Name: _____ Date: _____

The Slow Leak

Reading level 12 (8th grade) · 1734 words

Imani Okoye drank her water the way other people read a book, slowly and all the way to the end, and on Kestrel Station that was the only respectable way to drink it. Every glass of water on the station had been something else first. It had been a shower, or the steam off a pot of rice, or the sweat on a farmer's neck, and the reclamation plant had collected all of it, purified it, and circulated it back around the wheel. Imani found that fact oddly comforting. So on the ninth morning of spring cycle, when she held her glass up to the light and noticed a bead of silver on the inside, she did not simply keep drinking. She set the glass down and observed it carefully.

The bead was no bigger than a grain of salt, but soon there were two, then five, then a whole crowd of them, shimmering along the glass like tiny pearls. Water that has sat motionless for ten minutes has no business doing that. Soda fizzes, but the water on Kestrel had always come out flat and calm. One by one the bubbles let go and drifted toward the surface, which on Kestrel meant toward the middle of the wheel. The station rotated three times a minute, and the spin pressed everyone against the rim, like water in a bucket swung on a rope.

"Papa," she said, "why would still water start to fizz?" Her father managed the reclamation plant, and he answered most questions the way he answered this one, half asleep and precisely right. "Gas hides in water like a person in a crowd," he said, without looking up from his tablet, "and it remains hidden only while the air pressing down is thick enough to hold it there. Thin the air, and the gas climbs out." He sipped his tea, then stopped, and for one second he looked at her, and she looked at him. "The air is fine," he said. "If it were not, the alarms would ring."

Imani went to the gauge beside their front door anyway. It was the old kind, with a needle and a glass face, installed by the original crew because they had not trusted electronics, and a white line marked how much pressure the air was supposed to have. The needle rested just beneath the line. It was not far under, and if she had not been staring she would have called it perfect, but it was a hair's width low, and Imani had spent twelve years learning how much a hair's width could matter. She took her notebook down the corridor to the next gauge, and the next, and copied each reading onto the palm of her hand because her hand was quicker than her pencil.

The numbers were declining steadily, and the gauge at the end of her corridor matched hers, but at the bottom of Spoke Four the needle had slipped another hair below the line, as though the air were draining slowly down a hill that nobody could see. Down was the floor under your shoes, and up was the hub. Imani ran, for running followed its own peculiar rule on Kestrel,

one that every child learned before learning to read. Run with the spin and you grew heavier, because you were adding your speed to the wheel's, but run against it and you weighed so little that your feet barely touched. Imani ran against it, light and quick, with a ribbon from her braid tied around her wrist.

At every ventilation grille she stopped and held out the ribbon. At the first two it hung limp, but at the third it lifted and stood out sideways, steady as a pointing finger, and she followed where it pointed. Air was traveling through the station, and it was traveling toward the farm. She climbed Spoke Two to the Engineering Shop, where each rung made her lighter until she floated through the hatch, and she found Chief Engineer Bram Halloran at his workbench with a mug of tea. He was extraordinarily old, with bristling white eyebrows and the shoulders of someone who had once carried heavy equipment for a living, and he listened to her whole story without a word.

"The computer says we sit at one hundred and one," he said at last, turning to the wall display. "The alarm sounds if we lose five, or if we lose one in a single minute. You are telling me we are losing it slower than either." Imani nodded and said, "About a hair an hour, I think, but the needles are not exact." "No," said Bram, and his face did not smile although his eyebrows did something remarkable. "Neither am I. Show me the farm." He drained the mug in one long swallow and set it down like a man closing a book.

The farm module hung from the rim like an enormous green barn, packed with wheat and tomatoes and beans on racks that climbed to the ceiling, with grow lamps humming overhead. Bram carried a more accurate instrument than any on a wall, a silver brick with a bright little screen, and he held it up at the doors, the racks, and the long middle aisle without comment. At the far end, where the air smelled of tomato leaves and warm metal, he stopped, read the number, and read it again. "It is dropping faster than you said," he told her quietly. "Faster than it was ten minutes ago." He took a pencil from behind his ear and began to calculate on the back of his hand.

"A crack that small should hold," he said, "except that this whole wheel flexes a little every time it turns, and every turn the crack opens a hair more." He looked up. "By my arithmetic, the air in this module will be too thin to breathe four hours from now. At that point Kestrel seals the doors, and a sealed farm stays sealed. We lose the wheat, the beans, the tomatoes, everything green we own." Somewhere above them a ripe tomato dropped from its vine and rolled to a stop beside Imani's shoe, and her mouth had gone completely dry. "Then we have to find the crack in less time than that," she said.

"We have to find it and repair it," said Bram, "and I am eighty-one years old." But he was already moving. The farm manager, Mr. Alvarez, led his workers out of the far end, and Bram sent half of them to switch off every fan in the module, because a loud room conceals a small sound. When the fans died the farm became so quiet that Imani could hear her own

heartbeat. Underneath it, thin and high and extremely far away, there was a whisper, like someone saying the letter *s* and never running out of breath.

The whisper guided them to a corner where an irrigation pipe passed through the outer hull. A steel collar encircled the pipe, and the collar sat behind a wall of racks and a tangle of cable, in a gap no wider than a bookshelf. Bram crouched at the opening and let out a long breath. "I cannot get in there," he said. "Not with these knees." "I can," said Imani. "I know," said Bram, and he did not argue, and she admired him a little more for that. He handed her a lamp, a long wrench, and a tube of gray putty designed to mend a hull. "It hardens under pressure in twenty minutes. Keep it off your skin. And find the crack before you guess."

She slid into the dark with her back against cold steel. It smelled of old pipe and dust, the whisper was louder here, and the escaping air tugged at her sleeve the way a cat tugs when it wants to be fed. She lifted the lamp and saw a ring of white weld but nothing that looked like a break. Then she remembered the dish soap that the farmers kept for scrubbing their tomatoes. She called out, and a bottle came sliding through the gap. She mixed a palmful with water and smoothed the foam around the weld with one finger. For a slow second nothing happened, and then at the very edge of the collar the foam swelled into a bubble the size of a pea.

It grew and grew into a shining dome with the lamp inside it, and Imani laughed out loud inside the pipe. A bubble had told her the first secret that morning, and now another was telling her the last. "Found it," she called. "It is on the left side, and it is blowing a bubble at me." "Good," said Bram's voice, dry as paper. "That is hour three." She scraped the weld clean, pressed the putty into the seam with her thumbs, and bolted a steel plate over it while dust drifted through the lamp beam and every grain slid toward the crack, slowed, and stopped.

She counted the minutes aloud. At twenty the whisper thinned, at twenty-two it was only a breath, and at twenty-five she held a pinch of foam to the weld and the foam lay flat and dull and did nothing at all. Out in the farm somebody laughed, and then everybody did. Imani crawled out, gray to the elbows, and Bram held the silver instrument in front of her face. The number on its screen had stopped falling. While she watched it ticked upward once, and then once more, as the station's reserve tanks began to fill the farm with air again.

That night she lay awake in her bunk. Her father had come home late and hugged her with both arms and said nothing. Now the whole station hummed around her, the fans and the pumps and the scrubbers that cleaned the carbon dioxide out of the air, the reclamation plant, the farm. It was four hundred people's worth of machinery that she had never really listened to before. She listened now, one sound at a time. In the morning she poured a glass of water, held it up to the light, and found it clear, with nothing clinging to the sides. She drank it slowly, all the way to the end, and then she went and checked the gauge by the door anyway.

Questions

1. What was the first thing Imani noticed that was wrong?

A. Bubbles forming in her still glass of water
B. A siren in the corridor
C. A crack in the farm window

2. Why did the station's alarm stay silent?

A. The alarm was broken
B. The air was falling too slowly to trip it
C. Bram had switched it off

3. In the story, what does "sealed" mean in "a sealed farm stays sealed"?

A. Stamped with a mark
B. Closed off so no air passes
C. Covered with soap

4. Why did Imani, and not Bram, climb into the gap behind the pipes?

A. She had been told to wait outside
B. She was the only one with a wrench
C. She was small enough to fit

5. What did the soap bubble show Imani?

A. That the water was dirty
B. That the glue had dried
C. Where the air was escaping

Words to know

hub: wheel's center
gauge: measuring dial
sealed: shut airtight
reclamation: recycling
collar: pipe ring
pressure: push of air

Answer key: The Slow Leak

1. A. Bubbles forming in her still glass of water
2. B. The air was falling too slowly to trip it
3. B. Closed off so no air passes
4. C. She was small enough to fit
5. C. Where the air was escaping