

Nick and Tesla's High-Voltage Danger Lab: A Mystery with Electromagnets, Burglar Alarms, and Other Gadgets You Can Build Yourself

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Nick and Tesla are bright 11-year-old siblings with a knack for science, electronics, and getting into trouble. When their parents mysteriously vanish, they're sent to live with their Uncle Newt, a brilliant inventor who engineers top-secret gadgets for a classified government agency. It's not long before Nick and Tesla are embarking on adventures of their own-engineering all kinds of outrageous MacGyverish contraptions to save their skin: 9-volt burglar alarms, electromagnets, mobile tracking devices, and more. Readers are invited to join in the fun as each story contains instructions and blueprints for five different projects.

In Nick and Tesla's High-Voltage Danger Lab, we meet the characters and learn how to make everything from rocket launchers to soda-powered vehicles. Learning about science has never been so dangerous-or so much fun!

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Chapter 1
Someone climbed into Joe Devlin's cab, and he put down his newspaper and looked in the rearview mirror and started to say "Where to?"

He froze.

Sitting behind him were a boy and a girl with sad, serious expressions on their faces. They looked like they were eleven or twelve years old.

There were no adults in sight.

Two kids getting into a taxi, alone, outside San Francisco International Airport?

Trouble, Joe's gut said.

The boy looked down at a letter he was holding.

"Five-thirteen Chesterfield Avenue," he said.

Joe could hear the paper rustling as he spoke. The boy's hands were shaking.

"In Half Moon Bay," the girl said, her voice firm, resolute. "That's near here, right?"

Joe turned around to squint at his would-be passengers. They were dressed like any other kids-T-shirts, jeans, sneakers-yet they seemed subdued and grave in a way that didn't fit their ages. All they had with them were the letter and two small, black suitcases and a book each.

The boy was holding something called A Brief History of Time. The girl had Theory of Applied Robotics: Kinematics, Dynamics, and Control.

"You're not running away, are you?" Joe said. "Where are your parents?"

"No, we're not runaways," the girl said. "Our parents are . . . well . . ."

"They're in Uzbekistan," said the boy.

Joe blinked.

"Uzbekistan?" he said.

The boy nodded. "Watching soybeans grow."

"Well," the girl said, "it's a little more complicated than that."

"Oh," said Joe. "Oooooookay."

"We've been sent to live with our uncle for the summer," the boy said. "He was supposed to meet us here, but he didn't show up."

Joe stared at the kids a moment, trying to decide if he believed them. Even if he did,

they still looked like trouble. And Joe didn't like trouble.

The girl stuffed a hand into the pocket of her jeans and pulled out a wad of wrinkled bills.

"We have ninety-three dollars," she said.

The boy reached into his pocket, too. "And fifty-eight cents. That's enough, right?"

"Absolutely," Joe said.

He turned around and started the engine. And the meter.

Joe didn't like trouble. But he did like money.

Every so often, Joe stole a peek at the kids in the rearview mirror. The girl was watching the rolling Northern California hills slide by. The boy was toying with a silver pendant he wore on a chain around his neck. It was shaped like a star.

"Stop that," the girl said when she noticed what her brother was doing. "You might break it."

"Break what? I still haven't even figured out what it is."

"It's jewelry, that's all. A keepsake from Mom and Dad."

"Since when have Mom and Dad been into keepsakes?"

The girl shrugged.

The boy started picking at the pendant again.

"Anyway," he muttered, "I don't wear jewelry."

The girl went back to staring out the window.

After a moment, though, she pulled out an identical pendant hanging around her neck and began rubbing it absentmindedly.

About twenty yards behind her, Joe noticed, was a big, black SUV that had been following them for miles. It was probably just a coincidence that it had stayed with them as they went from the airport to 101 South to 92 West. But then again, if Trouble had to drive, wouldn't it drive a big, black SUV?

Joe gave his cab a little more gas.

Joe made the winding drive down to Half Moon Bay at least once a week. Though it was just a speck of a city, it was perfectly situated-nestled on the coast at the edge of a long stretch of lush, hilly forest-and had built up a healthy tourist trade. The town itself was quiet and quaint and cute. And boring, but the tourists didn't seem to mind.

Five-thirteen Chesterfield Avenue was in a nice neighborhood not far from the ocean. The house looked a little shabby, though. The paint was more faded, the driveway more cracked, the yard more choked with weeds than any of its neighbors. Even the mailbox was dented and scorched on one side.

As Joe's cab slowed to a stop out front, a lawn mower was going around and around in the yard. No one was going around and around behind it, though.

It looked like a ghost was mowing the lawn.

Rope ran from the mower to a metal pole in the middle of the yard. The end of the rope was wrapped around the top of the pole in a coil. As the mower moved, the rope unraveled itself, slowly feeding more slack to the mower so it could go in bigger and bigger circles.

It was a self-mowing lawn.

"Cool," said the girl.

"Uhh," said the boy.

He pointed to the pole. The more the mower tugged on it, the more it tilted to the side.

"Oh," said the girl.

The pole sagged, then fell over completely, and the mower rumbled off-course into a neighboring yard. It chewed through row after row of beautifully manicured flowers before rolling over a garden gnome, getting snagged, and-with a screech and a pop and a puff of black smoke-bursting into flames.

"Well," the girl said, "cool idea."

"Sixty-five dollars," Joe said.

The girl counted out the money.

"And we're supposed to tip you, right?" the boy said.

"Don't worry about it," said Joe. His conscience was yelling at him not to abandon a couple of kids outside a run-down house with an exploding lawn mower. He needed to leave quick or he might actually listen.

He glanced at the kids in his rearview mirror as he sped away. They were kneeling beside the fallen pole examining the rope. They looked like they wanted to put the pole back up, find another mower, and try again.

A little farther down the street, Joe could see the black SUV he'd noticed behind them on the highway. A shadowy figure sat behind the wheel. Whoever it was, he or she seemed to be watching the kids.

Joe's gut had been right about those two. They were trouble. Weird trouble.

As he drove away, fast, Joe made a promise to himself that he planned to keep the next time he was at the airport.

From now on, middle-aged tourists only. Middle-aged tourists only. Middle-aged tourists only. . . .

"At least we know Uncle Newt's around here somewhere," Tesla said.

"How do we know that?" asked her brother Nick.

Tesla nodded at the lawn mower. "Who do you think started that?"

"That doesn't prove anything," Nick said. "If you could rig it to mow by itself, you could rig it to start itself, too."

"True. Want to go check for a timer?"

The lawn mower wasn't burning anymore, but the engine still sizzled and smoldered ominously.

"Maybe later," Nick said.

"All right then."

Tesla picked up her suitcase and started toward the house. She'd taken it upon herself to be the leader lately. She was the elder sibling, after all.

She'd been born twelve minutes before her twin brother.

Nick got his own suitcase and followed her onto the porch.

Tesla started to reach for the doorbell. It chimed when her finger was still two feet from the button.

"Hey," Tesla said, looking around the porch.

Nick looked, too.

"Motion detector?" he said.

"Could be."

Tesla was standing on a welcome mat. Printed on it were the words IF YOU'RE SELLING GIRL SCOUT COOKIES, I'M NOT HOME.

Tesla noticed a wire running from the mat to the door frame. She stepped off the mat, then back on.

The doorbell chimed again.

"Pressure sensor," Nick said. "Nice."

"Yeah. Only, if Uncle Newt's so smart, how come he wasn't at the airport?"

"Mom and Dad always said he was a little . . . off. Maybe he just forgot."

"Forgot that his niece and nephew were coming today to live with him?"

Nick gave his sister a sad, weary shrug.

Their summer was off to a pretty lousy start. Two days out of school and bang-their trip to Disneyland is canceled, their scientist parents tell them they have to rush to Central Asia to observe dramatic new soybean irrigation techniques, and they're shipped off to live with the reclusive uncle no one else in the family can talk about without smirking or shivering.

Fun in the sun it was not.

Tesla sighed.

"We're not here to sell you Girl Scout cookies!" she called out.

Still no one came to the door.

Tesla reached for the knob. The door wasn't locked.

Tesla opened it.

"Are you sure you should do that?" Nick said.

"Why not?" Tesla stepped inside. "This is supposedly our house now, too. For the next three months anyway."

"But . . . what if Uncle Newt has, like, a vicious attack dog?"

"Then it would've started barking the second the doorbell rang."

"Oh. Right."

Tesla moved deeper into the darkness of the house.

Nick stayed on the porch.

"What in the-? My begonias!" he heard someone say behind him.

Nick looked over his shoulder.

A small but muscular woman in sweaty workout clothes was stepping out of a big shiny car in the neighbor's driveway. She was gaping in horror at the chewed-up flowerbed and the smoking lawn mower.

Scowling, she turned toward Uncle Newt's house. And the scowl didn't go away when she noticed Nick looking back at her. In fact, it got scowlier.

Nick smiled weakly, waved, and hurried into the house. He closed the door behind him.

"Whoa," he said when his eyes adjusted to the gloom inside.

Cluttering the long hall in front of him were dozens of old computers, a telescope, a metal detector connected to a pair of bulky earphones, an old-fashioned diving suit complete with brass helmet, a stuffed polar bear (the real, dead kind), a chainsaw, something that looked like a flamethrower (but couldn't be . . . right?), a box marked KEEP REFRIGERATED, another marked THIS END UP (upside down), and a fully lit Christmas tree decorated with ornaments made from broken beakers and test tubes (it was June). Exposed wires and power cables poked out of the plaster and veered off around every corner, and there were so many diplomas and science prizes and patents hanging (all of

them earned by Newton Galileo Holt, a.k.a. Uncle Newt) that barely an inch of wall was left uncovered.

Off to the left was a living room lined with enough books to put some libraries to shame, a semitransparent couch made of inflated plastic bags, and a wide-screen TV connected by frayed cords to a small trampoline. The ceiling over the trampoline was cracked and cratered, as if someone kept bouncing a little too high. A dented football helmet was lying nearby on the floor.

To Nick's right was a dining room with a conveyor belt running to the kitchen, a gas grill built into the middle of the table, and straps and buckles hanging from the ceiling, instead of chairs.

Tesla was petting a hairless cat that stood on the table licking the frosting off a chocolate cake. As Nick came closer, he saw words written with yellow icing.

WELCOME
NICK AND TESLA

The cat had eaten the N.

"So Uncle Newt didn't forget we were coming," Nick said.

"Apparently not," said Tesla.

"Where is he, then?"

Tesla gave the cat a scratch behind one hairless ear. The cat just kept licking at the cake, but now it was purring.

"I don't know," Tesla said. "Maybe the cat ate him, too."

Tesla cocked her head to the side.

"Hey," she said. "Do you hear something?"

Nick cocked his head just as his sister had, though he wondered why anyone bothered doing that.

Does lifting one ear at an approximately thirty-degree angle really increase one's ability to detect faint noises? he thought. Because he was that sort of kid.

Then he heard it.

"Someone's shouting," he said. "But I can't make out the words."

Tesla cocked her head even more and then bent over, bringing her ear closer to the floor.

Nick did the same.

Without a word, Tesla walked out of the dining room and into the kitchen, still tilted to one side. Nick followed at an identical angle.

On the far side of the kitchen, beside the refrigerator, was a door. It was covered with signs.

KEEP OUT
PRIVATE PROPERTY
AUTHORIZED PERSONNEL ONLY
TRESPASSERS WILL BE PROSECUTED
HAZARDOUS
FLAMMABLE
POISON

HIGH VOLTAGE
DANGER
BEWARE OF DOG

The word DOG had been crossed out and replaced with CAT.
As Nick and Tesla crossed the kitchen, the muffled
cries grew louder.

Tesla reached out and opened the door. Just beyond it was a dark stairwell.
Something at the bottom of the stairs hummed and glowed.

"HEEEEEEEEEEEEEELLLLLLLLLLLLLLP!" someone said.

Other Books

Nikola Tesla for Kids. Nikola Tesla was a physicist, scientist, electrical engineer, and world-renowned inventor whose accomplishments faded into oblivion after his death in 1943. Tesla was undeniably eccentric and compulsive; some considered him to be somewhat of a "mad" scientist. But in reality, he was a visionary. Many of his ideas and inventions that were deemed impossible during his lifetime have since become reality. He was the first to successfully use rotating magnetic fields to create an AC (alternating current) electrical power supply system and induction motor. He is now acknowledged to have invented the radio ahead of Marconi. Among other things, he developed the Tesla coil, an oscillator, generators, fluorescent tubes, neon lights, and a small remote-controlled boat. He helped design the world's first hydroelectric plant at Niagara Falls. Nikola Tesla for Kids is the story of Nikola Tesla's life and ideas, complete with a time line, 21 hands-on activities, and additional resources to better understand his many accomplishments.

Cheney and Uth . "My mother was an inventor": Tesla, My Inventions, 4. "the fountain of my enjoyment": Margaret Cheney and Robert Uth, Tesla: Master of Lightning (New York: Barnes and Noble Publishing, 1999), 4. "Mama's back was a sheet": Cheney and ..."