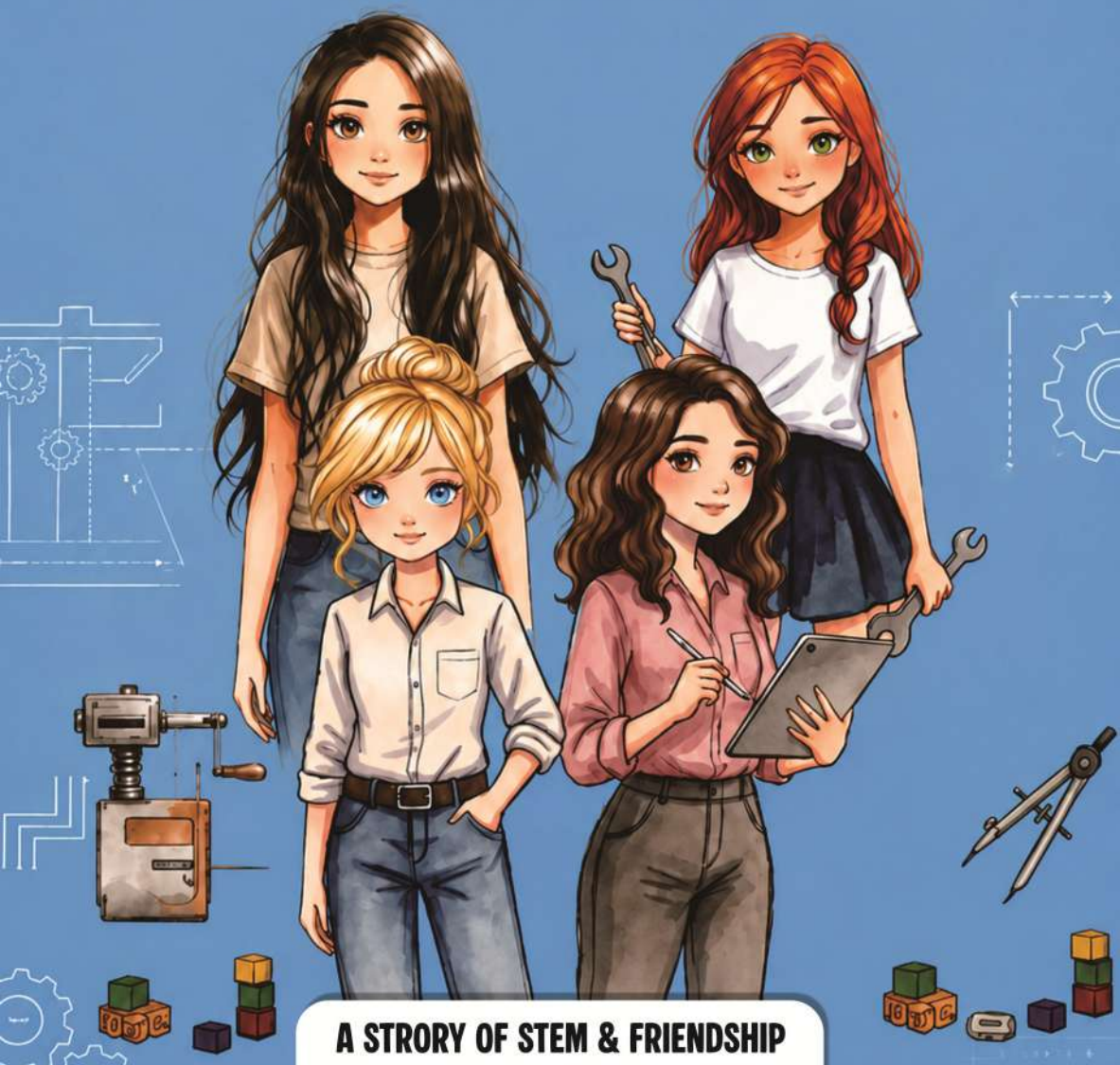


Killy Dinanti Permadi



THE LITTLE ENGINEERS BIG IDEAS FOR BIGGER ADVENTURES



A STORY OF STEM & FRIENDSHIP

THE LITTLE ENGINEERS: BIG IDEAS FOR BIGGER ADVENTURES



Killy Dinanti Permadi

**THE LITTLE ENGINEERS:
BIG IDEAS FOR BIGGER ADVENTURES**

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A NOTE FROM THE AUTHOR

Hi! My name is Killy and this is my very first book!

I've always enjoyed knowing and figuring out the 'why?' and 'how?' behind things. I wrote this book to show how math and engineering aren't just 2 different school subjects.

Instead, they are tools that help us solve problems, build amazing things, and can lead to exciting adventures for people.

This book is the first story in my series called The Little Engineers. I hope this series inspires young readers. Whether this book sparked an interest in math and engineering or inspired you to go on your own adventures or maybe even write a book of your own, I hope you never stop being curious about the world around you!

I have a major in Biochemistry and my main interests are in science and math but I also love engineering. I hope that you will be able to find fun and interest in these subjects as well.

Thank you for joining me on this journey. Keep learning, keep having fun, and remember to stay curious and always ask questions!

DEDICATION

To my mom for inspiring me to create this book.

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CHAPTER 1:

THE BLUEPRINT ADVENTURE

Different Minds, Same Idea

One day, Amanda & Esther were frustrated. They have been friends for years and it started off as playful bickering as neighbors. But lately, things have changed. Despite being in the same neighborhood, they don't go to the same school and have very different schedules due to their differing interests.

Amanda has always followed creative ideas. Art, music, and design capture her heart. Esther always preferred predictable, logical ideas. She leans more into math and science. They still care about each other but their friendship felt like it missed a few important pieces.

"Let's build a playhouse!" announced Amanda in excitement as she almost spilled her tea under the evening sky.

"A playhouse is fine," replied Esther as she raised an eyebrow. "But what about a treehouse? With a ladder, an adventure, and maybe a secret entrance?"

CHAPTER 2:

THE ADVENTURE OF THREE MINDS, ONE BUILD

The Waiting Game for Packages...and Pizza

Every afternoon after school, Amanda would race to Esther's front window the moment she heard an engine outside. Sometimes, it was just the neighbors driving their cars, returning from work or school. Other times, it was just the mailman, driving the mail truck around the blocks. Once, Amanda got so excited when the doorbell rang, thinking it was Esther informing her about the packages, only to realize that it was pizza delivery for Amanda's big brother.

"Hi. Is this for Carl?" the delivery guy questioned.

"Carl! Get down here! It's your pizza," Amanda shouted, her smile fading slightly.

"Can you help me?" Carl yelled back from his room.

"It's your pizza! You can take it!" Amanda screamed back.

CHAPTER 3:

THE MAP THAT CHANGED EVERYTHING

The Playhouse is Finished! But Engineering isn't...

The following Saturday morning, warm sunlight spilled across Esther's backyard. The wooden playhouse stood proudly on the grass. The walls, roof, and door went through similar steps when the girls were making the floor. Carl would sometimes walk with Amanda to the area, using his own engineering studies to help Crystal attach the glass to ensure they are securely attached.

After days of hard work, the walls, roof, windows, and door had all been finished. Although it already looked beautiful, Esther folded her arms thoughtfully.

"It still feels...unfinished," Esther admitted.

Amanda tilted her head. "Unfinished? We already have walls, a roof, beanbags, lights, and my amazing kitchen set. What could possibly be unfinished?!"

Crystal walked around the playhouse slowly, inspecting every corner like an engineer would.

CHAPTER 4:

THE FIX

Is There Something Wrong?

The afternoon sun cast long shadows across the backyard as a gentle breeze rustled the leaves of the nearby trees. However, the friends' concern mainly rests with the structure they have built so far. Esther continued quietly as she watched Claire closing the notebook, where the measurements they had drawn on the coordinate plane had been written down earlier.

"The structure looks like it matches our blueprint almost perfectly," Esther said. "The floor is eight feet by eight feet, and the walls are seven feet high, just as planned. Am I worrying too much?"

Meanwhile, Crystal slowly walked around the outside of the playhouse, her eyes moving carefully from one corner to another while her feet tapped against the dirt ground. She wasn't admiring the playhouse. She was studying it.

CHAPTER 5:

THE INSIDES OF THE PLAYHOUSE

Imagination Time!

The morning sun streamed through the newly installed windows, filling the playhouse with warm golden light. Tiny specks of dust floated lazily through the air, dancing whenever a gentle breeze drifted inside. Amanda slowly pushed open the wooden door and the four girls stepped inside one after another. Their footsteps echoed softly against the wooden floor.

Amanda stretched both arms wide. "We actually built this."

Esther ran her hand gently across one of the walls. "Every measurement matches our plan."

Crystal nodded proudly. "You're right. The frame is stable, the walls are square, and the roof passed all our tests."

Amanda spun around once before stopping. "I know exactly what we need!"

Esther folded her arms with an amused smile. "You always have ideas."

ABOUT THE AUTHOR

Killy Dinanti Permadi



Killy Dinanti Permadi is a 15 year old author. She was born in Yogyakarta, Indonesia in May 2011. Currently, Killy is a college student and has been doing her studies at Mary Baldwin University in Virginia, United States since she was 12 years old, majoring in Biochemistry. She also always enjoys asking questions, solving problems, and discovering how things work because she believes that curiosity is the 1st step in learning.

This is Killy's first book. Through a story that is filled with friendship, creativity, and hands-on problem-solving, she hopes to show young readers that math and engineering can work together for building, exploring, and making the world a better place.

When she's not writing, Killy enjoys reading, learning new things, and exploring the connections of the STEM subjects (Science, Technology, Engineering, Math).

She hopes that this book inspires children to stay curious, think creatively, and never stop asking about the world.



In their first adventure, four friends discover that math and engineering are everywhere. With careful planning, mathematical thinking, engineering skills, and endless creativity, the friends can turn their idea into reality.

But they learned a few important lessons in the process: building isn't always easy and great engineers aren't perfect but instead, people who make mistakes and are brave enough to learn from them.

Big Ideas for Bigger Adventures is an inspiring story that encourages readers to explore the STEM subjects, experiment with ideas, and improve until they find a solution.

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