



ANTARCTIC
PENINSULA

**NEVER BELIEVE THAT A
FEW CARING PEOPLE CAN'T
CHANGE THE WORLD. FOR, INDEED,
THAT'S ALL WHO EVER HAVE.**

**—Margaret Mead, anthropologist
(1901–1978)**

21.8921° N | 160.1575° W

▶ **“WE’VE GOT ’EM** this time!”

whispered Bryndis. She was squeezing Cruz’s hand so hard his fingertips were turning white. “We’re going to beat Team Magellan!”

Things *did* look promising. Heads shook and hisses flew as Ali, Zane, Kat, Matteo, Yulia, and Tao huddled up. For nearly an hour, the four explorer teams had been battling it out in *Orion’s CAVE*. Cruz was frazzled. He could tell his teammates were, too. Lani’s cheeks were flushed and shiny, a chunk of Sailor’s ponytail had escaped its band, and Emmett’s emoto-glasses resembled a couple of chocolate doughnuts left in a car on a hot day. Dugan shifted like a goalkeeper ready to defend against a penalty kick. However, this was no soccer match. This was a brain-busting, heart-hammering, take-no-prisoners geography bee.

Each team had 30 seconds to answer a question from Professor Modi that might or might not include a holographic element. Get the question right, and their teacher moved on to the next team. Get it wrong, and you earned a strike. Three strikes and your team was out.

Galileo was the first to be eliminated, followed by Earhart several rounds after that. Cousteau and Magellan had fought on. Back and forth they’d gone in the virtual reality chamber, tossing out facts about cities and countries, bodies of water, deserts, mountains, parks, and monuments. Cruz had lost track of the number of rounds. Now both teams had two strikes. Cruz’s team had already answered their

question correctly. If Magellan couldn't do the same, Cousteau would be crowned geography bee champion.

The prizes were worth the torture. The winning team would get first pick on their next mission. Every member would also be awarded 100 bonus points. Finally, each would get a high-definition ultra-sensitive ingestion analysis upgrade to their Portable Artifact Notation and Data Analyzer (PANDA) device. Cruz wasn't exactly certain what that meant, but it sounded good.

Standing in a holographic forest of aspen trees with golden leaves, Cruz drew in a hopeful breath. He wanted the rewards, sure, but he also needed to win at *something*! He'd been pretty down the past few weeks, since discovering that the seventh piece of his mom's cipher was not genuine.

"The angle of the top inside edge on this one *is* different," Emmett had proclaimed after carefully examining the black marble fragment through his magnifying emoto-glasses. "You have to get really close to see it, but your mom was right. It's not one of hers. The pieces must have been switched."

"Switched? How can that be?" Sailor spun to Cruz. "I thought as long as you have it around your neck it's protected by your bio force field."

"It is, but I don't wear it *all* the time," Cruz reminded her. "I have to shower, you know. I also take it off when we scuba dive ..."

"Jaguar!" accused Sailor. "The explorer spy took the seventh piece."

"Maybe," cautioned Emmett.

"What do you mean 'maybe'? Dr. Vanderwick was Zebra, and she's no longer a threat," she argued. "It *has* to be Jaguar."

Emmett shook his head. "Not necessarily. The switch could have happened before we found the dragon's blood warrior."

"Why not check it against the first photos Cruz took of the piece?" suggested Lani. "That should at least tell us *when* it was swapped. Cruz, could you ask your dad to send it back?"

Each time Cruz found a new piece of the cipher, he'd immediately snap a couple of pictures and message them to his father. He would then

delete the photos from his tablet and run a program to record over the data so the images could not be recovered from his computer's trash bin. "Uh-oh!" moaned Cruz after opening the file on his tablet. "I didn't overwrite the photos. After we left the museum in Xi'an ... in the car ... I called Bryndis to update her, and I—I guess I must have forgotten ..."

"We know, head in the clouds," teased Sailor.

She'd made light of it, but everyone knew it was a costly error. Cruz had opened the door for someone to hack into his tablet, nab the photos, and create a fake piece to trade for the real one. Lani was right about the picture, though. If the edge of the stone in the image matched the one Cruz wore now, then the exchange had occurred *before* they'd ever made it to the Terra-Cotta Army museum. If not, the piece had been swapped *after* they'd found it, placing Jaguar as their prime suspect. Cruz sent the photo to Emmett, who spent forever studying it. When, at last, Emmett glanced up, gray beads bounced through the emoto-glasses. "It's not the same."

To Cruz, this was the best scenario possible, given the situation. If Jaguar had the cipher, there was a chance it was still on board *Orion*. Cruz had sent his honeybee drone, Mell, on a shipwide search for the stone. Of course, there were places even a bee couldn't go, like inside a drawer that was shut tight or a zippered backpack. There were also some places she didn't dare go, such as the galley. Chef Kristos would have lost his top if he'd have found an insect in his kitchen, robotic or otherwise. Still, the MAV was able to sweep *most* of the ship. She'd found nothing. Was Cruz too late? Was the seventh cipher already in Nebula's hands? He could only pray that it wasn't.

In the meantime, as *Orion* sailed east, Cruz worked to advance his mom's journal to unlock the final clue. He'd patiently explained the situation to his holographic mother. He'd asked for her help. Begged. Sulked. Demanded. Yet, no matter what he said or how he said it, her response remained the same. She calmly refused to unlock a new clue. It had left Cruz with only one option. By bedtime tonight, he would know if his last resort would work.

“Fifteen seconds!” Professor Modi’s pronouncement jolted Cruz back to the present.

Cruz looked up at the white-barked aspens, their autumn leaves fluttering against a vivid blue sky. This place was beautiful, but he had no idea where they were.

“Magellan won’t get it,” Lani said quietly to Cruz. “I only came across it while reading about how trees communicate.”

She was kidding, right?

Lani caught his look. “It’s true. Trees can communicate with each other using fungus filaments known as mycelium. See, the mycelium grows into the tree roots, allowing some trees to connect using chemicals and electrical signals. One tree can tell others when it’s in pain, or warn of dangers, like insect infestations or drought.”

She *wasn’t* kidding.

Cruz was still a bit skeptical. “You’re telling me trees talk to one another?”

“They do more than that.” Her eyes brightened. “They take care of each other, too. Older trees will send water and nutrients to saplings through the system to help them grow. It’s called the mycorrhizal network. Professor Ishikawa says there are miles of mycelium in just a teaspoon of forest soil. It’s kind of like nature’s fiber-optic cable. They even nicknamed it the wood-wide web. Cool, huh? Professor Ishikawa told me we’ll be studying it in biology next year, but I’m not waiting. I’m trying to speak ‘tree’ now.”

Of course she was.

“Time!” called Professor Modi. “Zane, I’ll need Magellan’s answer.”

“Uh . . . uh . . .” Zane swallowed hard. “We’re gonna say . . . Utah?”

Professor Modi lifted his tablet. “Pando is a grove of more than forty-seven thousand quaking aspens spanning a hundred acres that share a single root system . . .”

Cruz elbowed Lani. “Hey, I bet they have great conversations.”

She rolled her eyes.

The professor was still talking: “. . . is one of the oldest and largest

organisms on our planet. It’s located in the Fishlake National Forest in *Utah*.”

Team Magellan cheered. Team Cousteau groaned.

“Crikey!” Sailor did a facepalm. “Will it ever end?”

“It will, and soon,” declared Professor Modi. “We have five minutes left in class, just enough time for a final tiebreaker to decide the winner.”

The CAVE erupted in applause, with Teams Earhart and Galileo clapping the loudest. Since being eliminated, they’d had to sit and watch Cousteau and Magellan go toe to toe.

“The category is a place on the map,” said Professor Modi. “I will begin listing clues. General at first, then more specific. The first team to buzz in and correctly identify the location I am describing will be declared the winner of this year’s freshman geography bee.”

A red buzzer on a stand materialized in front of Dugan.

“Teams, a reminder to confer before you answer,” said their teacher. “I can only accept your *first* response.”

Cruz felt a breeze cool his forehead. The smell of fresh grass tickled his nose. A carpet of green grass rolled under the soles of his shoes. The meadow headed for the wall behind their professor, ending at a rocky coastline. Beyond the shore was a wide blue sea. To his left, Cruz saw steep, jagged cliffs, and on his right a dirt road cut through the rolling hillside. A lazy train of cottony clouds chugged across a late-afternoon sky, their shadows trailing on the ground below. Cruz swiveled his neck. The wall behind them was still a blank canvas. Interesting.

“Clue number one,” said Professor Modi. “You are on a tropical island that measures sixty-three square miles. A trio of volcanoes, now extinct, is responsible for forming its triangular shape.”

Team Cousteau circled up. They threw out a few possibilities, like Jamaica and Vanuatu, but nobody was certain.

“Better to wait than make a wild guess,” advised Lani.

Magellan wasn’t hitting their buzzer, either. Cruz saw that the wall behind them was still black. *Odd*, he thought. Shouldn’t it be part of the scenery, too?

Emmett had noticed it as well. “Must be a malfunction,” he muttered. “Clue number two,” continued Professor Modi. “The original Polynesian inhabitants called this island Rapa Nui, but we know it by a different name, thanks to a Dutch explorer who landed here on a particular day in 1722.”

“Polynesia!” Sailor grinned at Lani and Cruz. “We’re in the South Pacific.”

“Could it be Kaho’olawe or Ni’ihau?” Cruz named the smallest islands in the Hawaiian chain.

Lani bit her lip. “Kaho’olawe is triangular, but—”

“The landscape’s wrong,” Cruz realized his mistake. “I don’t think there’s this much grass there, and the soil is red.”

“Ni’ihau isn’t triangular,” noted Lani. “The terrain is likely similar to Kauai’s, but I’m not completely sure. I’ve sailed around the island but never set foot on it. You?”

Cruz shook his head. Ni’ihau was a private island. You needed permission to visit.

Professor Modi was clearing his throat. Neither team had answered, and he was ready to give the next hint. “Clue number three: The island is known for its *ahu* and *moai*.”

“Ahu?” Dugan rubbed his chin. “Isn’t that sushi?”

“You’re thinking of ahi,” said Bryndis. “Tuna.”

Moai. The word sounded familiar to Cruz. He started to ask Lani if it could be a Hawaiian word when she blurted, “The big heads! You know, the stone statues on—”

“Easter Island!” piped Sailor.

That was it!

“Does everyone agree?” asked Dugan. When all hands shot up, he smacked their red button.

Zooooooooonk!

It blared through the CAVE. Cruz saw that Zane had his hand on Magellan’s button. Oh no! Both teams had buzzed in at the same time! Kwento moaned. “Another tie.”

“Cousteau was first,” said Weatherly.

“No, Magellan,” countered Femi.

Voices filled the CAVE as the rest of the explorers ventured their opinions.

“Hold on, hold on!” Professor Modi was typing on his tablet. “I’ll check the replay.”

Lani glanced at Cruz. “There’s a replay?”

He gave Monsieur Legrand’s usual response: “*Tout est vu.*”

“Everything is seen,” said Lani’s translator.

“While you’re waiting,” remarked their teacher, “it might interest you to know that for the past twelve years a member of the winning geography bee team has *also* received the North Star award.”

Cruz nudged his roommate. “It’s gonna be you. You’re gonna win.”

“Nah,” said Emmett shyly, though he couldn’t hide the yellow-and-pink strings pulsing through his glasses like kite tails in a brisk wind.

“Got it!” called Professor Modi. “The first team to ring in was...”

A hush fell over the room. Cruz felt his heart beating in rhythm to the word that pulsed in his brain: *Cousteau. Cousteau. Cousteau.*

“Magellan.”

Cruz crumpled. They’d lost.

“Team Magellan, I’ll need your answer,” said Professor Modi, but it was merely a formality. Magellan would get all the great prizes and bragging rights. And boy, would Ali and Matteo brag. Cruz stubbed his toe into the grass.

“Christmas Island,” said Zane.

Cruz’s head shot up. He locked eyes with Lani. Her jaw dropped. So did his.

“That is incorrect.” Their teacher shifted his gaze. “Cousteau, you now may—”

Dugan pounced. “Easter Island.”

“Correct.” Professor Modi smiled. “Congratulations, Team Cousteau!”

Cruz slapped palms with Lani, Sailor, Emmett, and Dugan. When he got to Bryndis, he grabbed her hand. She held on, curling her fingers

around his. They'd done it. They'd won the bee!

Professor Modi was gesturing to the wall behind the teams. It was no longer blank! The hillside the explorers stood on now continued up to a U-shaped volcano, its cone long since blasted away. A giant stone head materialized only a few feet from Cruz. The rough, charcoal-colored statue was as tall as the second-floor apartment and attic of the Goofy Foot surf shop! A few yards to the right, another gigantic head appeared on the grass slope, then another and another, until a dozen or so moai were scattered across the meadow. Each carving had similar geometric features: prominent foreheads, deep-set eyes, large noses, and stern mouths. Only one head stood straight. The rest, some with shoulders peeking above the ground, were either tipped forward or backward or leaning to one side.

"You are standing at the base of Rano Raraku volcano," explained Professor Modi. "This is the main quarry where

the Rapa Nui mined tuff to carve these moai. The statues were part of their religious rituals. There are more than eight hundred of these completed monolithic carvings on the island, ranging from six to thirty feet high. Each one weighs as much as a school bus. The term *ahu* that I gave in the clue refers to the shrines and platforms beneath some of the moai."

Several explorers had their hands up.

"Questions will have to wait until tomorrow, I'm afraid," said their teacher. "We're already running over time. Again, congrats, Team Cousteau."

The lights were dimming in the CAVE. Cruz felt a cold ping on his head. The chubby white cumulus clouds of a moment before had become ominous dark cumulonimbus thunderheads. The sky tumbled and churned like a stew boiling over a pot. A zigzag of light flashed.

Boom!

It began to hail. Shielding their heads, the explorers raced for the



exit. The ice pellets bounced off Cruz's head and arms. They stung!

Weatherly was waving her OS band in front of the scanner at the door. "It won't open!"

Others also stepped in to try but the sliding partition did not move. The hail was coming down harder and faster. The chunks of ice were getting bigger, too.

"Ow!" yelled Lani when a jawbreaker of a hailstone smacked her shoulder.

"Take cover!" yelled Professor Modi. He motioned to a long, horizontal bulge of rock jutting out of the side of the volcano. "I'll try to stop the program from the main panel." He ran for the console in the opposite corner of the CAVE, while the explorers scrambled to safety under the ledge. Cruz was on the end, closest to the professor, yet could hardly see him through the white curtain of hail. Their teacher was frantically typing on the keyboard, but the weather was only getting worse.

Cruz hit his comm pin. "Cruz Coronado to Fanchon Quills."

"Fanchon, here," came the reply. "Hey, shouldn't you be in class?"

"I am!" he cried. "We're in the CAVE, and we need—"

"What game are you playing? It sounds like you're dropping marbles on a tin roof."

"No game ... We're in trouble ... We've got hail the size of tennis balls coming down in here. Fanchon, we need—" Cruz's jaw fell open.

It was white. And huge. And coming right at him!

"Cruz?" shouted Fanchon. "CRUZ?"

▶ CRUZ SAW A SWISH of blond

hair, then an arm, and before he could blink again, a missile of ice the size of a watermelon was smashing into the ground. It shattered into thousands of crystal shards. Bryndis stood between Cruz and the broken hailstone. She whirled around, fists clenched and eyes blazing. "You okay?"

Cruz managed a nod. "Yeah-huh."

"Nice spike, Bryndis," crowed Dugan.

"Look out!" warned Sailor.

Dodging another melon of a hailstone, Bryndis shoved Cruz back under the ledge with the others.

"That was crazy," said Cruz, his heart wildly thumping.

"But thanks."

"I know."

Bryndis pushed her hair out of her face. "And you're welcome."

"Cruz, are you

