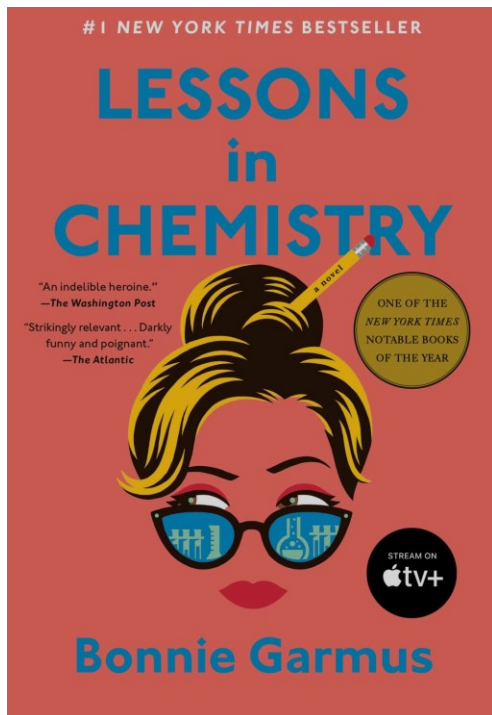


LESSONS IN CHEMISTRY



Book Summary:

A young woman with a passion for chemistry is repeatedly met with hardship as a female chemist.

Summary of Concerns:

This book contains sexual activities; violence; references to sexism, suicide, and attempted sexual assault; profanity; and controversial religious and historical commentary.

Adult

By Bonnie Garmus

ISBN: 9780385547376



3 /5

Minor Restricted
BookLooks Review Rating

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10	<p>It goes without saying that there was very little sex after these dates. Actually, there was none.</p>
14	<p>Elizabeth Zott held grudges too. Except her grudges were mainly reserved for a patriarchal society founded on the idea that women were less. Less capable. Less intelligent. Less inventive. A society that believed men went to work and did important things—discovered planets, developed products, created laws—and women stayed at home and raised children. She didn't want children—she knew this about herself—but she also knew that plenty of other women did want children and a career. And what was wrong with that? Nothing. It was exactly what men got.</p> <p>She'd recently read about some country where both parents worked and took part in raising the children. Where was that, again? Sweden? She couldn't remember. But the upshot was, it functioned very well. Productivity was higher; families were stronger. She saw herself living in such a society.</p>
16	<p>But Elizabeth did not leave—she couldn't, she needed the master's. So she endured the day-to-day degradations—the touches, the lewd comments, the rank suggestions—while making it clear she had no interest. Until the day he called her into his office, ostensibly to talk about her admittance to his doctoral program, but instead shoving his hand up her skirt. Furious, she forcibly removed it, then threatened to report him.</p> <p>“To whom?” he laughed. Then he admonished her for being “no fun” and swatted her bottom, demanding that she go fetch his coat from his office closet, knowing that when she opened the door she would find it lined with pictures of topless women, a few splayed, expressionless, on their hands and knees, a man's shoe resting triumphantly on their backs.</p>
17	<p>“I was only trying to help, Dr. Meyers.” He looked at her, as if weighing the veracity of her offer. “And I need your help,” he said. And then he turned back toward the door and locked it.</p> <p>His first blow was an open-handed slap that spun her head to the left like a well-hit tetherball. She gasped in shock, then managed to right herself, her mouth bleeding, her eyes wide with disbelief. He grimaced as if unsatisfied with his results, then hit her again, this time knocking her off the stool. Meyers was a big man—nearly 250 pounds—his strength a product of density, not fitness. He bent down to where she lay on the floor and, grabbing her by the hips, hoisted her up like a crane lifting a sloppy load of lumber, plunking her back down on the stool like a rag doll. Then he flipped her over, and kicking the stool away, slammed her face and chest against the stainless-steel counter. “Hold still, cunt,” he demanded as she struggled, his fat fingers clawing beneath her skirt.</p> <p>Elizabeth gasped, the taste of metal filling her mouth as he mauled her, one hand pulling her skirt up past her waist, the other twisting the skin of her inner thighs. With her face flat against the table, she could barely breathe, let alone scream. She kicked back furiously like an animal caught in a trap, but her refusal to concede only infuriated him more.</p> <p>“Don't fight me,” he warned, as sweat dripped from his stomach onto the backs of her thighs. But as he moved, her arm regained freedom. “Hold still,” he demanded, enraged, as she twisted back and forth, gasping in shock, his bulbous torso flattening her body like a pancake. In a final effort to remind her who was in charge he gripped her hair and yanked. Then he shoved himself inside her like a sloppy drunk, moaning with satisfaction until it was cut short by a shriek of pain.</p> <p>“Fuck!” Meyers yelled, pulling his weight from her. “Jesus, fuck! What was that?” He shoved her away, confused by a blaze of misery springing from the right side of his body.</p>

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20	The attack, or “unfortunate event,” as the admissions committee called it just before they formally rescinded her admittance to the doctoral program, had been her doing. Dr. Meyers had caught her cheating. She’d tried to change a test protocol to skew the experiment’s results—he had the proof right here—and when he’d confronted her, she’d thrown herself at him, offering sex.
26	“But instead,” she continued, “women are at home, making babies and cleaning rugs. It’s legalized slavery. Even the women who wish to be homemakers find their work completely misunderstood. Men seem to think the average mother of five’s biggest decision of the day is what color to paint her nails.”
30	And yet each time they were together, she felt this practically irresistible urge to kiss him.
31	And then that feeling came over her again, the one she had every time she was with him, but this time she acted on it, reaching out with both hands to draw his face to hers, their first kiss cementing a permanent bond that even chemistry could not explain.
32	At night, after they made love, they would always lie in the same position on their backs, his leg slung over hers, her arm atop his thigh, his head tipped down toward hers, and they would talk: sometimes about their challenges, other times about their future, always about their work.
37	<p>“Where’s your brother?” he asked.</p> <p>“Dead.” Her voice was hard. “Suicide.”</p> <p>“Suicide?” Air left his chest. “How?”</p> <p>“He hanged himself.”</p> <p>“But... but why?”</p> <p>“Because my father told him God hated him.”</p> <p>“But... but...”</p> <p>“Like I said, my father was very convincing. If my father said God wanted something, God usually got it. God being my father.”</p> <p>Calvin’s stomach tensed.</p> <p>“Were... were you and he close?”</p> <p>She took a deep breath. “Yes.”</p> <p>“But I don’t understand,” he persisted. “Why would your father do such a thing?”</p> <p>...“John—my brother—was a homosexual,” Elizabeth said.</p> <p>“Oh,” he said, as if now he understood. “I’m sorry.”</p> <p>She propped herself up on one elbow and peered at him in the darkness. “What is that supposed to mean?” she shot back.</p> <p>“Well, but—how did you know? Surely he didn’t tell you he was.”</p> <p>“I’m a scientist, Calvin, remember? I knew. Anyway, there’s nothing wrong with homosexuality; it’s completely normal—a basic fact of human biology. I have no idea why people don’t know this. Does no one read Margaret Mead anymore? The point is, I knew John was a homosexual, and he knew I knew. We talked about it. He didn’t choose it; it was simply part of who he was. The best part was,” she said wistfully, “he knew about me, too.”</p> <p>“Knew you were—”</p> <p>“A scientist!” Elizabeth snapped. “Look, I realize this may be hard for you to fathom given your own terrible circumstances, but while we may be born into families, it doesn’t necessarily mean we belong to them.”</p> <p>“But we do—”</p> <p>“No. You need to understand this, Calvin. People like my father preach love but are filled</p>

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	<p>with hate. Anyone who threatens their narrow beliefs cannot be tolerated. The day my mother caught my brother holding hands with another boy, that was it. After a year of hearing that he was an aberration and didn't deserve to live, he went out to the shed with a rope."</p> <p>... "How old were you?" he asked.</p> <p>"Ten," she said. "John was seventeen."</p>
41	<p>And the fact that the duo decided to combine their unearned gifts into one loving and probably highly sexual relationship, which the rest of them had to witness at lunch every day, just made it that much worse.</p>
70	<p>Their catastrophic loss (seven boat lengths), witnessed only by a handful of people who'd managed to glimpse it over a sea of impossibly big hats, was carefully blamed on some fish and chips they'd ingested the night before, instead of the tonnage of beer that had washed it down.</p> <p>In other words, they were all still drunk at the start.</p>
110	<p>At the time, they wrote it off to the ramblings of a man who'd hit the jackpot, sexwise. But now?</p> <p>... Darwin had long ago proposed that life sprang from a single-celled bacterium, which then went on to diversify into a complex planet of people, plants, and animals. Zott? She was like a bloodhound on the trail of where that first cell had come from.</p>
112	<p>"I was funding a professional slut?" he'd probably shout.</p>
129	<p>The real reason was because she'd quietly hoped the pregnancy would take care of itself. End as these things sometimes do. In the 1950s, abortion was out of the question. Coincidentally, so was having a baby out of wedlock.</p>
131	<p>"I only kept on with it," she offered in a low voice, "because it exhausts me to the point where I can sometimes sleep. But also because I thought it might, well—"</p> <p>"I understand," he said, cutting her off and looking both ways as if making sure no one else could hear. "Look, I'm not one of those people who believe a woman should have to—" He stopped abruptly. "Nor do I believe that—" He stopped again. "A single woman... a widow... it's... Never mind," he said as he reached for her file. "But the truth is, that erg probably made you stronger; made the baby stronger for that matter. More blood to the brain, better circulation. Have you noticed it has a calming effect on the baby? Probably all that back and forth."</p>
150	<p>She knew she should be used to it by now, his desire for other women. It was on their honeymoon that he'd first masturbated to girlie magazines right next to her in bed. She'd gone along with it because what else was she supposed to do? Besides, she'd been told it was normal. Healthy, even. But as the magazines got raunchier, the habit grew, and now here she was, fifty-five years old, neatening his sticky stack of periodicals with a stone in her heart.</p>
176	<p>As for Eddie—the geologist she'd slept with to prove she was marriage material—he'd dumped her two years ago for a virgin.</p>
187	<p>And what about sex with Elizabeth Zott? She seemed like she'd be frigid—was she?</p>
193	<p>"Specifically, I wanted to ask: Don't you think it's possible to believe in both God and science?"</p> <p>"Sure," Calvin had written back. "It's called intellectual dishonesty."</p> <p>Although Calvin's flippancy had a tendency to annoy a lot of people, it didn't seem to faze</p>

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	<p>the young Wakely. He wrote back immediately.</p> <p>“But surely you’d agree that the field of chemistry could not exist unless and until it was created by a chemist—a master chemist,” Wakely argued in his next letter. “In the same way that a painting cannot exist until it is created by an artist.”</p> <p>“I deal in evidence-based truths, not conjecture,” Calvin replied just as quickly. “So no, your master chemist theory is bullshit. By the way, I notice you’re at Harvard. Are you a rower? I row for Cambridge. Full-ride rowing scholarship.”</p>
194	<p>“By the way, I’ve been meaning to ask: Why do you think so many people believe in texts written thousands of years ago? And why does it seem the more supernatural, unprovable, improbable, and ancient the source of these texts, the more people believe them?”</p> <p>“Humans need reassurance,” Wakely wrote back. “They need to know others survived the hard times. And, unlike other species, which do a better job of learning from their mistakes, humans require constant threats and reminders to be nice. You know how we say, ‘People never learn?’ It’s because they never do. But religious texts try to keep them on track.”</p> <p>“But isn’t there more solace in science?” Calvin responded. “In things we can prove and therefore work to improve? I just don’t understand how anyone thinks anything written ages ago by drunk people is even remotely believable. And I’m not making a moral judgment here: those people had to drink, the water was bad. Still, I ask myself how their wild stories—bushes burning, bread dropping from heaven—seem reasonable, especially when compared to evidence-based science. There isn’t a person alive who would opt for Rasputin’s bloodletting techniques over the cutting-edge therapies at Sloan Kettering. And yet so many insist we believe these stories and then have the audacity to insist others believe them, too.”</p> <p>“You make a fair point, Evans,” Wakely wrote back. “But people need to believe in something bigger than themselves.”</p> <p>“Why?” Calvin pressed. “What’s wrong with believing in ourselves? Anyway, if stories must be used, why not rely on a fable or fairy tale? Aren’t they just as valid a vehicle for teaching morality? Except maybe better? Because no one has to pretend to believe that the fables and tales are true?”</p> <p>Although he didn’t admit to it, Wakely found himself agreeing. No one had to pray to Snow White or fear the wrath of Rumpelstiltskin to understand the message. The stories were short, memorable, and covered all the bases of love, pride, folly, and forgiveness. Their rules were bite-sized: Don’t be a jerk. Don’t hurt other people or animals. Share what you have with others less fortunate. In other words, be nice. He decided to change the topic.</p>
210	<p>“Why?”</p> <p>He looked surprised. “Why do you think?” “Oh,” she said, with sudden understanding. “She believes you’re sexually deviant.”</p> <p>“I wouldn’t have put it so, so... blatantly,” Walter said, “but yes. It’s like wearing a badge that says ‘Hello! I’m a pedophile—and I babysit!’</p> <p>...“Calvin and I had sex nearly every day—completely normal for our youth and activity level—but because we weren’t married...”</p> <p>“Ah,” Walter said, paling. “Well—”</p> <p>“As if marriage has anything to do with sexuality—”</p> <p>“Ah—”</p> <p>“There were times,” she explained matter-of-factly, “that I would wake up in the middle of the night filled with desire—I’m sure that’s happened to you—but Calvin was in the middle</p>

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	<p>of a REM cycle, so I didn't disturb him. But then I mentioned it later and he was practically apoplectic. 'No, Elizabeth,' he said, 'always wake me up. REM cycle or no REM cycle. Do not hesitate.' It wasn't until I did more reading on testosterone that I better understood the male sex drive—"</p> <p>...“Anyway,” she continued. “I’m sorry that Mudford has implied you’re anything other than a loving father. I very much doubt she’s read the Kinsey Reports.”</p> <p>“The Kinsey—”</p> <p>“Because if she had, she’d actually understand that you and I are the opposite of sexual deviants. You and I are—”</p> <p>“Normal parents?” he rushed.</p> <p>“Loving role models.”</p>
230	<p>“My mom wants you to stop pinning stuff on me,” said Judy. “Says you’re making holes in my clothes.”</p> <p>Your mother is a lying whore, Mrs. Mudford wanted to say, but instead she said, “That’s fine, Judy. We’ll staple yours on instead.”</p> <p>...“You had to stay behind because you told your teacher that people are animals? Why did you say such a thing, honey? It’s not very nice.”</p> <p>“It isn’t?” Madeline said, confused. “But why? We are animals.”</p> <p>Harriet wondered to herself if Mad was right—were people animals? She wasn’t sure. “My point is,” she said, “it’s sometimes better not to argue. Your teacher deserves your respect and sometimes that means agreeing with her even when you don’t. That’s how diplomacy works.”</p> <p>“I thought diplomacy meant being nice.”</p> <p>“That’s what I mean.”</p> <p>“Even if she’s telling us wrong stuff.”</p> <p>“Yes.”</p> <p>...“You make mistakes sometimes, don’t you? And you wouldn’t want someone to correct you in front of a lot of people, would you? Mrs. Mudford was probably just embarrassed.”</p> <p>“She didn’t look embarrassed. And this isn’t the first time she’s given us bad information. Last week she said God created the earth.”</p> <p>“Many people believe that,” Harriet said. “There’s nothing wrong with believing that.”</p>
233	<p>“Do I have one?”</p> <p>“A godmother?”</p> <p>“A spiritual life.”</p> <p>“Oh,” Harriet said.</p> <p>“I don’t know. Do you believe in things you can’t see?”</p> <p>“I like magic tricks.” “I don’t,” said Harriet. “I don’t like being fooled.”</p> <p>“But you believe in God.”</p> <p>“Well. Yes.”</p> <p>“Why?”</p> <p>“I just do. Most people do.”</p> <p>“My mom doesn’t.”</p> <p>“I know,” Harriet said, trying to hide her disapproval.</p> <p>Harriet thought it was wrong not to believe in God. It lacked humility. In her opinion, believing in God was required, like brushing teeth or wearing underwear. Certainly, all decent people believed in God—even indecent people, like her husband, believed in God.</p>

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	<p>God is why they were still married and why their marriage was her burden to bear—because it was given to her by God. God was big on burdens, and He made sure everyone got one. Besides, if you didn't believe in God, you also didn't get to believe in heaven or hell, and she very much wanted to believe in hell because she very much wanted to believe that Mr. Sloane was going there.</p>
252	<p>"For instance, let's say you wrote your PhD thesis on free market economics, but your husband rotates tires for a living. You love each other, but he's probably not interested in hearing about the invisible hand. And who can blame him, because you know the invisible hand is libertarian garbage."</p>
257	<p>"Well don't. That tiny amount is mostly act-of-God stuff—earthquakes, tsunamis—things we can't possibly anticipate because the science isn't there yet." She paused, straightening her belt. "Walter, don't you find it interesting that people even use that term 'act of God'? Considering that most want to believe that God is about lambs and love and babies in mangers, and yet this same so-called benevolent being smites innocent people left and right, indicating an anger management problem—maybe even manic depression. In a psychiatric ward, such a patient would be subjected to electroshock therapy. Which I don't favor. Electroshock therapy is still largely unproven. But isn't it interesting that acts of God and electroshock therapy share so much in common? In terms of being violent, cruel—"</p>
274	<p>He got up abruptly, his body vibrating with frustration, and strode over to a sideboard littered with important-looking amber whiskeys and bourbons. Grabbing one, he tipped it into a thick-walled shot glass until the liquid hit the rim and threatened to spill over. He threw it down his throat and poured another, then turned to look at her. "There's a pecking order here," he said. "And it's about time you learned how that works." ...He didn't like anyone who questioned his authority, but he could not and would not tolerate a woman doing so. With his pinstriped suit jacket parted at the waist, he locked his eyes on her, then slowly started to undo his belt. "I probably should have done this from the very beginning," he said, snaking the belt from its loops. "Establish the ground rules. But in your case, let's just consider this part of your exit interview." Elizabeth pressed her forearms down on the armchair. In a steady voice she said, "I would advise you not to get any closer, Phil." He looked at her meanly. "You really don't seem to understand who's in charge here, do you? But you will." Then he glanced down, successfully freeing the button and unzipping his pants. Removing himself, he stumbled over to her, his genitals bobbing limply just inches from her face. She shook her head in wonder. She had no idea why men believed women found male genitalia impressive or scary. She bent over and reached into her bag. "I know who I am!" he shouted thickly, thrusting himself at her. "The question is, who the hell do you think you are?" "I'm Elizabeth Zott," she said calmly, withdrawing a freshly sharpened fourteen-inch chef's knife. But she wasn't sure he'd heard. He'd fainted dead away.</p>
278	<p>"Dammit, Elizabeth, what were you thinking? Don't you know how being fired works? Step one: never tell anyone the truth—claim you won the lottery, inherited a cattle ranch in Wyoming, got a huge offer in New York, that sort of thing. Step two: drink to excess until you figure out what to do. Jesus. It's like you're not familiar with TV's tribal ways!"</p>
288	<p>"While that's cooking, I wanted to share with you all a letter I received from Nanette Harrison in Long Beach. Nanette writes, 'Dear Mrs. Zott, I'm a vegetarian. It's not for</p>

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	<p>religious reasons—it's just that I don't think it's very nice to eat living things. My husband says the body needs meat and I'm being stupid, but I just hate thinking an animal has given up its life for me. Jesus did that and look what happened to him. Sincerely yours, Mrs. Nanette Harrison, Long Beach, California.'</p>
292	<p>"Hello, Edna," she said, "and thanks for your question. The answer is no; I don't have a favorite grace. In fact, I don't say grace at all." Standing in the office, both Walter and Harriet paled. "Please," Walter whispered. "Don't say it." "Because I'm an atheist," Elizabeth said matter-of-factly. "Thar she blows," Harriet said. "In other words, I don't believe in God," added Elizabeth as the audience gasped. "Wait. Is that rare?" Madeline piped up. "Is not believing in God one of those rare things?" "But I do believe in the people who made the food possible," Elizabeth continued. "The farmers, the pickers, the truckers, the grocery store shelf stockers. But most of all, I believe in you, Edna. Because you made the meal that nourishes your family. Because of you, a new generation flourishes. Because of you, others live."</p>
293	<p>In 1960, people did not go on television and say they didn't believe in God and expect to be on television much longer. As proof, Walter's phone was soon filled with threats from sponsors and viewers who wanted Elizabeth Zott fired, jailed, and/ or stoned to death. The latter came from self-proclaimed people of God—the same God that preached tolerance and forgiveness. ..."Edna Flattistein asked me a direct question and I answered it. I'm glad she feels she can express her belief in God and I welcome her right to do so. But I should be extended the same courtesy. Plenty of people don't believe in God. Some believe in astrology or tarot cards. Harriet believes if you blow on dice, you'll get better numbers at Yahtzee." "I think we both know," Walter said through gritted teeth, "that God is just a bit different from Yahtzee." "Agreed," Elizabeth said. "Yahtzee is fun."</p>
296	<p>"I thought you knew. Everyone knows. Especially now that she doesn't believe in God." "It's all right not to believe in God," Wakely said. "That's one of the things we mean when we say it's a free country. People are welcome to believe whatever they want as long as their beliefs don't hurt others. Besides, I happen to think science is a form of religion."</p>
331	<p>"I'm referring to atoms and molecules, Roth," she explained. "The real rules that govern the physical world. When women understand these basic concepts, they can begin to see the false limits that have been created for them." "You mean by men." "I mean by artificial cultural and religious policies that put men in the highly unnatural role of single-sex leadership. Even a basic understanding of chemistry reveals the danger of such a lopsided approach." "Well," he said, realizing he'd never seen it that way before, "I agree that society leaves much to be desired, but when it comes to religion, I tend to think it humbles us—teaches us our place in the world." "Really?" she said, surprised. "I think it lets us off the hook. I think it teaches us that nothing is really our fault; that something or someone else is pulling the strings; that ultimately, we're not to blame for the way things are; that to improve things, we should pray. But the truth is, we are very much responsible for the badness in the world. And we have the power</p>

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	<p>to fix it.”</p> <p>“But surely you’re not suggesting that humans can fix the universe.”</p> <p>“I’m speaking of fixing us, Mr. Roth—our mistakes. Nature works on a higher intellectual plane. We can learn more, we can go further, but to accomplish this, we must throw open the doors. Too many brilliant minds are kept from scientific research thanks to ignorant biases like gender and race. It infuriates me and it should infuriate you. Science has big problems to solve: famine, disease, extinction. And those who purposefully close the door to others using self-serving, outdated cultural notions are not only dishonest, they’re knowingly lazy. Hastings Research Institute is full of them.”</p> <p>...“I’m an atheist, Mr. Roth,” she said, sighing heavily. “Actually, a humanist. But I have to admit, some days the human race makes me sick.”</p>
332	<p>Then she told him the whole story, explaining that she’d had to leave UCLA because when men rape women, they prefer women not to tell.</p> <p>...“As for my background, it was my brother who raised me,” she continued. “He taught me how to read, he introduced me to the wonders of the library, he tried to shield me from my parents’ devotion to money. The day we found John hanging from the shed rafters, my father didn’t even wait for the police to arrive. Didn’t want to be late for a performance.”</p>
355	<p>As for what he’d told her? It was the worst. I don’t believe in God.</p> <p>...He suddenly remembered Madeline’s family tree. At the very bottom was a kid with a noose around his neck.</p>
380	<p>“YOU DON’T BELIEVE IN GOD FOR SCIENTIFIC REASONS, MISS ZOTT?” she suddenly exploded. “WELL, I DON’T BELIEVE IN GOD FOR PERSONAL REASONS.”</p>

Profanity	Count
Ass	4
Bitch	3
Cunt	3
Fuck	20
Goddamn	6
Piss	1
Shit	2