

A TEACHER'S GUIDE TO FARTHER THAN THE MOON

ABOUT THE BOOK

From award-winning author Lindsay Lackey comes *Farther Than the Moon*, a heartfelt story about a boy who wants to become an astronaut, but wonders if his dreams can include his brother with disabilities, perfect for fans of *We Dream of Space* and *Song for a Whale*.

All thirteen-year-old Houston Stewart has ever wanted is to become an astronaut. His dreams feel like they're finally coming true when he's accepted to the highly-competitive Junior Astronaut Recruitment Program – if only he could bring his little brother, Robbie, with him.

Ever since their dad left, Houston and Robbie have been inseparable. It's hard to tell where Houston's love of space ends and where Robbie's begins. But Robbie's cerebral palsy and epilepsy mean he needs medical attention at home, so Houston is forced to take this giant leap for the two of them all on his own.

At camp, Houston is quickly drawn into the orbit of new friends, cosmic adventures, and a long-lost grandfather. But as Houston struggles to meet the program's rigorous demands, he's forced to reckon with the truth that Robbie may never visit space like the brothers have always hoped. But Houston is determined to honor Robbie's dream, even if it seems like an impossible mission. So, like a good astronaut, he dares to make a new plan — one that shoots for the stars.



ABOUT THE AUTHOR

Lindsay Lackey's debut novel, *All the Impossible Things*, was named a Best Book of 2019 by the New York Public Library, the Denver Library, and *Children's Book Review*. While conducting research for her second novel, *Farther Than the Moon*, Lindsay fell in love with space and NASA history. Born and raised in Colorado, she now lives in the San Francisco Bay Area with her husband and their spoiled dog.



NOTE FROM THE AUTHOR

Dear Reader,

The first time I heard an author refer to “the book of their heart,” I was working as a children’s librarian at a public library in Colorado. I remember thinking it was a beautiful idea, and hoped I’d be able to write the book of *my* heart someday. This book—the one you are holding now—is not the book of my heart.

It is the book that nearly broke my heart.

In many ways, this story is deeply personal. Inspired by the close bond between my husband and his younger brother, *Farther Than the Moon* is an examination of brotherhood, sacrificial love, and compassion—both for others and for ourselves.

It is also the story of two boys with big dreams and unique circumstances. Both want to go to space someday, but as Houston discovers, the space industry was only designed for someone like him. Someone without a disability. Robbie has cerebral palsy and epilepsy, which means his dream of going to the moon is impossible. It’s this realization that propels Houston to use his love of STEM to seek a new outlook, one that not only includes people like Robbie, but gives them space to soar.

As you read, you may wonder why this story nearly broke me. It is, after all, an immensely *fun* book. (Although, the robotics research tied me in knots.) Science-loving kids, teamwork, astronauts, space history, bot battles, supersonic jets...*Farther Than the Moon* is an ode to nerdy kids (and kids-at-heart) everywhere.

It was the deeper questions this book asks and (sometimes) seeks to answer that truly challenged me. Questions of forgiveness — *Must forgiveness be earned? How do we forgive ourselves for hurting those we love most?* Questions of belonging — *Are we destined to repeat the mistakes of earlier generations? Do individuals have the power to effect real change?* And questions of intention — *Do good intentions make up for hurt? In the long run, do intentions—good or bad—matter at all?*

I strive to tell stories that are woven with truth. By posing the questions that are central to this book, I began to interrogate my own beliefs and acknowledge both my failures and my strengths as a storyteller and as a human. Along with Houston, I learned that examining our own faults can be the most painful and empowering act of all.

I hope you enjoy *Farther Than the Moon*. I hope it speaks to the nerdy kid in you that gazes at the stars with wonder. I also hope this book will challenge you to “think like an astronaut,” to ask tough questions of yourself and of our society. Questions that can, ultimately, bring us closer to the promise of Apollo 11: peace for all humankind.

Thank you for all you do to bring books into the orbit of young readers!

To the Moon and back,
Lindsay

PRE-READING QUESTIONS

What do you know about the U.S. space program? Why do you think individuals and nations are interested in exploring the moon, Mars, and other parts of outer space?

How do you think the world treats people with disabilities? Give examples, if you know any. Why is there bias against people with disabilities and in general against anyone perceived as different?

DISCUSSION QUESTIONS

1. Discuss the title, ways that it relates to the story, and if you think it suits the book. Talk about the epigraphs and how they fit with and foreshadow the story. Why do you think the author starts with a short section that's five years earlier than the rest of the book? What do you learn in that section?
2. Talk about Houston's relationship with Robbie. How do each of them get happiness out of their relationship? What do they find frustrating about each other? Why is Robbie disappointed with the final project that Houston's crew first creates? What does Houston realize about himself because of Robbie's reaction?
3. What is Houston and Robbie's mother like? What are some examples of how she expresses her love for her sons? What hardships has she faced in the past, including problems with her father and her husband?
4. Houston and Robbie's father is rarely present in the story but the boys feel his impact. Where is he? Why do you think he left? Reflect on the scene at the hospital when Houston overhears his father. Why do you think their father doesn't keep his promises about showing up for his sons?
5. Discuss Houston's belief that his father thinks his sons aren't "good enough." How is that belief connected to his second encounter with Grandpa when Houston thinks, "What if Grandpa—like Dad—didn't think Houston was worth sticking around for once he got to know him?"
6. Draw connections between Houston's feelings about not being good enough and his mother's thoughts about how the world treats Robbie: "The world reminds him of his limitations every day. It tells him over and over that he's broken, that he isn't enough, that he *can't*." Discuss the examples she gives and other examples you see around you of how this is true.
7. Mom believes that her father left her when things got hard. Summarize Grandpa's version of what happened. What were the misunderstandings? Why did Patti, Houston's grandmother, hide her illness from Grandpa and Mom? What was the effect of that secret? How do things begin to change between Mom and Grandpa?
8. What do you think some important responsibilities of being a parent are? How well do Mom, Dad, and Grandpa each fulfill those responsibilities? What are some difficult parts of being a parent? What are some of the positive parts?

9. Describe what Houston and his fellow students do as Jr. ASCANs. What areas do they study? What projects do they work on? What are their living conditions like? Discuss the ups and downs of being a Jr. ASCAN.
10. Initially, Maverick presents real difficulties for Houston. What is Maverick like at first? Why does he keep mentioning his father? Discuss Maverick's use of the word "spaz." Why is that especially painful for Houston and Freya? How does Maverick change? What do you think helps him change?
11. Who are the other kids in Houston's crew? What does each of them bring to the team? Describe Houston's initial reactions to them and how his relationship develops with each of them. Talk about some of the group's conflicts and how they are resolved.
12. Discuss Grandpa's advice to the Jr. ASCANs that as an astronaut "You must learn to anticipate the unexpected, but also to embrace it." What prompts that remark? What are some of the unexpected things that happen to characters and how do they react?
13. Houston gives this advice to Freya about facing fear that he heard from his grandfather: "Don't think of this as a challenge. Think of it as an opportunity to learn about how you react in stressful situations. Focus on what you can learn, not on what you're scared of." Apply this advice to Freya's situation and how she handles it, and to other examples from the story.
14. "Science . . . is poetry," according to Skeet at Space Center Houston. He goes on to say, "Science is art. Art is science." What are his reasons for saying that? Later in the chapter, Houston thinks about the comment and decides, "Maybe Skeet was right." Why does Houston think that? How is science like poetry? How is it like art?
15. A recurring theme is the idea of being a "good astronaut," not only as a Jr. ASCAN but also in life. What does it entail to be a good astronaut as a crewmate? Give examples from Houston's crew. What does it mean to be one in life? Again, find examples from Houston's family life and other examples you've experienced or read about.

POST-READING QUESTIONS

Has reading this novel made you more aware of how the world treats people with disabilities? If not, try to notice it in the coming days. How do you think the world could improve in this regard?

What did you learn about our exploration of space while reading the novel? Did it change your view of it in any way? Would you be interested in becoming an astronaut?

ACTIVITIES

Continue the adventure! Invite your students to visit the Junior Astronaut Recruitment Program landing page on Lindsay Lackey's website for classes, simulations, and more. See www.lindsaylackey.com/JARP.

As a class, compile a list of the NASA-related topics mentioned in the novel, including space missions, rockets, shuttles, the International Space Station, EVAs, and so on. Ask pairs of students to choose a topic and explore it at NASA's extensive website (NASA.gov), which offers written information, videos, photographs, and more. Students should prepare a multimedia presentation for their classmates about the history and goals of their topic. (NASA allows most of its photos to be used educationally. See <https://shorturl.at/aqtIV>.)

NASA Space Place (<https://spaceplace.nasa.gov/>) is full of ways for students to connect with science about the earth and space. Have students spend time exploring the website. Ask each student to watch at least one informational video, play one science game, and try one activity. Then have students meet in small groups to share what they did and what they learned.

Ask students to spend time at the websites the author lists about cerebral palsy and making space programs accessible to a more diverse group of astronauts. Then as a class, watch Zach Anner in the video “[Top 10 Things I Wish People Knew About Cerebral Palsy](https://www.youtube.com/watch?v=w-Sh8ZuGbMI)” (<https://www.youtube.com/watch?v=w-Sh8ZuGbMI>). Have students discuss the video as well as what they learned on the other websites.

What will Houston, Robbie, and the crew members do as adults? Instructor Young has students list as many space-industry jobs as they can. Ask each of your students to write a short profile of at least two of the characters and what kind of future they might have related to space exploration and science, although not necessarily as scientists or astronauts. The profile should link the envisioned future with details from the book about that character.

Houston and his crew know about and admire many astronauts. As a class, make a list of the astronauts named in the novel. Then have each student research a different astronaut and create an illustrated poster to share with the class, including the astronaut's background, training and education, and accomplishments in their work and other parts of their life.

FARTHER THAN THE MOON RESEARCH READING LIST

Hadfield, Chris: *An Astronaut's Guide to Life on Earth**

Melvin, Leland: *Chasing Space**

Massimino, Mike: *Spaceman*

Arceneaux, Hayley: *Wild Ride**

McCandless III, Bruce: *Wonders All Around*

Holt, Nathalia: *Rise of the Rocket Girls*

Gerardi, Kellie: *Not Necessarily Rocket Science*

Jackson, Libby: *Galaxy Girls*

Peake, Tim: *Ask an Astronaut*

Alan Shepard, Deke Slayton, Jay Barbree: *Moon Shot*

Barbree, Jay: *Neil Armstrong*

Koppel, Lily: *The Astronaut Wives Club*

Johnson, Katherine: *Reaching for the Moon**

Collins, Michael: *Carrying the Fire*

Walker, Stephen: *Beyond*

Stewart, Robert L.: *Fly***

Rocco, John: *How We Got to the Moon*

Wolfe, Tom: *The Right Stuff*

* *indicates availability of young reader's edition*

** *self-published*

Kathleen Odean was a school librarian for seventeen years and now gives workshops for educators on young adult books. She chaired the 2002 Newbery Award Committee and served on earlier Newbery and Caldecott committees.