Elizabeth Gray is the author of *Defying Gravity: The Story of Mae Jemison*. She and her husband live outside of Washington, D.C. They are both writers, dreamers, and creators. Together they have 1 child, 14 nieces, 4 nephews, 8 godchildren, and over 500 students they hold near to their hearts. Each book she writes is a seed of inspiration she hopes to plant.

Tanisha Cherislin lives in New York. She creates art posters, website graphics, and illustrations for children’s books. She also designs characters for apps and animation for television and movies. She loves retro and vintage movies and TV shows. In her spare time, she enjoys birdwatching and playing video games.
Mae looked out toward the Chicago horizon.
Her dark, sparkling eyes reflected the image she gazed upon.
She blinked slowly, capturing the beautiful sight before her.
Some people love to watch the clouds dance across the blue sky. Others love to see pink and blue hues mix, creating a floating string of cotton candy. Mae loved when the sky’s colors settled into one black stage where the stars, moon, and comets performed their great dance. These celestial bodies amazed Mae. Though they were far away, they felt familiar and near.
Mae stared off into Earth's atmosphere. “Matter,” she thought. “Matter is anything that has weight and takes up space. So much of the world is made of matter—those stars, that moon, these hands, this heart. I'm as much a part of the universe as anything out there.”

She felt limitless like the sky she gazed upon. As sure as Mae was that the grass is green, she was certain she would go to space someday.
Fueled by Passion

Mae’s finger swelled from a splinter. Something white oozed out like lava. “What’s this?” Mae asked her mother.

This simple question led Mae to learn about the body’s immune system. Mae’s curiosity kept her questioning, and her creativity and confidence led her to answers.
One day, Mae’s kindergarten teacher asked her class what they wanted to be when they grew up. “A scientist!” Mae exclaimed.

“You mean a nurse,” her teacher responded. Mae planted her hands firmly on her hips, “No, I mean a scientist.”

She did not care that there were few female scientists and no Black female astronauts. Just because something hadn’t been done before didn’t mean it couldn’t be!
Art in Motion

When Mae opened an *astronomy* book, she could see how art and science connected. The *solar system* was art in motion! Stars came in different colors and sizes like paint splatters on a canvas. The earth *rotated* and *revolved* like a dancer twisting and twirling around a disco ball.
Mae believed that space exploration teams should be as diverse as the universe they explored.

“We all have wonderful imaginations. We need to use every perspective we have,” Mae thought. Linking different talents, like stars in a constellation, would make space exploration more successful.
Blasting Off

At 16, Mae attended Stanford University. She studied hard and earned science and art degrees. After graduating, Mae went to medical school. This decision led her around the world to help many people in need.

After several years, Mae knew it was time to go where she always intended to go: space. Out of more than 2,000 applicants to the astronaut program, Mae was selected!
Weightless Wonder

On September 12, 1992, Mae boarded the Endeavor spacecraft. She was the science mission specialist. In space, Mae and the other astronauts would experience microgravity, otherwise known as weightlessness. Mae’s role was to explore the effects of motion sickness and weightlessness.
She liked the idea of weightlessness. Mae wanted to live unweighted, like an astronaut floating in space. To Mae, fear and gravity were similar. They both felt heavy. She wouldn’t let the fears of others or her own fear of heights stop her from soaring.
Defying Gravity

Mae marveled at the stars glistening around her. “Young Mae would be tickled to see me,” she joked. As the spacecraft glided around the earth, Mae took a moment to dance.
Space was filled with variety, and Mae still believed space exploration teams should be too! Mae had a new mission. She was the first Black woman in space, and she was determined not to be the last.
Glossary

**astronomy:** the study of all the objects outside Earth’s atmosphere

**atmosphere:** the layers of gases that surround Earth

**celestial bodies:** natural objects outside of Earth’s atmosphere including stars, planets, satellites, comets, asteroids, meteors, meteorites, and galaxies

**immune system:** a network of cells, tissues, and organs that work together to protect the body from sickness

**matter:** anything in a solid, liquid, or gas state that takes up space

**microgravity:** see *weightlessness*

**rotate:** to spin around an axis

**revolve:** to move around in orbit

**solar system:** the sun and everything that orbits around it

**universe:** everything that exists, including objects and energy, throughout time and space

**weightlessness (also known as microgravity):** having little or no weight