

# Unlocking the Inner Engineer

## By ReadWorks

Mia first saw the sign on her way to lunch. Taped to the cafeteria doors, the sign said in bold black letters: “Hackathon! Come to Room 304 today at 4 p.m. to learn more.” Mia studied the sign, but there wasn’t any further explanation. As she sat down at the table with her friends, Mia asked, “Hey, does anyone know what a hackathon is?”

Most of her friends stared at her blankly or shrugged. They were as clueless as Mia. But one of them, Charlie, perked up. “Hackathon?” he asked eagerly. “Are we having one?”

“I guess,” said Mia. “There’s a sign saying to go to Room 304 today to learn more. I still don’t get what a hackathon actually is.”

“It’s like... a challenge,” said Charlie. Everyone continued to stare at him, and Charlie realized this wasn’t enough of an explanation. “Usually there’s some kind of problem. A bunch of people get teams together and you’re shut up with your team for hours and you develop a project that helps solve the problem. Engineers and computer scientists have hackathons all the time.”

“So... is there a winner?” asked Mia.

“I guess we’ll have to go to Room 304 to find out,” Charlie said, smiling happily at the thought.

Mia thought about the hackathon after lunch. She could see why Charlie was so excited. Everyone knew Charlie was a computer genius; he’d probably end up running Google one day. But if everyone at the hackathon was like Charlie, then Mia would be out of her league. It wasn’t that Mia was bad with computers. She was always able to help her parents when they couldn’t make a website work or when they had trouble connecting a laptop to the television.

Still, Mia had never taken a computer science class. She’d seen Charlie’s computer when he was writing code for a website—it was streams of numbers and words that looked like they were written in another language.

Just then, the bell rang to end the school day. “Oh well,” she thought, “I might as well head to Room 304 and check it out.”

When she entered the room, Mia’s heart sank. It was filled with the kids from Charlie’s computer science class. She was going to be completely out of place here. She slid into the seat next to Charlie and muttered, “I can’t believe you convinced me to come to this.” Charlie turned and said, “What? Don’t be silly. You’ll love this.”

Mr. Ingram, the science teacher, stepped to the front of the room and began to speak. “Well,” he said. “I’m happy to see so many new faces here. We’re going to have our very first hackathon at Waltham Middle School. Today you’ll form teams of four to six people. Then, next Saturday, we’ll present a problem to your teams.”

“What kind of problem?” Mia asked.

“Good question,” said Mr. Ingram. “Something like the amount of food that the cafeteria wastes each week or how unsafe the crosswalk outside the school is. Each team will have seven hours to come up with a solution. We’ll give you pizza for lunch so you don’t have to leave. At the end of the seven hours, the teams will present their solutions and the winner will get a prize.”

“Now I’d like you to form your teams,” said Mr. Ingram. “Remember, the strongest teams have members with different strengths.”

Half of the class was already circling Charlie, preparing to ask him to join their teams. But Charlie turned to Mia and said, “I want you on my team.”

“Wait, why me?” asked Mia. “You’re better than me at all of this engineering stuff. You could probably write a computer program on your own to fix the cafeteria’s waste problem.”

“But you know how to organize people,” said Charlie. “You’re better at public speaking, and you’ll think of ways of solving the problem that I would never think of.”

Mia considered Charlie’s points. It was true, she liked giving presentations in class. With four younger siblings, Mia also felt comfortable giving people tasks and making sure things got done.

“You’ve got a deal,” she said to Charlie as she held out her hand. They shook and a team was born.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. What event does Mia decide to take part in?

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2. Who are the two most important characters in the story?

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3. Read the following sentences from the text.

"Mia thought about the hackathon after lunch. She could see why Charlie was so excited. Everyone knew Charlie was a computer genius; he'd probably end up running Google one day. But if everyone at the hackathon was like Charlie, then Mia would be out of her league. It wasn't that Mia was bad with computers. She was always able to help her parents when they couldn't make a website work or when they had trouble connecting a laptop to the television.

"Still, Mia had never taken a computer science class. She'd seen Charlie's computer when he was writing code for a website—it was streams of numbers and words that looked like they were written in another language."

How does Mia feel about joining the hackathon at first based on this information?

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4. How does Mia feel about her ability to succeed in the hackathon by the end of the story? Use evidence from the story to support your answer.

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5. What is the main idea of this story?

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6. Read the sentences and answer the question.

"But you know how to organize people," said Charlie. "You're better at public speaking, and you'll think of ways of solving the problem that I would never think of."  
"Mia considered Charlie's points. It was true, she liked giving presentations in class. With four younger siblings, Mia also felt comfortable giving people tasks and making sure things got done."

What does the word "considered" mean in this text?

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7. What word or phrase best completes the sentence?

At first, Mia is not sure she wants to take part in the hackathon, \_\_\_\_\_ she eventually decides to participate.

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8. Why does Charlie ask Mia to be on his team for the hackathon?

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9. Contrast Charlie's and Mia's skills and abilities. Use evidence from the text to support your answer.

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10. Mr. Ingram says that the strongest teams have members with different strengths. Why might this be true? Use evidence from the text to support your answer.

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