

An Encrypted Clue



Book 4 in The Math Kids Series

The Math Kids series
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An Encrypted Clue

Book 4 in The Math Kids Series

by

David Cole



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*To Rob, Bill, Laura, Linda, and Sarah.
Our family tree may not always have straight branches,
but there are some common roots in there somewhere.*



Prologue



A loud crack of thunder startled me from a sound sleep. I had been dozing in the back of the car, but I was now fully awake. Sheets of rain pelted the car, and my father slowed us to a crawl as the wipers struggled to keep up with the water streaming down the windshield.

"Wow, it's really coming down," I said.

"Well, at least we're almost home," my dad responded tersely. He concentrated on keeping the car centered in the road as he drove through the pouring rain.

I could barely make out the *Welcome to Maynard* sign as we crossed the town line. Lightning flashed, illuminating the hillside on the right of the two-lane highway. A winding road led up the hill, and as the rain lessened, I could just make out the dark mansion perched at the peak. As I continued to stare at the house, I thought I saw a wavering light in the middle window on the top floor. Another flash of lightning blinded me. When the darkness returned, I squinted through the rain, but the light was gone.

Chapter 1



Stephanie Lewis squinted at the tiny handwriting in the margin of the book. At first, it looked like someone had just been doodling. When she put her nose almost to the page, however, she could just make out the tiny writing.

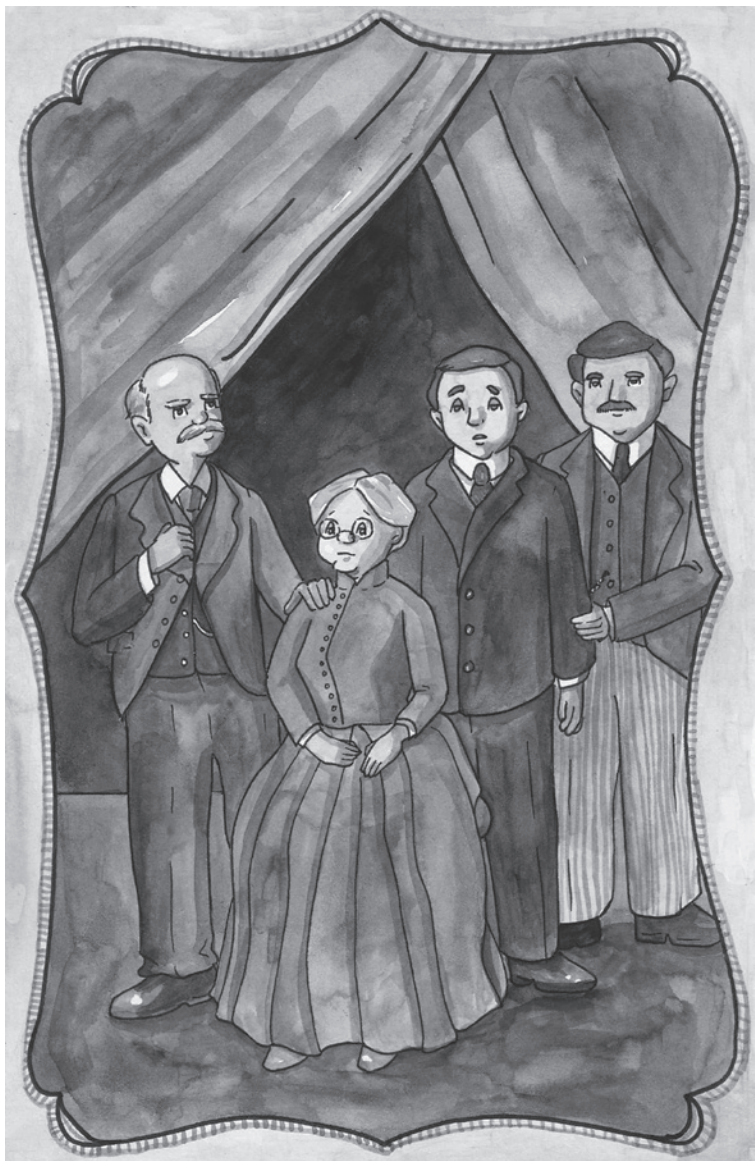
The strange symbols didn't mean anything to her, but she carefully copied them into her notebook anyway.

Stephanie had spent the afternoon at the library working on a social studies project. Her family had moved into the area at the beginning of the school year, so the project to track the history of Maynard was helping her to learn about her new town. The paper only had to be three pages long, but Stephanie had already collected almost seven pages of notes. The latest book she was studying, *A Short History of Maynard*, was anything but short. It was almost four hundred pages long. It was on page 213 that Stephanie found the cryptic note.

Maynard, like most small towns anywhere, doesn't really have enough history to fill four hundred pages, but it still has enough stories to be interesting. It was founded in 1874 by Herbert Maynard. Herbert was the first mayor of the town, which in the beginning consisted primarily of other Maynards. The extended family had made its living mining the veins of rich black coal from the caves just north of town. By the early 1900s, the town had grown to almost a thousand people, and Herbert Maynard had grown very wealthy. He built a sprawling mansion on the tallest hill overlooking the town and less than a football field from the entrance to the caves that had given his family, and the town, its start. But he only got to enjoy two short years in his new home as he and his wife, Olivia, were struck down with yellow fever in 1904 and died just days apart in their master bedroom. They were not to be the only ones to die in the mansion.

After Herbert's death, his sons, Urban and Eustis Maynard, took over the mining operation, but it wasn't long before disaster struck. A landslide in 1908 buried almost a dozen miners, and the brothers were forced to seal off the cave system. With the closing of the coal mine, most of the men in town were suddenly unemployed, but Urban and Eustis started Maynard Manufacturing and quickly put everyone back to work. The company prospered making canvas tents,

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farming tools, and buggy parts. The invention of the automobile eventually forced them out of the buggy business, but by then World War I had kicked into full gear and the brothers made a small fortune selling helmets and ammunition to the army. When the war ended, Maynard Manufacturing employed almost half of the residents of the growing town. Urban remained single, but Eustis married, and he and his wife, Martha, had a son named Douglas in 1916. The four lived a luxurious life in the family mansion, their every need promptly tended to by a staff of cooks, butlers, and housemaids.

While the Depression of the 1930s hit the country hard, Maynard Manufacturing kept their doors open and the town employed. It was said that the Maynard family lost a fortune in the stock market, but it didn't seem to faze them. They continued to live the life of royalty.

While they remained wealthy, bad luck continued to follow them. Urban was electrocuted when he was trying to repair a faulty light switch in the basement of the mansion. Eustis died four years later when he tripped and fell down the main staircase. Douglas married and had a son, Cletus, in 1940, but his wife died during childbirth. In 1958, Douglas died on Christmas Eve when he fell off a ladder while placing the angel on top of the Christmas tree.

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That left the eighteen-year-old Cletus as the last remaining member of the Maynard family. He went to college and earned a degree in history. He married his college sweetheart and returned to the mansion.

In 1965, Cletus's wife, Elenore, came down with a bad case of pneumonia. For days, Cletus sat by her side as she grew steadily weaker. The only doctor in town tried everything he knew to cure her, but she died early on a Saturday morning. Cletus made the long walk into town that afternoon. After planning for his wife's funeral and burial, he returned to his house on the hill. He was never seen again.

More than fifty years later, the Maynard mansion still stands on top of the hill, but no one from the Maynard family lives there. The town now owns it and operates it as a museum. Busloads of kids still visit the Maynard House on field trips to learn about the town's history. Since this is usually done in third grade and she hadn't moved to town until fourth, Stephanie had never been there. She bet her friends Justin, Jordan, and Catherine had all been there though. She would have to remember to ask them during the next meeting of the Math Kids.

The Math Kids began as a club to solve math problems. Stephanie and her friends were all in the highest math group in their class and loved to work on difficult problems. And they were pretty good at it

too! They had won the fourth-grade math competition at McNair Elementary last month and would compete against the other schools in town in the spring.

The Math Kids had used their math skills to solve some other tricky problems too, including tracking down a kidnapper, figuring out a fifteen-year-old bank robbery, and even capturing some burglars trying to rob Stephanie's house.

Stephanie squinted again at the tiny handwriting in the margin of the book. What did the strange symbols mean?

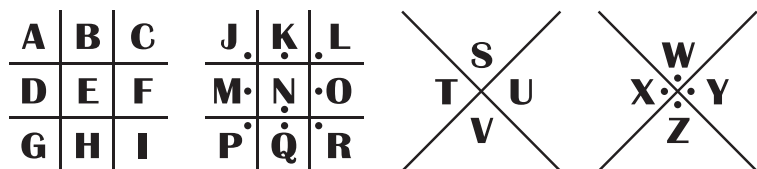
Could this be another case for the Math Kids?

Justin stared at the symbols and smiled. He quickly scribbled something onto a sheet of paper and then stood in front of the board. He glanced back and forth between his paper and the symbols, nodding the entire time.

“It’s a pigpen cipher,” he said. “Don’t you remember Mr. Wynkoop teaching us that in Cub Scouts, Jordan?”

In a flash, it came back to me. Our cubmaster had taught us a simple cipher. Justin and I had used it one whole summer to send secret messages back and forth to each other.

“It’s pretty simple,” Justin explained as he drew on the whiteboard.



“Each letter is represented by the shape it’s in,” Justin said. “Since the *E* is in a square, it would be shown as a square in the cipher. The *B* would be shown as a square with no top. The *S* would look like a *V*, and so on. If a shape has a dot in it, the symbol will also show a dot.”

“That’s a pretty cool code,” Catherine said.

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“Actually, it’s a cipher,” Justin corrected her. “A cipher substitutes one character or symbol for another. *A* might mean *N*, *B* means *O*, and so on.”

“So, what’s a code then?” Stephanie asked.

“In a code, the word *dog* might mean ‘attack in the morning.’ The difference is that someone can figure out a cipher, but with a code there’s no way to understand the message unless you get your hands on the codebook.”

We looked again at the message Stephanie had copied out of the margin in the book.

We compared it to the key Justin had drawn on the board.

A	B	C	J	K	L	 <table style="border: none; margin: auto;"> <tr><td style="padding: 0 10px;">S</td></tr> <tr><td style="padding: 0 10px;">T U</td></tr> <tr><td style="padding: 0 10px;">V</td></tr> </table> 	S	T U	V	 <table style="border: none; margin: auto;"> <tr><td style="padding: 0 10px;">W</td></tr> <tr><td style="padding: 0 10px;">X Y</td></tr> <tr><td style="padding: 0 10px;">Z</td></tr> </table> 	W	X Y	Z
S													
T U													
V													
W													
X Y													
Z													
D	E	F	M	N	O								
G	H	I	P	Q	R								

We checked each symbol in the message, and in a couple of minutes, we had a solution.

You'll find what you seek under the chair in the library

We high-fived each other for solving the mystery of the symbols, but Stephanie had a frown on her face.

"What's wrong, Stephanie?" Catherine asked.

"Great, we solved the code..." she started.

"Cipher," Justin correct.

"Fine, we solved the cipher," she said snippily, drawing a frown from Justin, "but now what? What is it we're supposed to be seeking?"

"Here's another problem," I added. "There are hundreds of chairs in the library. Are we supposed to check every single one until we find something?"

"And what if someone is just messing with us?" Catherine added.

"But what if they aren't?" Justin asked. "I think somebody left that message for someone to find."

"We need to figure out who left the message," Stephanie said. "Looks like I'm headed back to the library."

"Not without us, you're not!" I said.

Two hours later, we had looked under almost every chair in the library. I say almost because there were people sitting in some of them. An elderly man with a long gray beard was dozing in one while Mrs. Carmichael, our school librarian, was firmly planted

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in another. She looked like she was settled in for the day with a stack of old magazines on the table in front of her.

“You’d think after working in a library all week that another library would be the last place someone would want to be,” Stephanie pointed out.

“I don’t know,” Catherine countered. “My dad teaches math all week and does math at home all weekend.”

“But that’s different,” Justin protested. “That’s math!”

“Well, this was kind of a bust,” I said. “All I managed to find was old gum.”

“Yuck,” said Stephanie.

“Yeah, it doesn’t have much flavor left,” I said as I pretended to chew.

“That’s gross!” Stephanie groaned.

“I wish we had some idea of when the message was written,” Catherine said.

“Why?” I asked.

“Well, if the message was written a long time ago, these might not even be the same chairs.”

“I didn’t think of that.”

“Maybe we should ask the librarian,” Stephanie suggested. “They should have a record of who has checked out the book.”

Unfortunately, the librarian told us she was not allowed to give out information on who had checked

out books. After seeing the looks on our faces though, she reconsidered.

“Let me pull it up on the computer,” she said. “At least I can tell you *when* it was last checked out.”

She typed some information on the keyboard, clicked the mouse a few times, and then shook her head. “I’m sorry kids, but it looks like no one has ever checked that book out.”

“Ever?” Stephanie said.

“Well, at least not since 1997 when we computerized all of the checkouts,” she replied.

“How were checkouts done before that?” Justin asked.

She smiled. “It was pretty old-fashioned,” she said. “You signed and dated the card for the book. We kept the card until the book was returned, and then we’d return the card to the pocket glued to the inside of the back cover.”

We thanked the librarian and walked to one of the wooden tables. We held our breath as Stephanie opened the back cover of the book. There it was. The yellowed cardstock pocket was still attached. Stephanie yanked the checkout card from the pocket.

The checkout information was written in a shaky script, but they could still make out the last checkout date of September 23, 1984. The name next to the date was Cletus Maynard.

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“But that can’t be right!” Stephanie protested. “Cletus Maynard disappeared in 1965. How can he have checked out this book nineteen years later?”

It didn’t make any sense. When Cletus’s wife, Elenore, had died, no one had ever seen Cletus again. Or had they?

“And even if it was Cletus, can we be sure that it was him who wrote in the book?” Stephanie asked.

“I’m afraid I’ve got bad news,” Justin said.

We all looked at him, dreading the worst. And, unfortunately, Justin delivered exactly that.

“This library was built in 1988,” he said. “The old

library was torn down in 1990 to put up the Southside mini-mall. And, before you ask, they bought all new furniture when they built the new library.”

So that was it. It didn't matter that we had solved the puzzle. The old library was gone. Even if Cletus—or someone else—had hidden something under one of the chairs, it was gone now. We were at a dead end.

Stephanie, Catherine, and I sat silently around the table. There was a cloud of defeat hanging over us. I looked around for Justin. He had wandered off and I didn't see him at first, but then I spotted him on the other side of the library. I watched as he walked down the row of windows, reversed direction as he reached the far wall, and then followed the row of windows again. A small smile broke over my face as I realized what he was doing.

Justin and I had been best friends since kindergarten, so I knew what was happening. When he was thinking hard about a problem, he tuned everything else out and went into what he called “the zone.” He became so engrossed in solving the problem that he often lost all track of where he was or what he was doing. Luckily, this time he was in a closed room. Once, he had wandered almost a mile away before he looked up to find out he was lost. The good thing was that when Justin came out of the zone, he usually brought an answer with him. I wasn't expecting that to happen

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this time though. There was nothing in the zone that was going to bring a library chair back from a pile of rubble.

Justin stopped in the middle of the wall of windows. He stood perfectly still for almost a minute, then looked up like he wasn't sure where he was. A sly grin came across his face, and he was still smiling when he returned to the table.

“What if there *is* another library?” he asked.