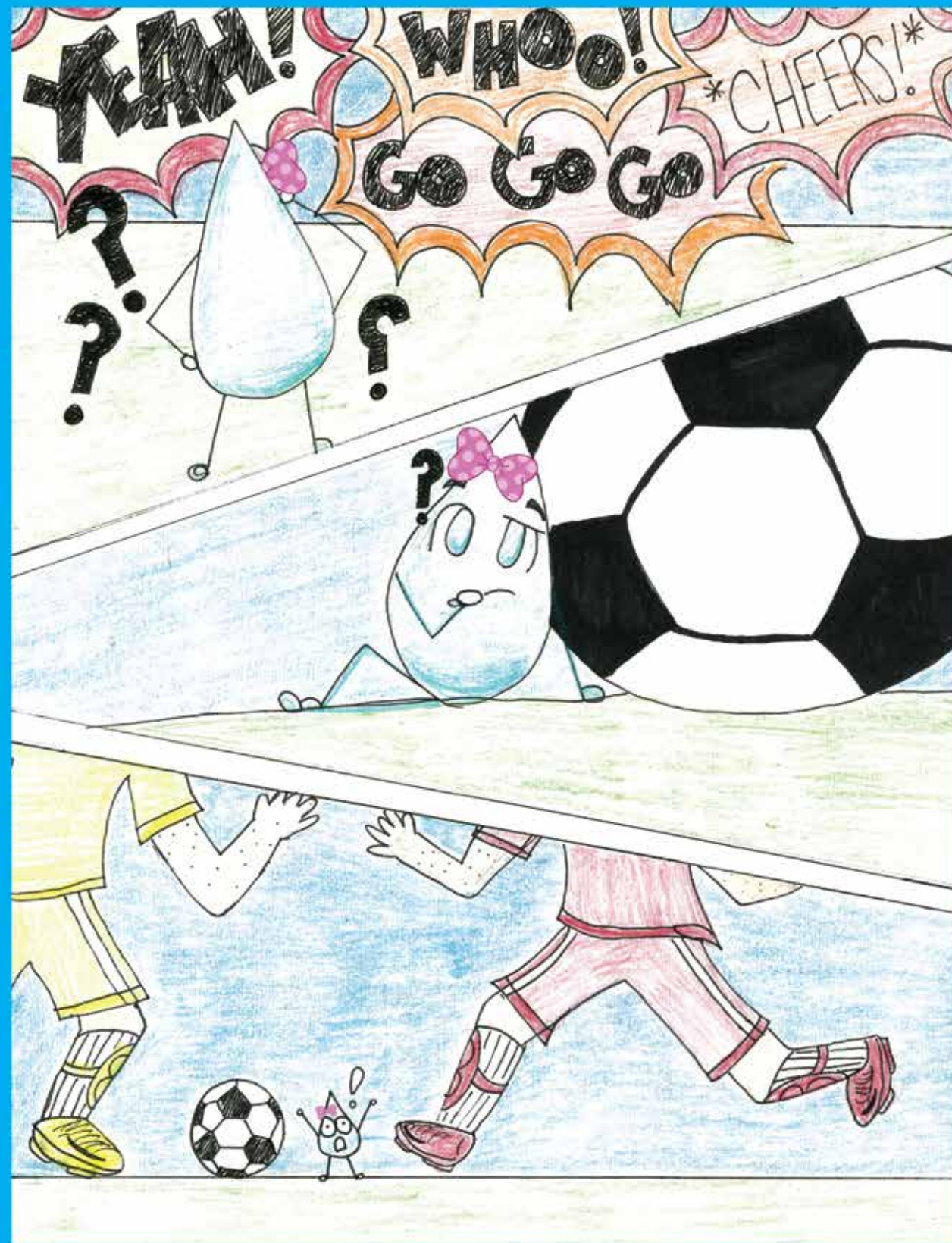
Savvy's next adventure took her to France, where she precipitated on the Eiffel Tower. Standing on top of the monument, she could see Paris being showered with all of her rain drop friends. Sliding down the side, Savvy landed on a pink umbrella until she dripped onto the hard pavement and into a drain.



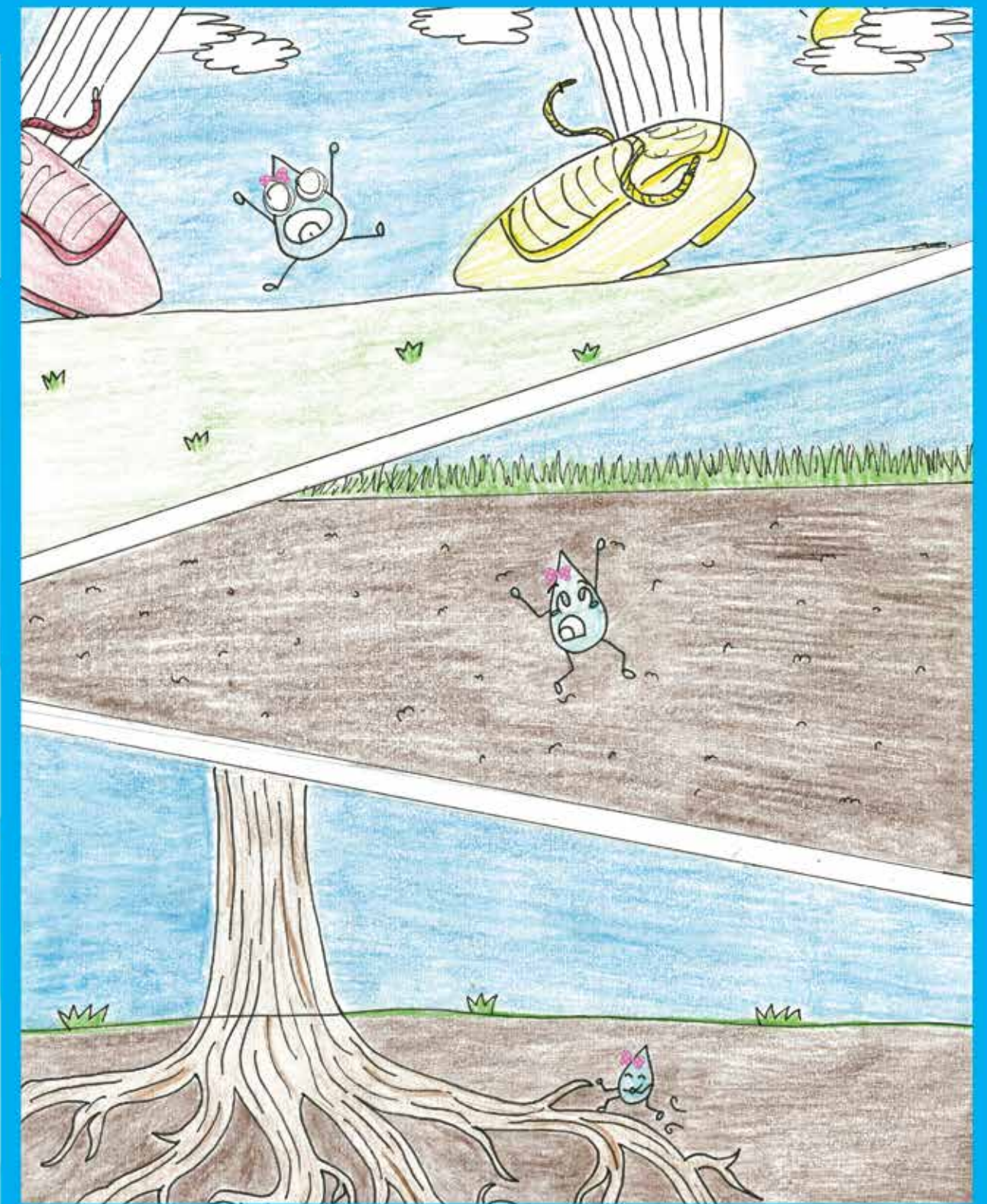
Savvy bounced off the sides and swam through the gutters lined with moss. Eventually, she flowed out of the pipes and into a stream, which took her to China. Savvy sailed into another pipe and eventually flowed through a faucet where a little boy put her in a pot for his mother to make some tea. As water drops boiled around her, Savvy sailed up into the air again.



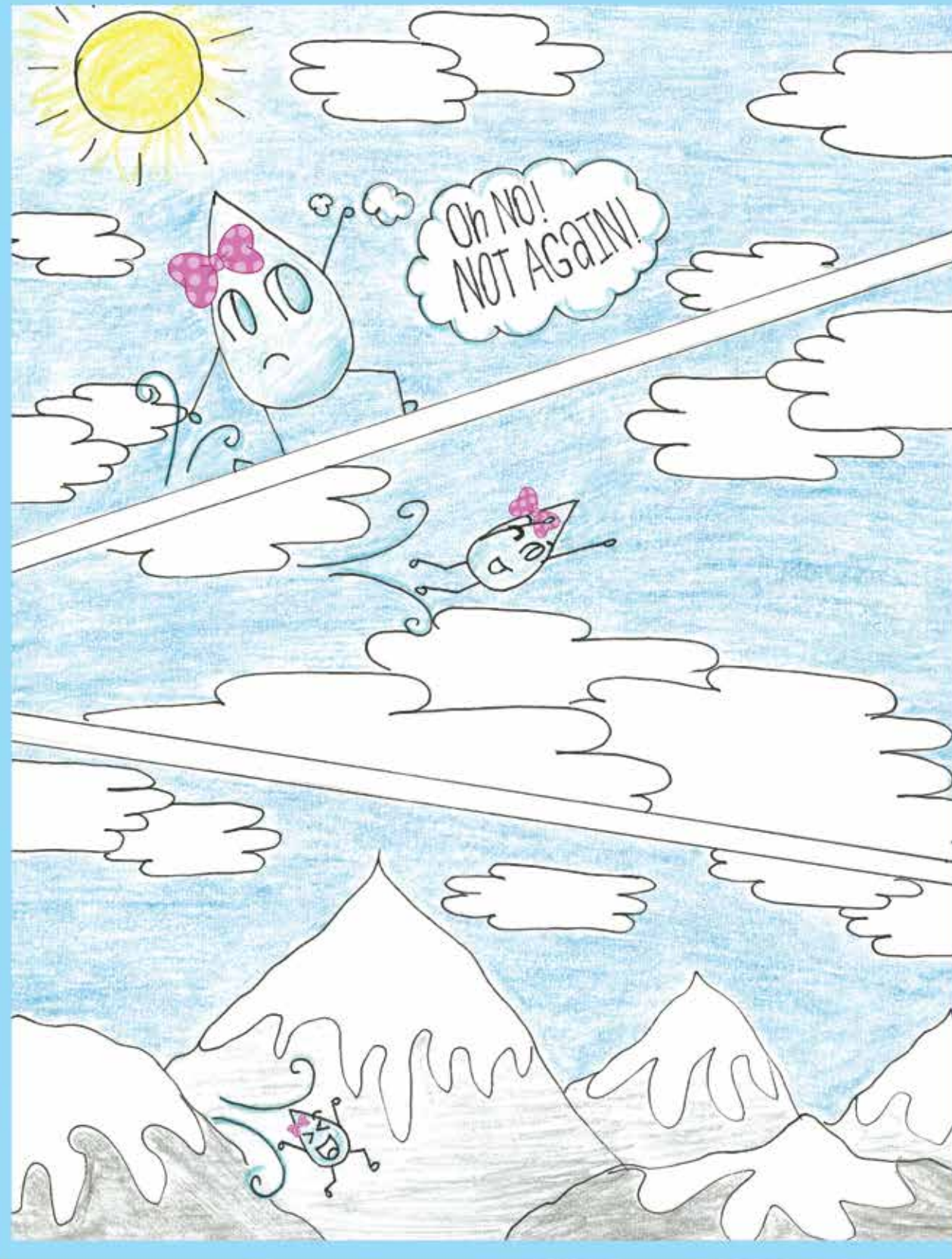
Sitting on a new cloud, Savvy drifted across the sky and above the ocean. Before Savvy could reach another country a storm brewed, and she fell into the sea. Savvy rode the waves up and down, as she tumbled and somersaulted under the water. Eventually, she landed on the beautiful shores of Brazil. She jumped across the sand and fell into a little hole, bouncing off the sides until she reached the bottom.



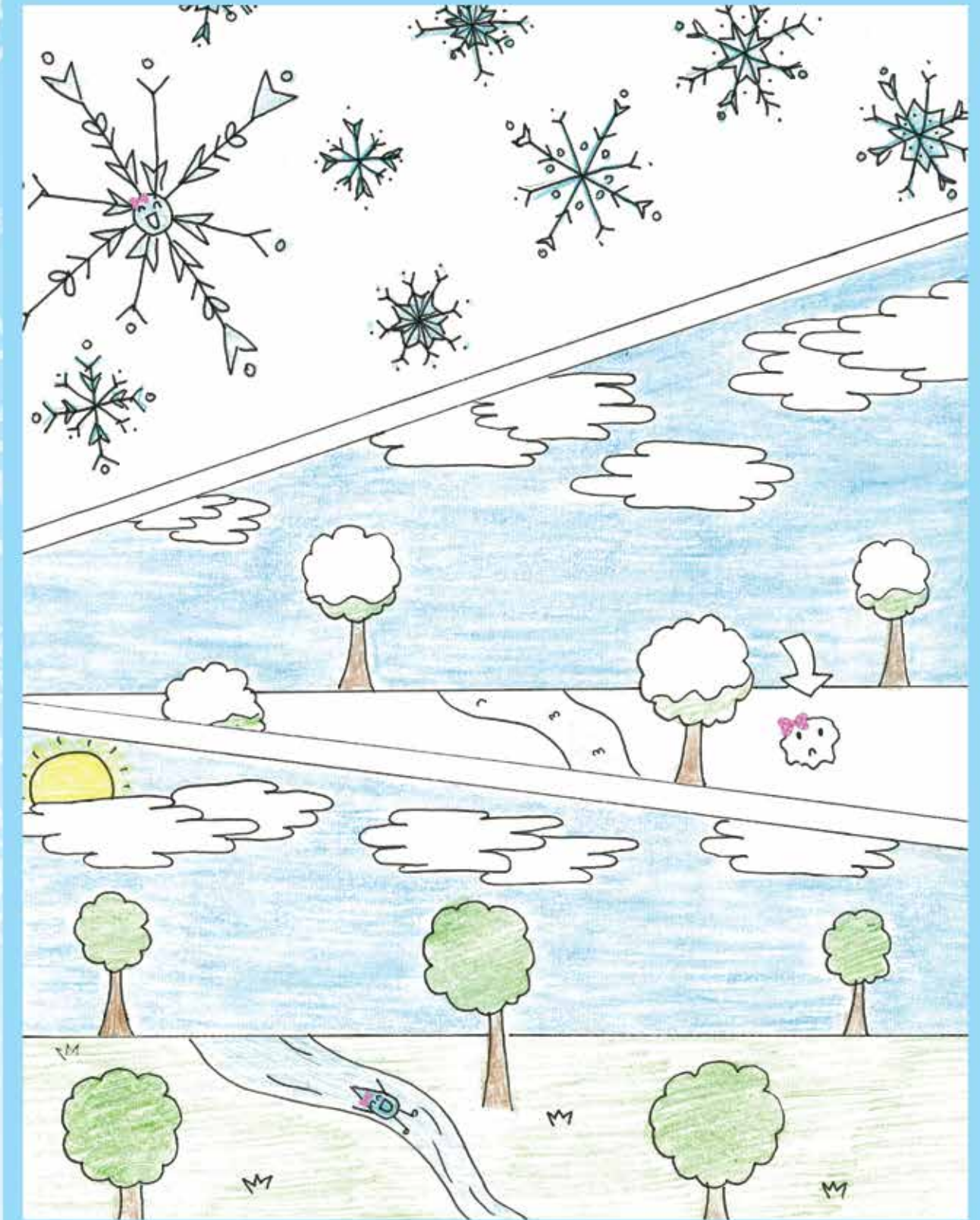
Soon Savvy was in an underground pipe and the next thing she knew, she was being sprayed from a sprinkler and landed on a soccer ball. She looked into the stadium and saw that half of the people were wearing yellow, and the other half were wearing red. Confused, she sat motionless as the players jogged onto the field and the fans started to cheer.



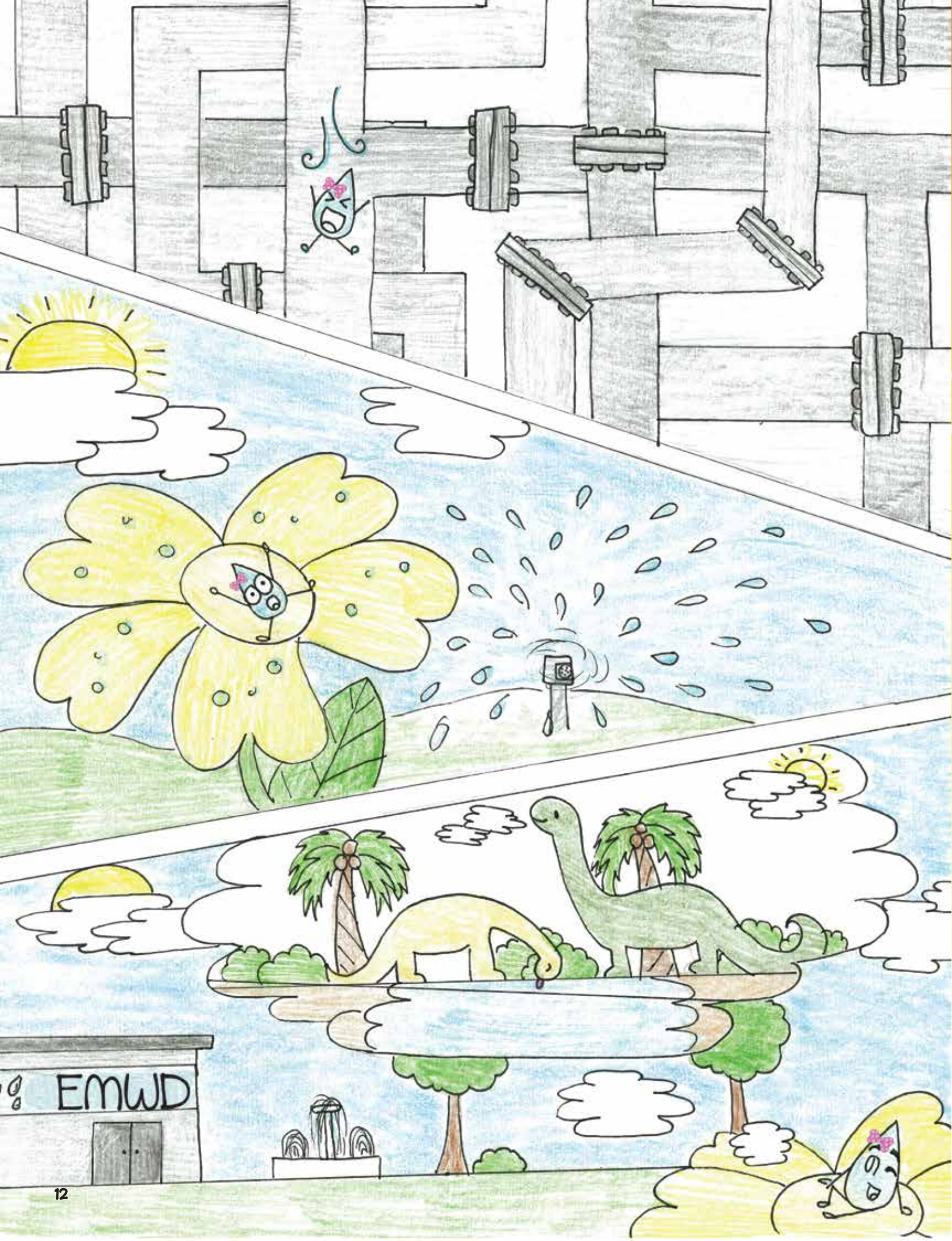
The ball was kicked and dribbled back and forth between the players' feet until finally Savvy sailed out of the stadium and onto a pile of dirt. As she stopped to rest, Savvy began seeping down through the layers of soil. She tried her best to stay above the ground, but she just couldn't hold on, so she let go. Miraculously, Savvy ended up with millions of other droplets, in an underground water storage area called an aquifer. Savvy saw a tree root above her and grabbed it. Traveling up through the root, Savvy was taken up into the leaves at the top of the tree. The sun was out once again, and Savvy began to float up.



“Here we go again,” she thought. As she floated higher and higher, Savvy began to shiver, creating a mini fog cloud with other droplets near the tree. The wind picked up, and Savvy flew off towards the Himalayas.



Every minute felt colder and colder to Savvy as her cloud grew bigger and darker with the crowd of droplets inside. The cloud moved fast across the sky and eventually, she felt herself begin to fall. Suddenly she was a beautiful snowflake. Drifting slowly down onto the pure white snow of the Rocky Mountains, Savvy rested as she prepared to melt. Months passed until the sun finally crept out and thawed the frozen ground. Savvy and her friends began to melt and she flowed into streams that eventually carried her to the Colorado River.



Savvy evaporated once more and felt herself falling into the same field of flowers by Eastern Municipal Water District, just as before.

“Wow!” Savvy said loudly “I’ve traveled around the world and have been used by many people. This entire trip seems new, yet very familiar.”

A little voice inside of her exclaimed, “Yes, you are right! You have been around since the beginning of the Earth. You, as well as all of your water drop friends, have been used by people, woolly mammoths, and even dinosaurs!”

Savvy then rested because she knew it would not be long before she would be off on another adventure.

The End (or is it?)

Events That Occur During the

Condensation is the transformation of a vapor or gas to a liquid when the air is very cold.

Savvy, as a water vapor, changes back to a water droplet on the cloud.

Evaporation is the transformation of a liquid state to a gaseous state by an increase in temperature or pressure.

Savvy floated up into the sky when the sun came out, and turned into water vapor. She did this at the water district, Germany, and China.

Evapotranspiration from the leaves of plants is when water is being exhaled from the pores in the leaves. Along with that water is being evaporated.

Savvy evaporates from the leaves of the tree.

Fog and Dew: when the air contains water vapor but encounters cooler temperatures next to the ground, some of the vapor condenses back into droplets creating a fog cloud. When the temperature dropped rapidly Savvy joined other droplets which created a fog cloud.

Groundwater flow is when water in the groundwater storage flows in underground passageways all through the land.

Savvy falls into an underground water storage, where she flows in the groundwater flow.

Gutters transport water into rivers and oceans.

Savvy flows into a dirty gutter in Paris and ends up in a river in China afterwards.

Oceans allow for water to transport all around the globe.

Savvy is pushed around in the ocean, but later ends up on the shores of Brazil.

Water Cycle

Plant Uptake: plants depend on water from the ground because their roots absorb water. Using the water in the groundwater flow, plants soak up water to survive.

Savvy is taken up by the tree's roots and lands on the tree's leaves.

Precipitation is rain, snow, sleet, or hail that falls to the ground.

Savvy falls down to Germany and later Paris, France.

Rivers and streams collect rainfall and other water particles and transport them to other places.

Savvy is carried in a river all the way to China.

Seepage is when precipitation falls on the landscape and starts to soak into groundwater storages.

After falling into the dirt, Savvy starts to seep into the ground.

Snow melt: warmer temperatures cause the snow to melt into a liquid state.

When the sun came out again, Savvy melted into water and joins a river.

Transformation to Ice and Snow: because of extremely cold temperatures, water particles can transform into snowflakes, ice, or snow.

Savvy transformed into a snowflake when she was at the Himalayas.



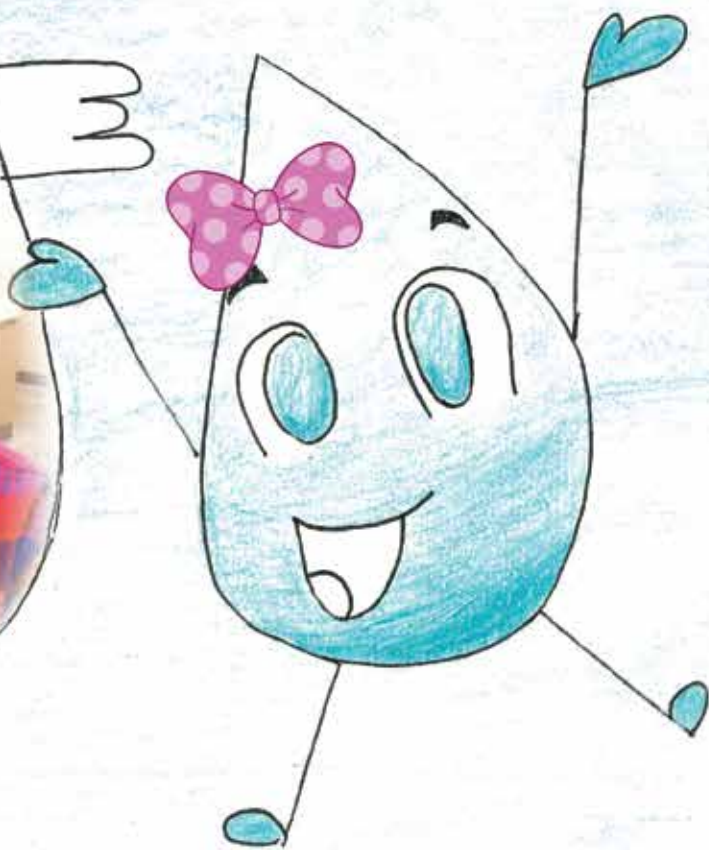
Meet the Author & Illustrator

Hi, my name is Avika Patel and I am an 8th grader attending James L. Day Middle School in Temecula. I am 13 years old and I am the writer of this book. Some of the many things I love doing include reading a good book, playing sports, having fun with my family and friends, being outdoors, and learning about new things. My favorite subjects include basically everything, but mostly math and science! I am the president of Student Council at my school and enjoy being a part of our school and community! Also, I play for our school's varsity volleyball team and play tennis as well! I am fortunate to have a loving family, which includes my innovating dad, supportive mom, and caring brother!!! I am honored and super excited to be published through the Eastern Municipal Water District Write-Off contest and I hope everyone who reads this book, enjoys it as much as I do!!!



Hi, my name is Katherine Phung (no middle name) and I am an 8th grader who currently goes to James L. Day Middle School in Temecula, CA. I am 13 years old and the illustrator of this book. I'm into video games, baking, and of course drawing, specifically: nature, food, and other random things. I also love dogs (corgis), cupcakes, and the TV show "Steven Universe".

I am a self-taught artist and a lefty, who one day dreams of becoming an animator. My favorite subject is art and I am also the president of the yearbook staff at my school. I was born and raised in Southern California and I have one older brother, Brandon. Every day I am inspired by my family and friends, and I am glad to be published through the Write-Off contest!



Meet the Teachers

Mrs. Vanderhorst
(James L. Day Middle School, Temecula Valley)

8th grade Language Arts Teacher:

Teaching is a joy. I have been teaching for 30 years and have taught all grades from kindergarten to 8th grade. Every day I learn something new from my students and this inspires me to be a life-long learner. I earned my bachelor's degree in Liberal Studies from Cal Poly Pomona and my master's degree in Education from National University. My husband, Kees, and I have been married for 23 years and we have two children, Nick and Rebecca, who are now college students themselves. I am proud of the success of former students, just as I am proud of the success that my current students are achieving.



Mrs. Gregory
(James L. Day Middle School, Temecula Valley)
6th grade Science Teacher:

Teaching science as it relates to our everyday world is my passion. I have been teaching for twenty six years and have been working at Day Middle School since 1999 (last century). I graduated from Cal Poly, Pomona with a Bachelor's of Science and National University with a Master's in Education. Also, I am the teacher advisor for the on campus recycling club called DEAP. I have been fortunate to work with some very bright and motivated students. Students inspire me with their creative talents to produce amazing projects, such as this story book. These students truly have a love of learning.



Vocabulary Words

*the meaning of these words are put in a way K-5 students may understand

Admire: To like or appreciate something

"Butterflies in my Stomach": A term used to describe the weird feeling you get in you stomach when you rise up

Condense: A part of the water cycle after the droplet evaporates into the sky. In this step, the water vapor condenses back into droplets

Dinosaurs: A wide range of reptiles that lived between 231,000,000 and 66,000,000 years ago!!!

Drift: To be carried slowly by air or water

Gloomy: Sad

Gutters: A channel at the side or in the middle of a road or street for draining off surface water

Man-made lake: Reservoir; place that collects water to be used in homes, garden, etc. but made by humans

Miraculously: Happening amazingly and uniquely

Moss: A dirty plant or greenery that grows in damp and moist places, like underground sewage pipes

Motionless: Not moving

Pavement: A walkway usually made out of concrete, stones, bricks, tiles, or wood

Precipitate: A part of the water cycle in which the water droplets fall to the ground after the cloud has been filled with water

Recycle: Changed into a reusable material

Shiver: Shaking because of cold

Sidestream: A stream of water that flows off a river in a different direction

Somersault: To roll forward

Streamflow: Water flowing in a river or stream

Swiftly: Quickly

Tumble: Falling downhill while rolling

Water Vapor: The gas version of water that comes when water is heated

Wooly Mammoths: "An elephant with fur." An animal that lived in the Ice Ages about 4,000 years ago!

Acknowledgments

In 2008, the award-winning Write-Off program was developed by Eastern Municipal Water District (EMWD) Education Specialist Malea Ortloff, in an effort to encourage a greater understanding of our most precious resource, water, in both elementary and middle school students. Malea uses a cross-age approach, which allows older students to write stories focusing on water-related issues geared toward younger (elementary) students. Malea designs curriculum, around many of the winning stories, that is grade-level appropriate and also keeps the water message in the classroom for a longer period of time. Funding for the Write-Off contest is sponsored in part by Rancho California Water District (RCWD).

This year the topic focused on the water cycle and students were tasked with conveying a message about how the history of the water cycle impacts our daily lives. More than three hundred students participated and four winning entries were selected. These stories offer a great learning opportunity for people of all ages. The story books are available to schools and libraries within the EMWD/RCWD service areas and are also available as eBooks on the EMWD/RCWD websites.

Check out the EMWD website (www.emwd.org) to read all of the stories.

EMWD wishes to thank the following students, teachers, graphic designer, and advisory committee members for their collaboration and contributions in the development of this book.

Author
Avika Patel

Illustrator
Katherine Phung

James L. Day Middle School
Temecula Valley Unified School District

Mentor Advisors
Lesley Gregory
Science Teacher

Katie Vanderhorst
Language Arts Teacher

James L. Day Middle School
Temecula Valley Unified School District

Advisory Committee
Malea Ortloff
Education Specialist
Eastern Municipal Water District

Teresa Barnett
First Grade Teacher
Megan Cope Elementary School
San Jacinto Unified School District

Ailene Earl
Education Assistant
Eastern Municipal Water District

Meggan Valencia
Public Information Officer
Rancho California Water District

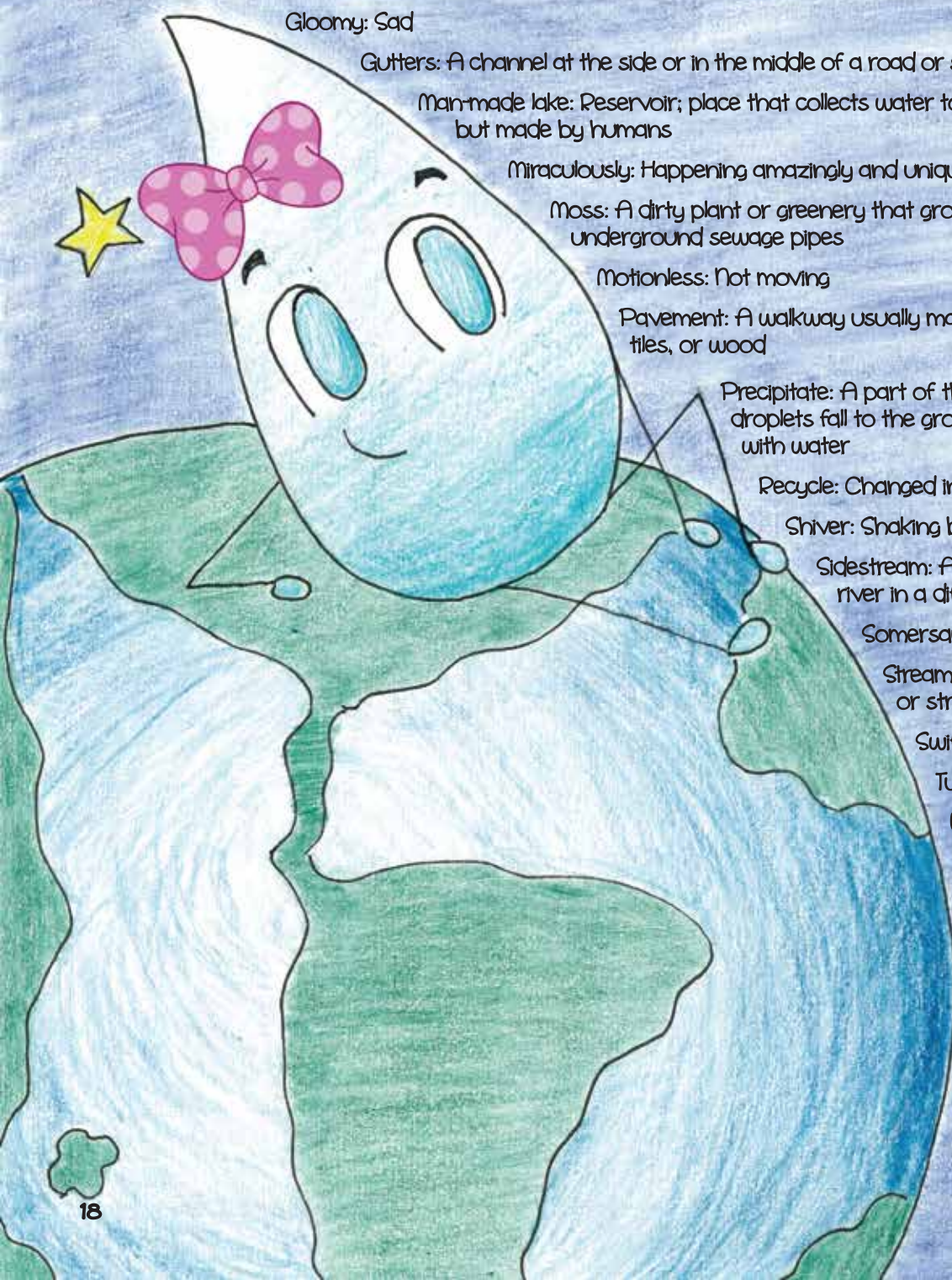
Summer Nungesser
Student Intern
Youth Ecology Corp/EMWD

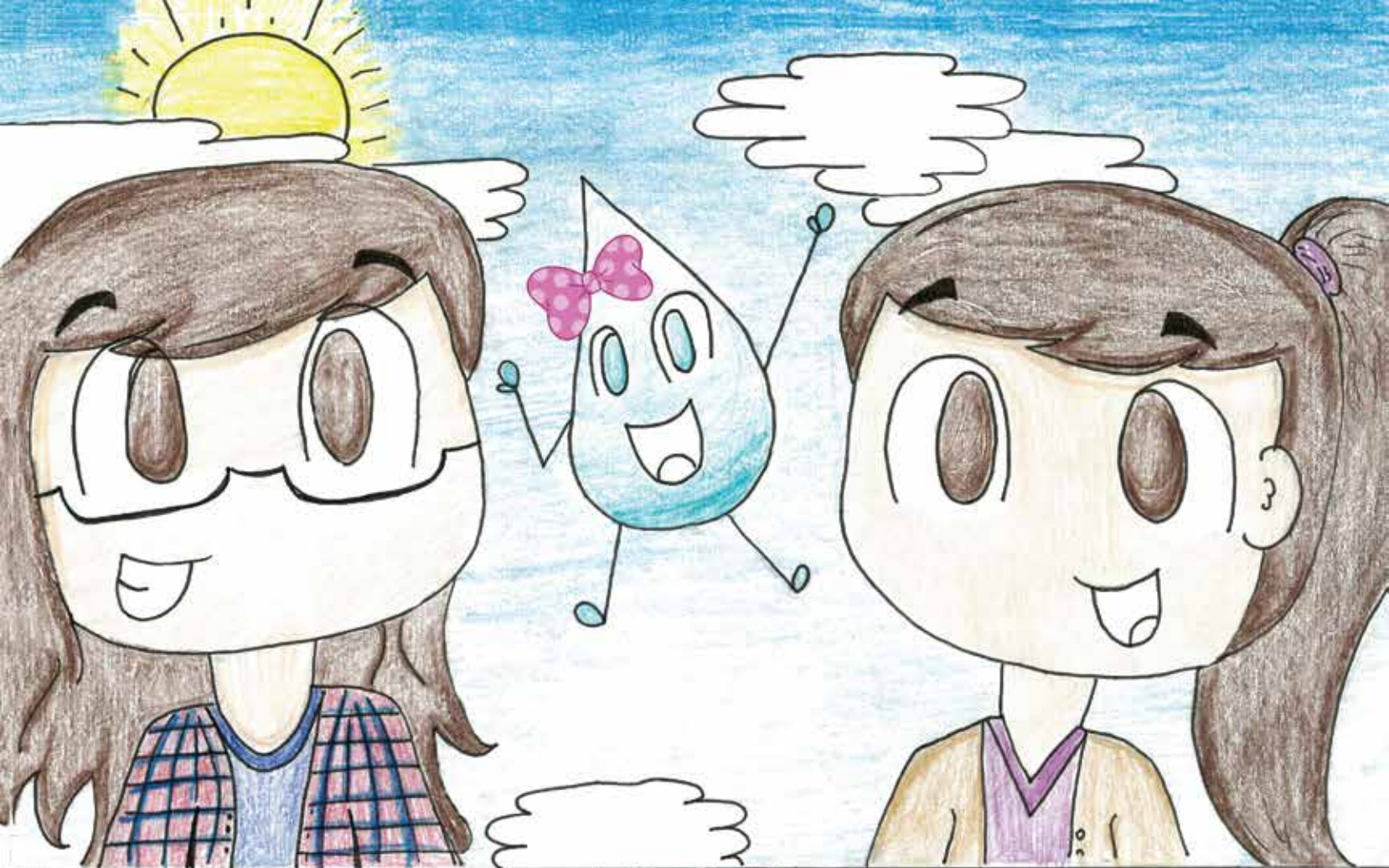
Vicki Sue Owens
Retired
County of San Diego

Editing
April Coady
Joyce Messin

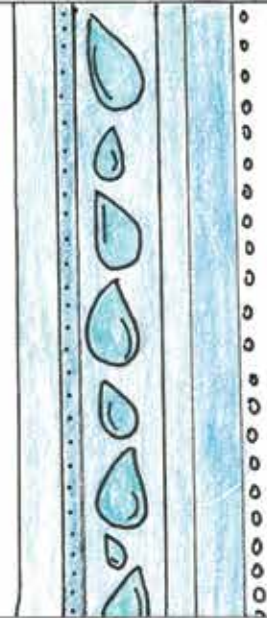
Review
Dorothy Baber
Cindy Larmay

Book Design
Jennifer Wahl
JD Design





Katherine
The
Inventive
Illustrator



Avika
The
AMAZING
Author



This book is intended for educational, artistic, and water conservation purposes. Permission is never granted for commercial purposes. Manufactured in the United States of America (2016).

Copyright pending. All rights reserved. No part of this publication may be reproduced or quoted in whole or in part by any other printed or electronic means, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or for presentation on radio, television, videotape, or film without written permission from Eastern Municipal Water District.