

Moonwalk

by Ben Bova illustrated by Peter Bollinger



Genre

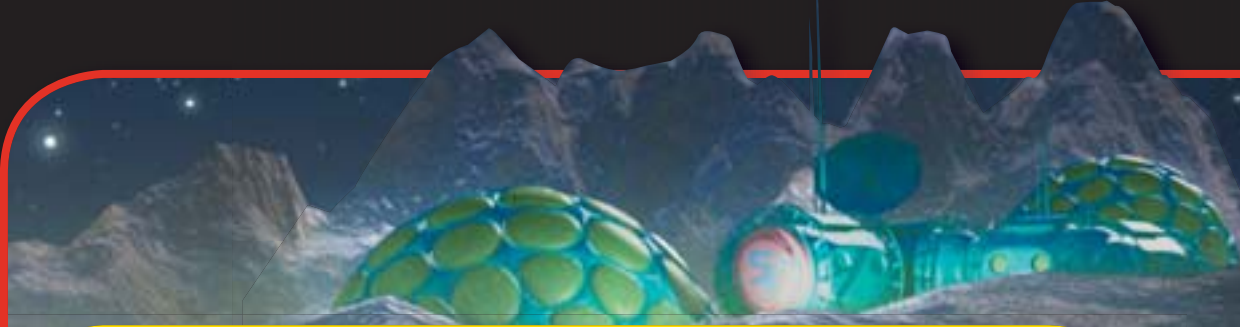
Science fiction is a story based on science. It often tells about life in the future. As you read this story about a walk on the moon, look for the scientific information on which it is based.



Question of the Week

What are the risks when walking on the moon?





"Bet you can't jump over that rille, Runt," Vern challenged. Gerry Kandel hated it when his older brother called him Runt. "Watch me, Runt," Vern taunted. "I'll show you how to do it." Inside his hard-shell moonsuit, with its big backpack and astronaut-type helmet, Gerry watched as Vern got a running start, kicking up lazy puffs of dust with each step. He sailed over the crooked crack in the ground, floating like a cloud until he touched down on the other side.

The boys were out on the floor of the giant crater Alphonsus. Their father had brought them along with him to the half-buried shelter fifteen miles from the main base. Dad had left them at the shelter and gone off with the tractor to inspect the new telescope that was being built still farther out on the crater floor.

Dad had told them to stay inside the shelter until he came back. But Vern wanted to go outside for a moonwalk. Now he was jumping over gullies in the bare, dark ground.

"Come on, Runt," Vern called from the other side of the rille. "Let's see you do it!"

Gerry glanced at the thermometer on the wrist of his moonsuit. It was 214 degrees below zero. Yet he was sweating inside his suit.

"What's the matter? You scared?"

Even though it was nighttime, it wasn't really dark. A big, blue and white Earth hung in the starry sky, shining beautifully. Gerry could see the rough uneven ground, the rocks and boulders scattered everywhere on the moon's surface.

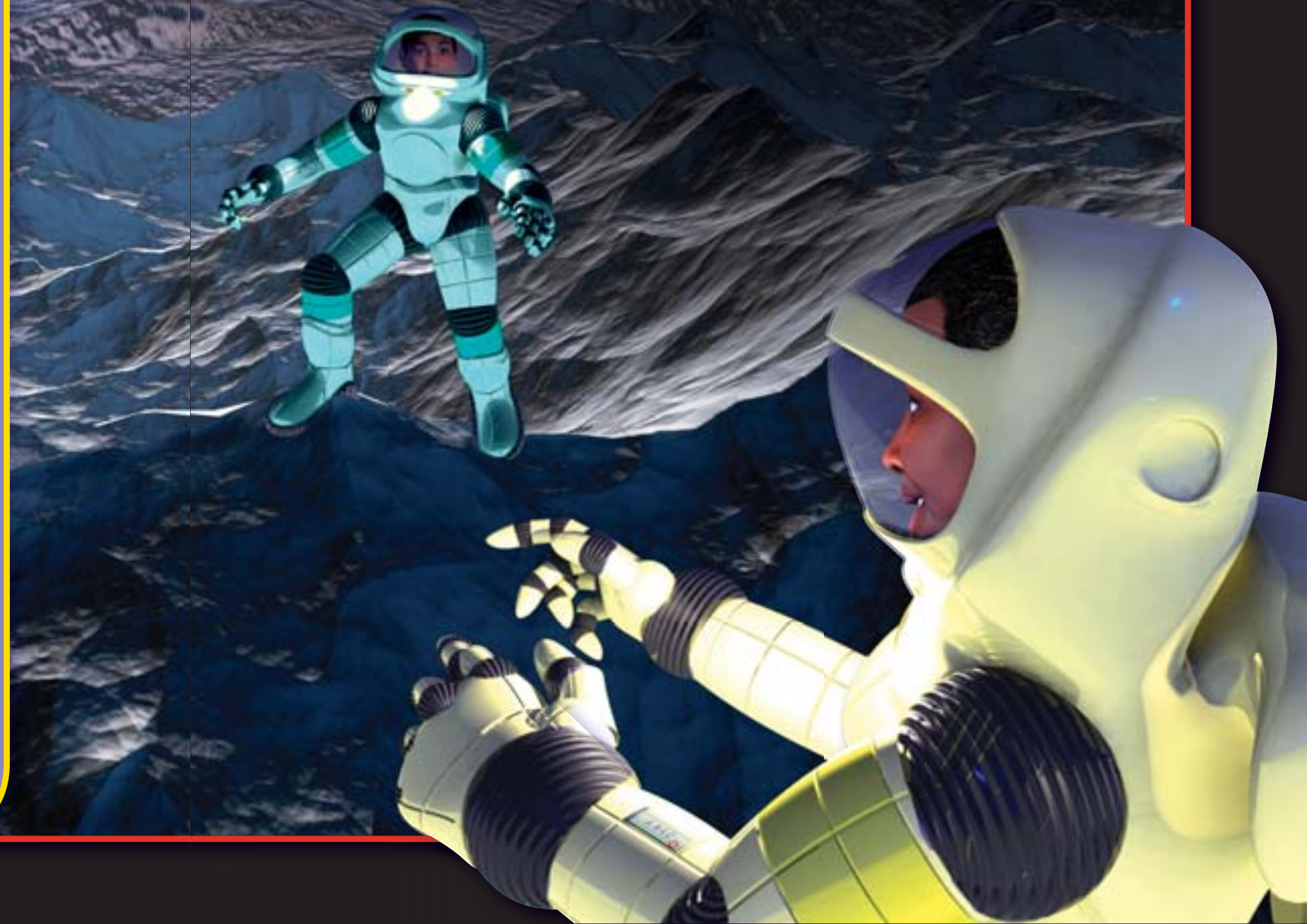
And the rille. A wide, meandering crack in the ground. "Well?" Vern demanded.

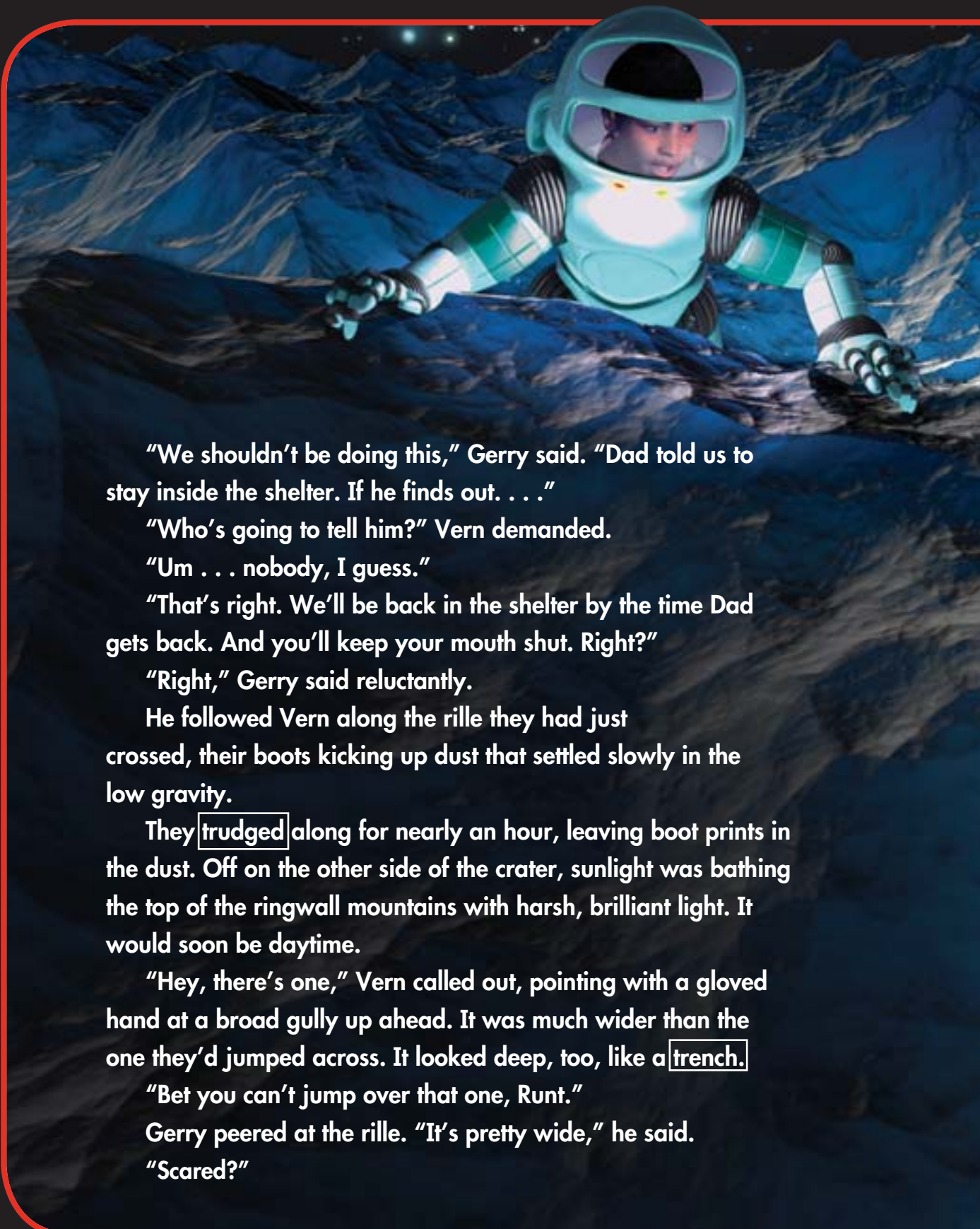
In the moon's light gravity, Gerry weighed only about thirty pounds, even with his bulky moonsuit.

"OK," he said into his microphone. "Here I come."

He took four running steps, then soared over the rille. It felt like flying. He stumbled when he landed, though. Vern grabbed him and kept him from falling.

"Not bad for a runt, Runt," Vern said laughing. "Now let's find a really big one."





"We shouldn't be doing this," Gerry said. "Dad told us to stay inside the shelter. If he finds out. . . ."

"Who's going to tell him?" Vern demanded.

"Um . . . nobody, I guess."

"That's right. We'll be back in the shelter by the time Dad gets back. And you'll keep your mouth shut. Right?"

"Right," Gerry said reluctantly.

He followed Vern along the rille they had just crossed, their boots kicking up dust that settled slowly in the low gravity.

They **trudged** along for nearly an hour, leaving boot prints in the dust. Off on the other side of the crater, sunlight was bathing the top of the ringwall mountains with harsh, brilliant light. It would soon be daytime.

"Hey, there's one," Vern called out, pointing with a gloved hand at a broad gully up ahead. It was much wider than the one they'd jumped across. It looked deep, too, like a **trench**.

"Bet you can't jump over that one, Runt."

Gerry peered at the rille. "It's pretty wide," he said.

"Scared?"

Gerry was, but he didn't want to admit it. He shook his head inside his helmet, then realized that Vern couldn't see it.

"Well? Want me to go first?"

Summoning up his courage, Gerry said, "Naw, I'll try it."

Gerry backed up several paces, then started running. In the light gravity, every step was a leap. The edge of the rille **loomed** up like the rim of the Grand Canyon. Gerry jumped as hard as he could.

He soared, sailing up and over the yawning trench, and landed almost perfectly. He hardly **staggered**.

Turning to look back across the rille at Vern, he called, "Nothing to it! Piece of cake!"

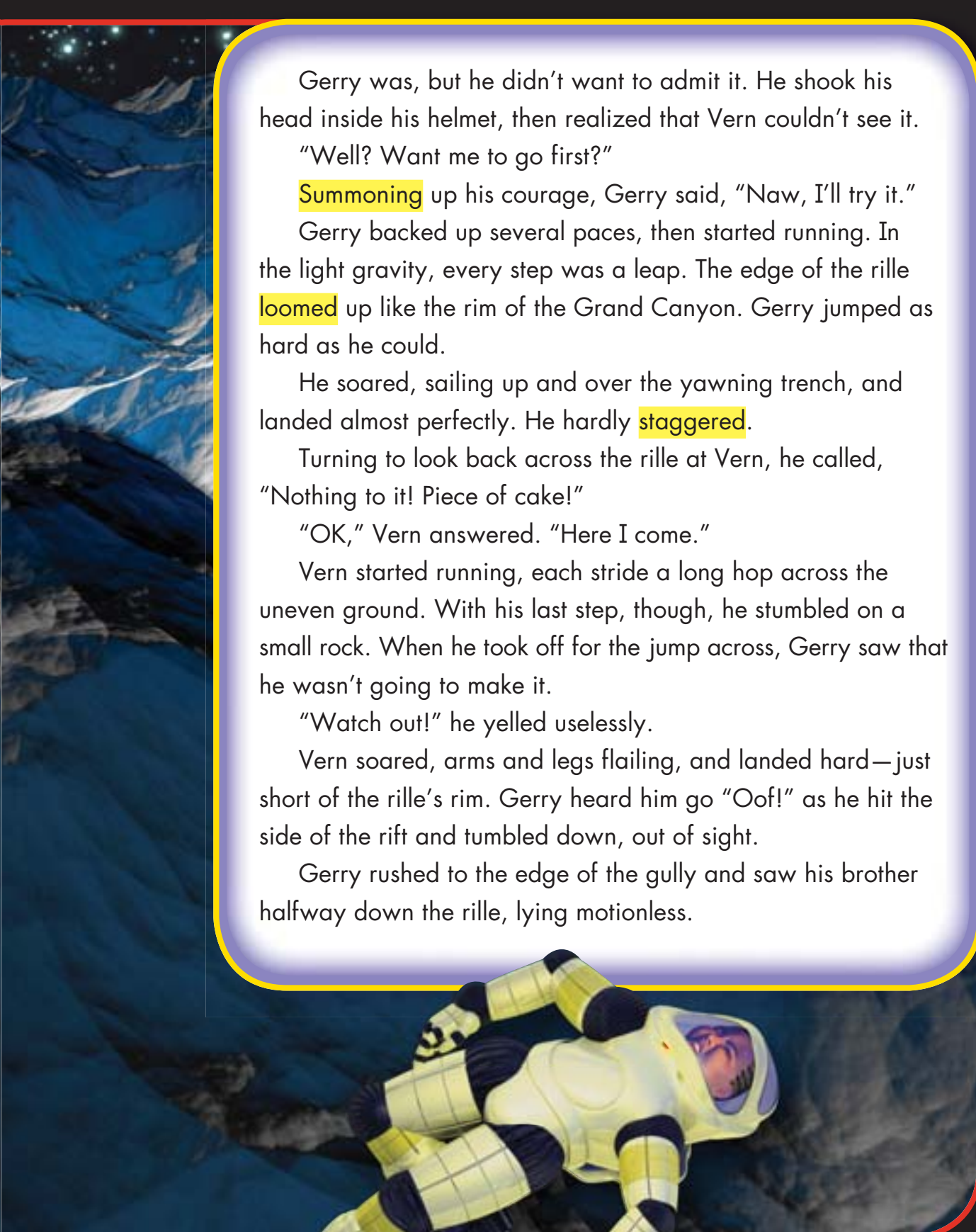
"OK," Vern answered. "Here I come."

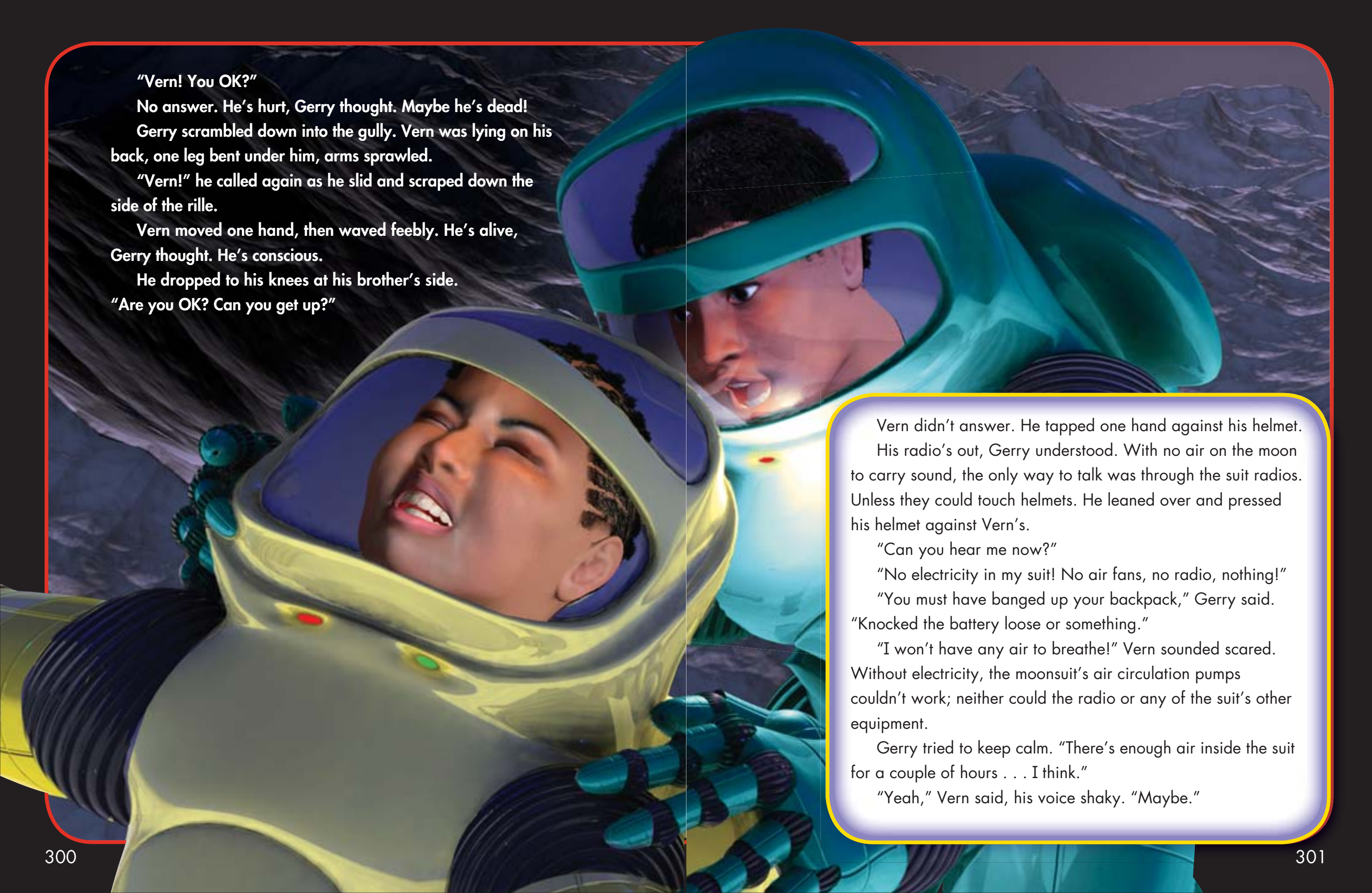
Vern started running, each stride a long hop across the uneven ground. With his last step, though, he stumbled on a small rock. When he took off for the jump across, Gerry saw that he wasn't going to make it.

"Watch out!" he yelled uselessly.

Vern soared, arms and legs flailing, and landed hard—just short of the rille's rim. Gerry heard him go "Oof!" as he hit the side of the rift and tumbled down, out of sight.

Gerry rushed to the edge of the gully and saw his brother halfway down the rille, lying motionless.





"Vern! You OK?"

No answer. He's hurt, Gerry thought. Maybe he's dead!

Gerry scrambled down into the gully. Vern was lying on his back, one leg bent under him, arms sprawled.

"Vern!" he called again as he slid and scraped down the side of the rille.

Vern moved one hand, then waved feebly. He's alive, Gerry thought. He's conscious.

He dropped to his knees at his brother's side.

"Are you OK? Can you get up?"

Vern didn't answer. He tapped one hand against his helmet. His radio's out, Gerry understood. With no air on the moon to carry sound, the only way to talk was through the suit radios. Unless they could touch helmets. He leaned over and pressed his helmet against Vern's.

"Can you hear me now?"

"No electricity in my suit! No air fans, no radio, nothing!"

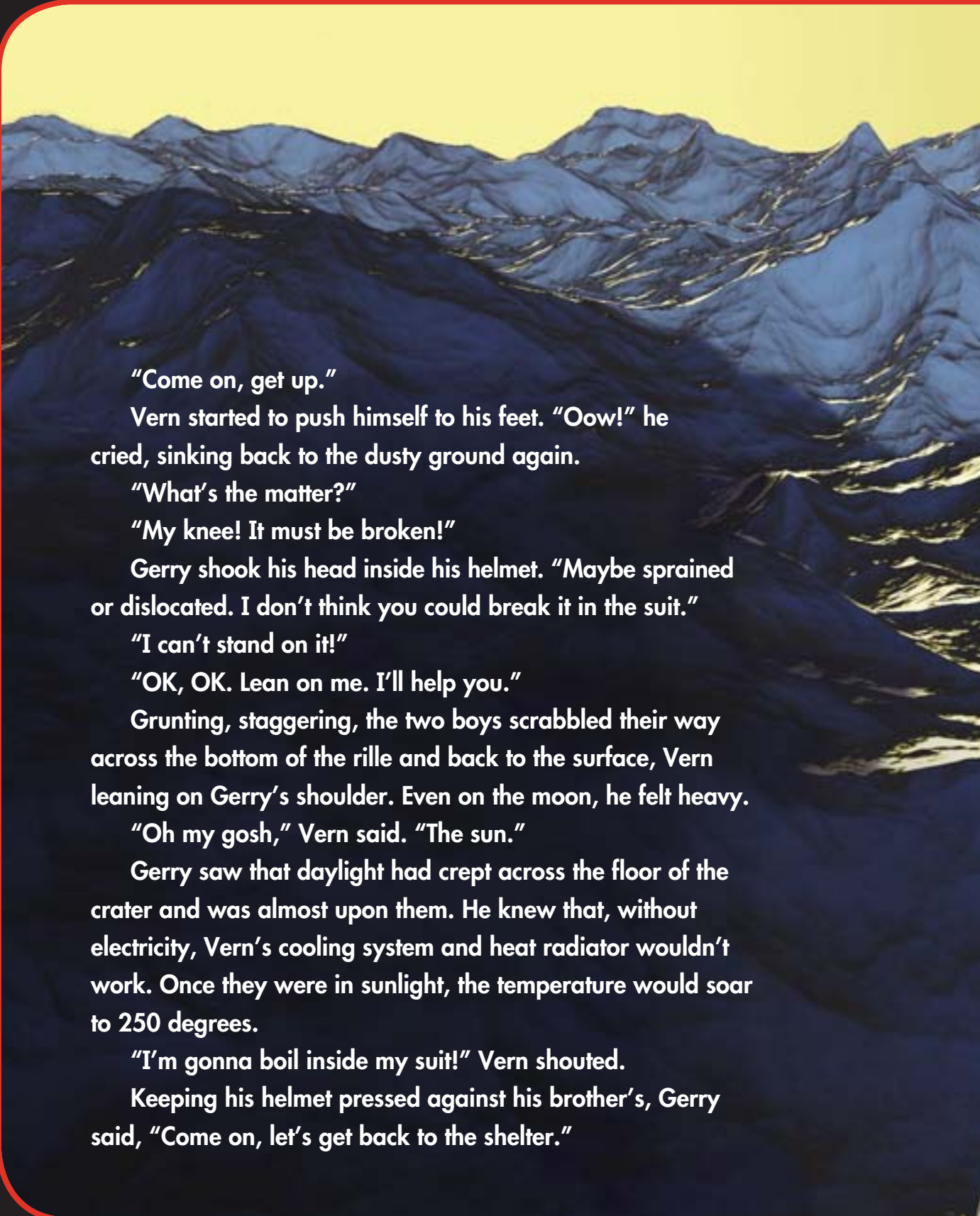
"You must have banged up your backpack," Gerry said.

"Knocked the battery loose or something."

"I won't have any air to breathe!" Vern sounded scared. Without electricity, the moonsuit's air circulation pumps couldn't work; neither could the radio or any of the suit's other equipment.

Gerry tried to keep calm. "There's enough air inside the suit for a couple of hours . . . I think."

"Yeah," Vern said, his voice shaky. "Maybe."



"Come on, get up."

Vern started to push himself to his feet. "Oow!" he cried, sinking back to the dusty ground again.

"What's the matter?"

"My knee! It must be broken!"

Gerry shook his head inside his helmet. "Maybe sprained or dislocated. I don't think you could break it in the suit."

"I can't stand on it!"

"OK, OK. Lean on me. I'll help you."

Grunting, staggering, the two boys scrabbled their way across the bottom of the rille and back to the surface, Vern leaning on Gerry's shoulder. Even on the moon, he felt heavy.

"Oh my gosh," Vern said. "The sun."

Gerry saw that daylight had crept across the floor of the crater and was almost upon them. He knew that, without electricity, Vern's cooling system and heat radiator wouldn't work. Once they were in sunlight, the temperature would soar to 250 degrees.

"I'm gonna boil inside my suit!" Vern shouted.

Keeping his helmet pressed against his brother's, Gerry said, "Come on, let's get back to the shelter."

"I can't! I can't walk!"

"I'll help you."

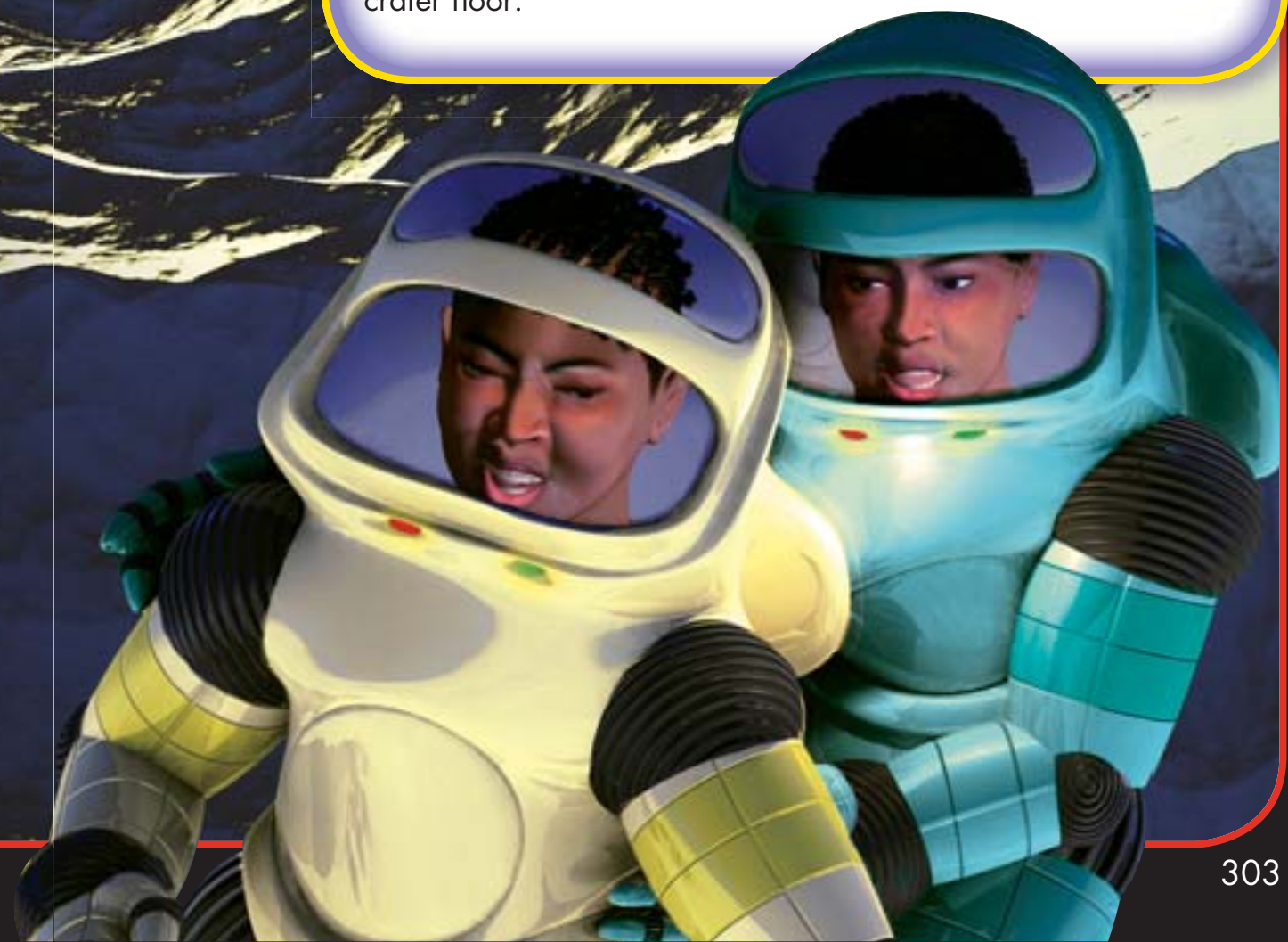
"You can't. . . ."

"Come on," Gerry said stubbornly. "Let's get started."

Gerry remembered that the moon turned very slowly on its axis, once in about 28 days, not like the Earth's once every 24 hours. That meant that sunrise was pretty slow on the moon—about the pace of a person strolling briskly. Maybe they could make it.

Maybe, Gerry thought. If we can get back before the sunrise catches us.

They started toward the shelter, Vern leaning on Gerry's shoulder. Behind, blazing sunlight crept toward them across the crater floor.



As long as we stay in the night we'll be OK, Gerry told himself. If we can get back to the shelter before Vern's air runs out.

They trudged along for what seemed like hours. The sky was spangled with thousands of stars; they seemed like hard, solemn eyes watching the two boys.

"We can make it," Gerry kept muttering. "We can make it."

But with every step Vern seemed to get heavier. The line of daylight was catching up with them. Gerry could almost feel the sun's blazing heat roasting him.

Vern coughed. "Hard . . . to breathe," he gasped.

"We're almost there." Gerry could see the rounded hump of dirt that covered the shelter.

"Can't. . . ." Vern collapsed. Gerry staggered under the full weight of his brother's unconscious body.

Blinking sweat from his eyes, trying hard not to cry, grunting, puffing hard, Gerry dragged Vern to the shelter. The tractor was nowhere in sight. Dad's not back yet, he realized, not knowing if he should be glad or sorry.

As he pulled his brother into the airlock, he saw the tractor coming slowly over the horizon, kicking up a lazy roostertail of dust.



Vern came to, coughing and sputtering, once Gerry got him inside the shelter and took his helmet off.

"We made it!" he said. "You saved me, Runt."

"Dad's on his way back," said Gerry.

Vern didn't care. "You saved my life! You really did!"

"It's OK."

"Gee, Runt—I owe you! What can I do to repay you for saving my life?"

Gerry didn't hesitate for a microsecond. "Don't ever call me Runt again!"