

NATIONAL  
HARBOR  
MARINA,  
MARYLAND,  
U.S.A.



▶ **A HEAD** popped around the doorway of cabin 202, a thick hazelnut ponytail swinging from the top. “Aren’t you unpacked yet?”

“Almost.” Cruz gave Sailor an uncertain grin. His heart skipped as he reached for the last item in his suitcase: a ball of puffed black carbon. He hoped the treasure inside wasn’t broken, but it probably was. How could it not be?

If it hadn’t been damaged by Lani taking it apart, it most certainly had suffered from the overnight trip from Hawaii via mail drone. Cruz gently tapped the foam-like carbon until the seal broke, then carefully pulled the orb apart. Free of its cocoon, the palm-size silver dome looked all right. However, Cruz wouldn’t know for sure until he touched it and the holo-video of his mother and him as a younger child at the beach appeared. Humming “Here Comes the Sun,” he set the globe on his nightstand. He placed it between the aqua box with some of his mom’s things and Mell, his honeybee drone. Cruz hesitated. Maybe now wasn’t the best time to find out if the video was ruined. If it was, Lani would say it was a bad omen, a sign that his journey on *Orion* was doomed. Cruz wasn’t superstitious. Still, he couldn’t seem to get his finger to tap the dome.

His friend and teammate Sailor York was checking out Cruz’s cabin. “You got a corner again. Sweet as! Bryndis and I are at the other end of

the passage. Doesn't this place make you feel like you're seeing double?"

She had a point. Most everything in the cozy, whitewashed maple stateroom was in pairs—two twin beds, two identical navy-and-white-pinstriped comforters with shams, two maple nightstands, side-by-side dressers, a pair of navy stuffed chairs—each with a penguin pillow—and two small writing desks and chairs. Cruz loved his desk. Made of polished blue lapis granite, the deep sapphire blue stone with golden flecks and soft white splatters reminded Cruz of photographs of the Milky Way. Standing like a miniature tent on each starry desk was a note from Explorer Academy president Dr. Regina Hightower. She'd written Cruz and his roommate, Emmett Lu, nearly identical messages, wishing them an exciting, educational, and life-changing journey. However, Cruz noticed his note contained one line that Emmett's did not. Under her signature, Dr. Hightower had included her private cell phone number. *In case you need anything*, she'd scrawled beside it, then, *Please be careful*.

The school's president was one of the few people who knew about Cruz's personal mission. He was looking for a formula developed by his mother before her death. Petra Coronado had discovered a serum that had the power to regenerate human cells—a breakthrough that could have led to curing hundreds of diseases. A founding scientist with the Synthesis, the top secret scientific branch of the Society, she had hit upon the formula while working on a pain medication for Nebula Pharmaceuticals. Once Nebula learned she'd created something that went far beyond their parameters, they'd ordered her to destroy the serum and formula. As his mother had explained in her digital holo-video journal, "The last thing a pharmaceutical company making billions of dollars selling drugs wants is for humanity to never need those drugs."

Cruz's mother had been pressured into agreeing to Nebula's demands, but not before engraving the formula into black marble, splitting the stone into eight pieces, and hiding the fragments of the

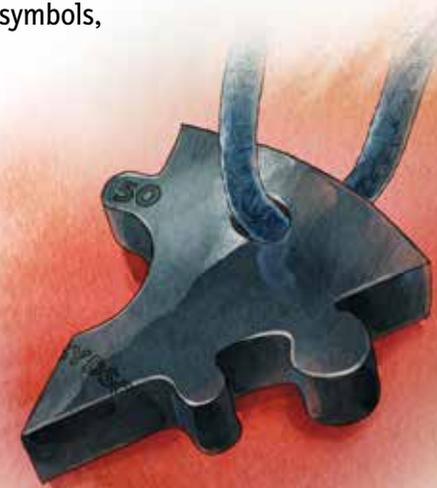
cipher around the world. Fearing for her life, she made a holo-journal for Cruz with clues on how to find the pieces. Soon after, she died in a mysterious lab fire that had been ruled accidental. Cruz only recently discovered his mother's death had been no accident. And worse? Nebula was to blame.

Following the first clue in her journal, Cruz had deduced the first piece of the cipher was hidden in the base of his holo-projector back home in Hawaii. His best friend, Lani Kealoha, had removed the bottom plate of the dome and, sure enough, found the stone inside.

Laser-etched with partial numbers and symbols, the black marble now hung on a lanyard around Cruz's neck. It was pie-shaped and less than an inch across at the curved edge. The segment looked like a piece to a miniature, round puzzle. With two knobs on the right side and a curved indentation on the left, it was obvious the fragment was meant to interlock with two others. Finding it had been an amazing feat, but Cruz knew he had a long way to go to complete the cipher circle. Then there was Nebula. They were still out there, still determined to make sure he didn't succeed. To help keep him safe, Dr. Hightower had increased the security on board *Orion*, and among the students, only Emmett and Sailor knew of Cruz's mission.

Sailor peered around cabin 202, dark eyes roving past the door that opened to the attached balcony, over to the closet, then, finally, to the closed bathroom door. "Is Emmett...?" She stuck out her tongue and pointed at her mouth, making what Cruz was sure was the international sign for hurling.

"Heaving chunks? Nope. So far, so good. He went up to the fourth



deck to check out the science tech lab. Between you and me, I think he needs help with Lumagine.”

“Still working on that mind-control fabric, huh? Hasn’t he tried, like, twenty times?”

“Twenty-six, actually. That’s nothing for Emmett. It took him fifty-seven attempts to invent his emoto-glasses.”

“That’s what my mom would call super stick-to-itiveness.”

Cruz noticed how Sailor kept a hand against the wall, as if worried that any minute a giant wave would capsize the boat. “He brought a bunch of extra seasick bands. I’m sure he wouldn’t mind if you wanted to borrow one—”

“I’m fine,” she said, though she didn’t let go of the wall.

“It takes a few days to get your sea legs,” he assured her. Living in Hawaii for the past seven—almost eight—years, Cruz had spent most of his life in or on the water. He knew the swaying motion of a 364-foot ship like *Orion* could take some getting used to, but he was sure everyone on his team would adjust. They’d already had some practice back at the Academy’s Computer Animated Virtual Experience simulator—the CAVE.

“Taryn says there are snacks in the galley,” said Sailor. “We have a few minutes before our meeting. You want to grab something on the way?”

Cruz was a little hungry. “Sure. One sec.” He snapped his suitcase shut and went to put it in the closet.

“What’s this?” Sailor had picked up a postcard off Cruz’s desk.

“It’s from my aunt.”

She frowned. “How can you tell? She didn’t sign it. It says ‘Begin with the birth year of Peary’s first man,’ and then there’s a bunch of numbers.”

“It’s a game we play. Aunt Marisol sends me coded messages on postcards. I decode them using books, art, or music, or whatever the clues lead to.”

“Sweet as! So what does it say?”



“Not sure yet. You can help me decode it if you want.”

She rolled her eyes. “If I knew where to begin.”

Cruz crossed the room to lock the veranda door. “Rule one: Always start with the picture.”

Sailor flipped the card. The photo was of a round sea creature, its mottled brown-and-white head and creamy-colored tentacles cradled in a circular shell with wavy brown and white stripes. “I know this animal,” she cried. “It’s a mollusk, but I can’t think of the name ... Not a hermit crab ...”

“Nautilus.”

She snapped her fingers. “That’s it!”

Cruz grinned. “And what book or song do you know that has a naut—”

“*Twenty Thousand Leagues Under the Sea*. *Nautilus* is the name of Captain Nemo’s submarine.”

He laughed. “I told Aunt Marisol she needs to make these harder.”

Cruz grabbed his tablet computer and tucked it under his arm. He nodded toward the postcard. “Bring it with.”

As they left the cabin, the door locked automatically behind them. Turning right out of his stateroom, Cruz followed Sailor down the narrow passage. A tall, sturdy security guard in a black jumpsuit stood near the elevator. Her ID tag read *K. Dover*. They said hi and she said hi, but her eyes lingered a bit longer on Cruz than on Sailor. Officer Dover tipped her reddish blond head at him as if to say, *So you’re the one I’m here for*. Cruz had thought having extra security on board would make him feel safer, but all it was doing so far was making him feel singled out.

Beyond the elevator, the hall opened into a sunny atrium. On the other side of the ship were the faculty staterooms. Aunt Marisol’s cabin was the second door on the left side. *Not “left,”* he corrected himself, *port*. He needed to start thinking in boating terms. The bow was the front of the ship, and the stern, the back. You went fore, or forward, to the bow and aft, or backward, to the stern. If you stood facing the bow, the right side of the ship was known as starboard and the left was port. A pair of grand staircases curved up each side of the round atrium, their ornate brass rails leading to the lounge on the third deck. The open lounge had plenty of seating: plump red and blue chairs in groups of four for hanging out with friends, as well as straight-backed chairs clustered around taller tables for doing homework. A large TV screen took up the back wall. The other three walls were glass, offering a 270-degree view of wherever *Orion* was going. At the moment, the ship was navigating the murky greenish blue waters of the Chesapeake Bay. Potted lemon, lime, and orange trees flanked the doors leading to the outdoor bow deck. Lush green limbs drooped under the weight of ripe fruit. Certain they were fake, Cruz reached for a lemon.

“Better not let Chef Kristos catch you or you’ll be washing dishes for months.”

Cruz whirled around to see a young man in a navy shirt and matching pants. “I... I... only wanted to see if they were real,” he sputtered.

Green eyes crinkled. “Did the same thing myself when I first came on board,” the man said, his Australian accent dropping the *r* so the last word sounded like “on bawd.” “If you think this is something, have a gander at the hydroponic garden on the observation deck. Chef Kristos grows most of the veggies we eat right here on the ship.”

“I know!” said Sailor. “Do you think Chef Kristos would let me help take care of the plants? I miss my garden back home.”

“Can’t hurt to ask.” The man rubbed his chin, and the emerald green eyes of a silver chameleon on his ring winked at them. “Do I detect a bit of the Kiwi there?”

Sailor grinned. “I’m from Christchurch, New Zealand.”

“Melbourne born and raised.”

“Sweet as! I’m Sailor York, and this is Cruz Coronado. We’re explorers.”

The man ruffled his messy crop of cinnamon hair. “Tripp Scarlatos. Marine biologist, aquatics director, and *Ridley* pilot.”

“The mini sub?” Cruz’s ears perked up. “You drive the mini sub?”

“Yip. Best job on the boat. In fact, I’m late for a meeting with Monsieur Legrand, and he does not like to be kept waiting, though I’m sure you know that. Hooroo!”

As Sailor and Cruz passed the security station next to the purser’s desk, a beefy guard with a thick dark mustache and a gold hoop earring caught Cruz’s eye. The gold ID tag on his massive chest read *J. Wardicorn*. He glanced at them but did not smile or nod. Turning down the corridor that led to the galley and classrooms, Cruz could feel the guard’s eyes boring into his back. More scrutiny.

Sailor was studying his postcard as they walked. “Who is Peary’s first man?”

“I know that one.” Cruz had just finished reading a book about explorers—a book Aunt Marisol had loaned him. Coincidence? Hardly. “It’s Matthew Henson. He was the first African-American explorer to go to the Arctic. He navigated a bunch of Robert Peary’s expeditions and that’s where he got the nickname ‘Peary’s first man.’” He glanced at

her. “Read the clue again.”

“Begin with the birth year of Peary’s first man.”

Okay, so you’d want to look up the year Henson was born, then go to the text of *Twenty Thousand Leagues* and search the book for the first mention of that year. Once you find it, you’d start counting the letters, according to the postcard. That’s what those sets of numbers are for. See how the first number is one? The means the letter you want is going to be the first letter after 1866.”

“I get it,” said Sailor. “The next number is twelve, so I’d want to find the twelfth letter after 1866 and so on until I spell out a word.”

“Right.”

“And I bet each set of numbers is equal to one word in the message.”

“Exactly.”

Her face lit up. “Can I decode it?”

Cruz could tell it was a short phrase, and Aunt Marisol never put anything personal in their postcards, so he didn’t see why not. “Be my guest.”

They were at the galley entrance. Cruz held his gold Open Sesame wristband up to the security camera to open the door. Just inside the dining room, several baskets full of fruit, energy bars, and other snacks had been placed on a side table. Sailor grabbed an apple. Cruz chose a small bag of trail mix. They took their food and headed to the conference room down the passage. Emmett was already there. He’d saved three seats for Sailor, Cruz, and Bryndis. Letting Sailor have the first chair, Cruz slipped into the second, which also happened to be next to Dugan Marsh.

Although they had trained together back at Academy headquarters and were now on Team Cousteau together, Cruz kept his distance from Dugan. The boy from Santa Fe, who was Ali Solimon’s roommate, had made it clear from the start he didn’t think Cruz belonged here. Dugan often made rude comments about Cruz getting special treatment because his aunt was their anthropology professor. It wasn’t true. If anything, Aunt Marisol had made Cruz work harder to prove himself.

Still, that didn’t stop Dugan from needling Cruz every chance he got. It also hadn’t helped that Cruz had walloped Dugan in Monsieur Legrand’s Augmented Reality Challenge obstacle course—the ARC—in fitness and survival training class. Maybe being on the ship was the fresh start they needed. Cruz was certainly willing to give it a try. “How’s it going, Dugan?”

“Wonderful,” said Dugan with about as much enthusiasm as a sick slug.

Cruz opened his bag of trail mix and offered the bag to his teammate.

“Are we supposed to eat in here?” snapped Dugan. “Or did you get your aunt to change the rules just for you?”

Strike two. Cruz didn’t need a third strike to tell him Dugan wasn’t interested in a new beginning. He pivoted his chair toward friendlier territory, aka Emmett. Looking around, Cruz did not see a sign saying NO FOOD. Even so, he slid the bag into his lap and ate a little faster in case Dugan was right.

Cruz tried to ask Emmett about his progress in the tech lab; however, with his mouth full, “How’d it go at the tech lab?” came out “Half hid a goat atheck lap?”

A bewildered Emmett stared at him for a few seconds, his emoto-glasses changing from their usual solid lime green ovals to a rushing current of seafoam and sapphire. “Oh, I gotcha. Not so good. The nano-processors sync up on the computer sim runs, but in human trials, I can’t get the textile to respond to cerebral cortex functional reconstructive commands—or even basic pigmentation alterations, for that matter.”

“So nothing happens?”

“That’s what I said.”

Cruz was about to reassure Emmett that he would figure it out, when Sailor leaned behind Emmett. “Got it!” She was clutching her tablet and the postcard. “Henson was born in 1866, and fortunately, I didn’t have to read far—1866 is the third word in the book. Here you

go.” She handed the postcard to Cruz.

He saw she had assigned each of the numbers a letter, as he had instructed. Aunt Marisol’s message read: *Welcome aboard*.

“Thanks for letting me be your cryptographer,” said Sailor. “That was fun.”

“Anytime.”

“Good afternoon, explorers!” Taryn Secliff breezed into the room.

Taryn was their class adviser, and the “mom” of their group. She gave advice, helped solve problems, and made sure everyone was where they were supposed to be, doing what they were supposed to be doing. As Taryn passed Cruz, he saw Hubbard, her West Highland white terrier,

at her heels. The little dog was wearing a bright yellow life vest. Taryn took a seat at the head of the table. She searched their faces. “How are we all doing? Settling in? Getting your sea legs? Excited to explore the world?”

Nudging Emmett, Cruz nodded to the empty seat across from him and whispered, “Bryndis isn’t here.”

Bryndis Jónsdóttir, the fifth member of Team Cousteau, had come to Cruz’s rescue after he had been falsely accused of cheating and expelled from the Academy. Her detective work revealed it was Renshaw McKittrick, another team member, and not Cruz, who’d



hacked into their CAVE training programs and altered them. Cruz owed Bryndis a lot. Plus, he liked her a lot. Cruz was starting to think maybe she liked him a little, too.

Emmett and Cruz looked at each other. Should they say something about Bryndis?

Taryn cleared her throat to signal they were starting. “On behalf of the faculty, staff, and crew of Explorer Academy, it’s my pleasure to welcome you aboard *Orion*, the flagship of the Academy’s fleet. For the remainder of your time with us, this will be home. And as such, we expect you to treat it with care. Please keep your cabin and the lounge areas clean. We also expect you to follow the same rules you did back at Academy headquarters. No leaving the ship without permission or adult supervision, no visitors on board without prior approval, and all issues with roommates, teammates, faculty, homework, health, and everything else are to be brought to my attention. Most of the ship is at your disposal, so if you haven’t already had a chance to take the tour and meet the crew, please do so when we finish here. Questions?” Taryn was searching their faces. “None? Moving on. Second order of business: Classes resume tomorrow two doors down in Manatee classroom at eight a.m.”

There were a few groans—the biggest from Dugan.

Taryn pursed her lips. “This is not a vacation cruise. While we’re at sea, you’ll be expected to follow the same school schedule you did at the Academy. First period, conservation; followed by anthropology, fitness and survival training, biology, world geography, and journalism. Whenever we dock, classes will be suspended during our time in port.” As they started to cheer, Taryn held up a hand. “Before you get too excited, this is because your professors and guest instructors will have missions for you to complete on shore. You’ll learn more about those as we go, but don’t expect a lot of free time. Questions? None? Moving on. Third item—”

Cruz couldn’t take it anymore. He lifted his arm. “Taryn, Bryndis isn’t here.”

“That is true,” she said evenly. “As I was saying, third item . . .”

Cruz dropped his arm. Shouldn’t their adviser be more concerned that an explorer was missing? What if Bryndis had gotten lost? Or was sick? Or had fallen overboard?

Rising from her chair, Taryn moved toward a connecting door behind her. She grabbed the knob and flung the door wide open. “. . . your official Explorer Academy uniforms!”

Cruz’s breath caught. Bryndis! The tall, fair-haired Icelander stood in the doorway, one knee bent, like a fashion model. She wore a light gray zippered jacket with a high collar. Dark gray fabric trimmed the square shoulders and cuffs. On the front of the jacket were four diagonal pockets—two on the chest and two on the hips. Pinned to the jacket above the top-right pocket was a black rectangle with the letters *EA* in gold. On the left collar was a button or pin that looked like planet Earth. Straight-legged pants matched the jacket, with light and dark shades of gray. A mock-turtleneck tee the color of moss poked out the top of the jacket. From her pinkie dangled a pair of round bronze sunglasses that looked like stacked machinery gears.

A grinning Bryndis strolled into the conference room with two women trailing behind her. The first looked a few years older than Aunt Marisol. She wore a white lab coat, a light blue button-down shirt, a black knee-length skirt, and nurse’s shoes. She carried a tablet twice the size of the explorers’ standard-issue computer. The other woman, about Taryn’s age, shuffled in wearing shredded jeans, a faded pink tee, and red flip-flops. She’d tied a tiger-print scarf around her head and was dipping her hand into a bag of pink jelly beans.

“Explorers, please meet our tech lab chief, Dr. Fanchon Quills, and her assistant, Dr. Sidril Vanderwick,” said Taryn. “They are the brains behind much of your wearable technology and are joining us to explain its main features. Fanchon?”

Cruz turned toward the lady in the lab coat, her blondish brown hair pulled back into a bun so tight it was stretching her cheeks back.

“Thank you, Taryn,” said the woman with the tiger-print head scarf.

Cruz did a double take. *That* was Dr. Quills? The one that looked like a college student on her way to the beach and was eating candy?

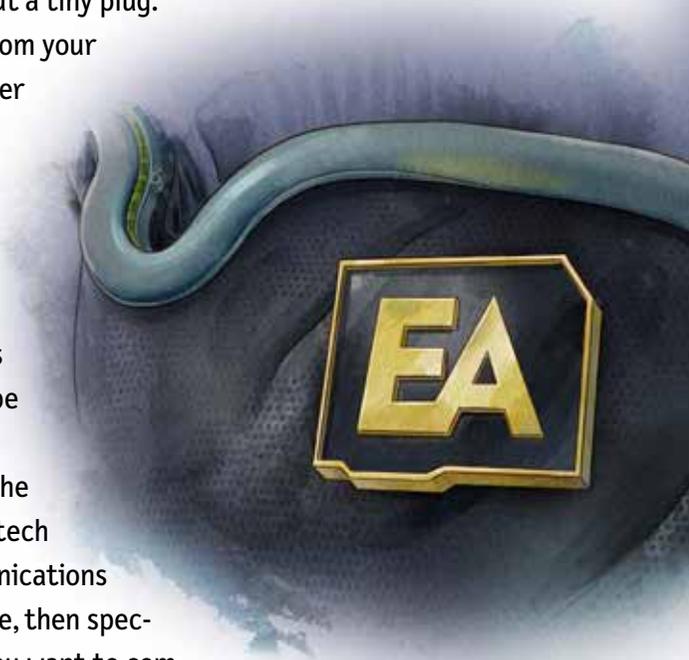
“Please, everyone, call me Fanchon.” Dr. Quills set her jelly beans on the table so she could gesture toward Bryndis. “Your Academy uniforms utilize state-of-the-art technology. The material is developed by our own Society scientists. It’s designed to help keep you cool in warm climates and blocks 99.9 percent of the sun’s harmful rays. It’s water-repellent, bug-repellent, reptile-repellent, and antibacterial. In your lower-left pocket, you’ll find a small charging port.” Bryndis unzipped the pocket and brought out a tiny plug.

“This converts the heat from your body to electricity to power your tablet, cell phone, or any other digital device.”

“Did you see that?” Cruz pounded Emmett on the shoulder.

“I saw. I saw.” Emmett’s glasses were a kaleidoscope on hyperdrive.

“Notice the EA pin on the top right,” continued the tech chief. “This is your communications system. Press it firmly once, then specify who you are and who you want to communicate with. You can reach a crew member, explorer, faculty member, or anyone with a similar pin within a twenty-five-mile radius of your location. The signal can be boosted, of course, if necessary. Press the EA pin twice, and it becomes a global translator, allowing you to understand and converse in more than six thousand languages. The planet Earth insignia activates your personal GPS system.” Bryndis tapped the round blue-and-green pin on



her left collar. In an instant, it emitted a holographic overlay of the third deck of the ship in front of her!

Cruz's bag of trail mix hit the floor.

"This will allow you to find your way around most anyplace in the world," explained Fanchon. "Your holo-map includes augmented-reality features, such as museums, historical sites, restaurants, or pretty much whatever you request. As you move, the map and elements will change, according to your position. This view is public mode. Put on your sunglasses to switch to private mode so that only you will see the display."

Bryndis placed the cog-like sunglasses on her nose, and the holographic image instantly disappeared. "I can see everything perfectly," she verified. The lenses looked cool, though Cruz wondered if Bryndis could see the real world as well as she could see the virtual one.

"I am happy to take your questions." Fanchon Quills scanned the room. The usually inquisitive explorers were speechless, including Cruz.

"Not one question?" Taryn cocked an eyebrow. "Come on. The time to ask is now, not when you're out on a mission. Speak up!"

"Arf!" barked Hubbard.

Everyone giggled.

"You'll find complete operating instructions for your uniform and its technology on your tablet," explained Taryn. "Please carefully review them." Her gaze settled on Cruz. "Because one day, this uniform might save your life."

Cruz understood. Only a few days ago, he had come as close to death as he'd ever been.

Malcolm Rook, Explorer Academy's librarian, had been secretly working for Nebula. Cornering Cruz and his dad in the special collections of the Academy's library with a laser, Mr. Rook planned to steal the holo-journal and kill Cruz and his father. He might have succeeded, too, had Cruz not commanded Mell to attack at the last second. The persistent stings of the faithful drone caused Rook to misfire, and the laser had only grazed Cruz's arm. He was lucky, he knew. Cruz slid the

right sleeve of his tee up a few inches. The small football-shaped burn scar on his upper right arm was nearly gone.

Everyone was lining up to get their uniforms. Cruz stood, too, and waited behind Emmett. However, while his 22 classmates were bubbling with excitement, Cruz remained quiet. He was worried. Fanchon had said their uniforms were every kind of "proof" imaginable: waterproof, sunproof, bugproof, reptileproof, even germproof. But she had left one very important "proof" off that list.

Bulletproof.