

## Issues in Earth Science

“Eww, There’s Some Geology in my Fiction!”

Issue 6, May 2016

### *Teacher Resources*

*Simone dreams of starting adult life with a degree in geomancy, but not at her father's magic carpet business. Will her efforts to call forth blue spinel from the magmatic fires be good enough for the master magicians at the University?*

## In the Rough

by

T. S. Brothers



**M**ere minutes before midnight, Simone frantically scribbled her quill across her last sheet of parchment. “...and I cannot fully express how excited I am about the future, and I would be deeply honored if the

West Carolina Academy of the Applied Arts were part of

my coming years. Sincerely, Simone R. Perriman.” Simone finished her signature with an enthusiastic flourish, snapping the end of the quill and knocking the inkwell across the page. Cursing quietly, she dropped the quill and frantically blotted at the paper. A white-furred blur tackled her feet and vanished with the feather. By now, Snowball had stolen most of the pens in the house.

This was the eleventh quill Simone had lost, the eighth essay she'd written, and the fourth time she'd drafted it. How many times did she need to explain which historical animal she'd want to meet (Hannibal's best elephant), her favorite one-vowel word (porphyry), or where she'd go with a round ticket to anywhere (the gem markets of Peshawar), anyway? But even the looming towers of paperwork paled in comparison with the horrible alternative—an entry level service job with her father's magic carpet cleaners. Tomorrow, she'd have to deal with Mister Djann again, who'd returned from travels overseas and had 'never seen such an infestation of moth larvae.' She'd much rather spend her life hunting crystals than chrysalises.

Clearing her mind of irritation, anger, and anxiety she focused on the one spell she'd truly mastered. Mastered by de-staining rugs in her father's shop, yes, but every wizard had to start somewhere. The scent of lavender filled her nostrils as the ink gradually vaporized, the big smeary blotch fading to an off-white and slightly fuzzy blob. *How ironic, she thought, that the skills I learned in the shop are the ones I'll use to escape it forever... oh wow, I should have put that in one of my essays.* She glanced at the clock. Its hands jiggled towards 11:43 PM.

With more haste than grace, Simone lit the candle on her desk. It flared to life, casting a harsh magnesium light—she'd have to move quickly before the candle burnt away. She piled her essays together, and touched the corner to the fire. Electric flames crackled across the pages, consuming the soft vellum without so much as warming her fingers. The essays were in, but there was one more step to be completed: the practical evaluation.

Melted wax spread across the surface of the desk, mixing with an intricate inlay of semi-precious gems. They lit up one-by-one in a coruscating play of color, signaling that

their enchantments were ready to send her application to the most prestigious colleges and universities she dared apply to. The powerful admissions wizards looked poorly upon their time being wasted on inferior candidates..

With some trepidation she laid a hand on the central gem, a round piece of flawless ulexite, and prepared to present her work for scrutiny by some of the most ancient and talented magicians in the world. Her eyes slowly closed as her consciousness sank into the network, slowly directing it, first to the ancient, lichen-covered giant inhabiting the University of Geomancy at the Malachite Palace—

“Simone!” Her head snapped up as a loud, almost panicked call echoed up the stairs, shattering her concentration and severing the link, “I hope that you're almost done with your applications! You have less than ten minutes left in the year!” Simone turned around to see her mom arrive at the door. “You'd better not be goofing off in—oh, I'm sorry, I didn't mean to interrupt you.”

Stifling a sarcastic response, Simone replied, “That's fine. I'm just about to send in my practical. And if you—I mean, can you take Snowball out with you? He's been bugging me.”

“Oh, you know I can never get the cat to do anything,” her mother said, gathering most of the twenty-pound animal into her arms. “Good that you're finally getting your applications together, but of course you should have had these done weeks ago. If you had to mail them you'd already be too late, so it's good you can use the Aether now. Back when I was a student—” she broke off, as Simone made a pained expression, “Well, just be sure that you send it off to all the right places. Are your supplements done? I thought that you still had to do the Tower of Necrade.”

“I'm not applying there anymore. It turns out that they need a pint of blood, and I can't ship that in time.”

“Oh, dear. Well, I suppose they only get applicants who are really motivated.”

Simone gave her another look.

“I'll leave you to it, then. Good luck!” And with that, her mother retreated down the stairs, the cat peering back over her shoulder.

Just as Simone sat down again, a puff of smoke erupted from the central stone. A stack of papers quivered, top sheet folding into a familiar-looking crane. Its head started bobbing up and down as it spoke, “Hey, it’s Francis. Just finished my applications, right under the deadline! Time to kick back and watch the ball drop! Wish I had your work ethic! You got them done last week, right?”

Simone glanced over again: 11:53. She couldn't afford to talk. Instead, she smashed the crane and swept the entire stack of paper to the floor. Then, without any more hesitation, she reentered the Aethernet. Her mind raced outwards, feeling out the paths through the network to each university’s hulking giant—their beacon in the Aether—as one by one the vast, slow minds gazed downward, inviting her to begin.

Simone pushed away the horrifying image of ending up at a community school studying common sorcery—or worse,

necromancy. There was no time for indecision. She stoked the fires of her magic, already filled with the passion the examiners desired and the caffeine their tests demanded.

The exam began.

Simone was surrounded by intolerable pressure, the world compressed into a crushing void. She pushed outwards, creating some room to work. With a thought, she illuminated the mental space. The flickering light revealed a rough-hewn cavern of dark limestone, sending shadows dancing across the cracked walls. Limestone was a classic starting material for crystallization, perfect for her purposes—now she just had to coax it to transform. She planted her feet firmly against the stone, rooting them there, filling herself with the support and solidity every geomancer instinctively sought. It took a firm grasp of the here and now to be able to compress millions of years into mere minutes.

A more impatient student might have started by turning up the heat, but Simone knew better. Instead, with a crackle of power she grasped the stone in a hundred

places. As she flexed her fingers, the walls creaked slightly, but didn't crack. Strong enough, then. She took a deep breath, then pulled with all her might, piling the weight of colliding mountains onto the stone. The limestone cracked, then lost its form, gradually dissolving. Now for the tricky part. There had to be magma somewhere, but with centuries streaming between her fingers, Simone couldn't waste any time finding it.

With spiraling arms of force she traced her way through the splintered stone, seeking the heat she knew must be somewhere nearby. She felt a trace of warmth and quickly followed it with her mind's eye. The cracks here were filling with heat and orange-red light. She *tsked* to herself, examining the immense and perfectly square magma chamber. Whoever had designed this test wasn't very detail-oriented, it seemed. With an effort of will she pulled the magma towards her, wrapping an aura of heat around herself like a scarlet cloak. With a careful tap she warmed the stone. The slurry of grey limestone immediately burst forth into white crystallization, newly-forming marble casting out dark impurities, minerals that soon would transform into brilliant gems.

The next part was all about balance—Simone had to unravel her mantle of heat quickly to make seed crystals appear, but not so quickly that they'd grow out of control. The first ones were already winking into existence. She frantically began to prune, snuffing out most of the tiny glimmers, and allowing only a few to grow. If she left too many, the crystals would be small and scattered. If she left too few, she might be left with no crystals at all. The best or most foolhardy students would be skirting the edge of disaster, staking the test on producing a single enormous gemstone.

The seeds grew quickly, like anemones slowly unfurling from an ocean bed or fireflies igniting in the night. She caught one between thumb and forefinger, bringing it to her eye. Garnet, and an orangey-brown one at that. *Not a terrible gemstone*, she thought, *but it's sure not an impressive one*. She wasn't going to stake her future on a garnet. And if garnets were forming, that meant there was enough iron to choke anything more interesting. She reached out, sweeping away traces of iron. The garnets abruptly dissolved, as she imprisoned the metal into crystals of yellow-green olivine. Simone would need to

split her attention now, keeping the bed of olivine stable while her real gems formed.

New seed crystals sparked to life, light blue grains with sharp, pointed edges. Spinel, a far more temperamental and ambitious stone. It didn't like rich colors, and it preferred to stay small, but a clever geomancer could coax out both brilliance and size. As her seeds grew, Simone tended her garden, gently feeding her crystals the nutrients they needed for the finest color. It was a difficult, all-consuming process, which made it all the more irritating when a flash of white appeared in her peripheral vision, paws batting at the shining gem nuclei.

"Snowball!" She yelled, trying to maintain the mineral flow. It was like balancing a spinning plate on a straw. A straw you were drinking molasses out of. Molasses full of cat hairs.

The crystals were growing rapidly now, and Simone realized the passage of time was now out of her control. The test was over, and she could only hope what she'd made would stand the test of time. The stone froze, forming a solid opaque mass, and millions of years went

by in instants. Her hand-groomed marble breached the surface, seasons flickering around it like seafoam off a whale's flanks, as time and weather took their toll. The green-veined pocket emerged, gems glimmering as they were revealed and fell one-by-one to the ground. As the last came to light, time slowed, and stopped. She crouched down, admiring their deep blue coloration and sparkling clarity. She picked up the biggest, standing to hold it to the sun.

And, with that, the illusion—and the year—ended. The looming shadows representing each of the universities bowed silently, a confirmation that her practical had been received and would be processed in due time. Simone broke her connection with the Aethernet and slumped back in her chair, exhausted but pleased. It could have gone much better: the crystals had some wonky-looking fractures, and she felt like the limestone looked a bit carpet-like in places. But, on the other hand, she still felt confident that someone—somewhere—had done worse on the test.

But, it slowly sank in, she was *done*. There were no more preparations she could make, so she didn't have anything to worry about anymore. A grin slowly spread across her face: the time spent convincing her teachers to give her letters of recommendation, the months of researching schools, ages of preparation and study and mountains of parchment, all were finally at an end.

“Hey, Simone,” she heard, turning to see her father standing in the doorway, “Did you remember to apply for merit scholarships? You know that they have to be done before the break of dawn.”



---

---

**T.S. Brothers** is a pair of brothers from North Carolina, Timothy and Stephen Challener. Stephen has his bachelor's degree in geology from the University of North Carolina at Chapel Hill and is currently drafting his master's thesis at North Carolina State University. Timothy is a PhD candidate in biomedical engineering. Both of them share a life-long passion for rocks and minerals which goes back to a childhood filled with rockhounding trips across the country.

---

---

Credit: In the Rough Illustration by Erin Colson.

Find more essays, games, and stories at  
[\*Issues in Earth Science\*](#).

©2016 Issues in Earth Science