



Pushing the Limits of Transformation Featured Video and Book – Discussion Questions

Who doesn't love a whole new start? The chance to reimagine and remake our home, our job, our neighborhood or ourselves. And what about those among us who can pick up any raw material and hammer it into a work of art? Humans stretch themselves all the time to transform what was into what could be. Get ready to discover what humans can accomplish by pushing the limits of transformation.

Featured Video - Heather Doyle

- What do you think of Heather? Is she an artist or an engineer?
- Does Heather's "do-it-yourself" mentality resonate with you? Is it a familiar personality type in our community?
- Do you have a craft kind of hobby? If so, do you see how your hobby is engineering? Have you had to learn something about the materials or things that you work with in your hobby in order to get good at it?
- Do you learn by doing, listening, or reading – or some combination of those? What about people that you know? Are there different kinds of "learning styles"?
- Do you have experience of working together on a project that helped bring folks together? Can "engineering together" be a way to create community?

Featured Book – *Lab Girl*

Hope Jahren, Nonfiction, Young Adult. Geobiologist Hope Jahren has spent her life studying trees, flowers, seeds, and soil. *Lab Girl* is her revelatory treatise on plant life - but it is also a celebration of the lifelong curiosity, humility, and passion that drive every scientist.

In these pages, Hope takes us back to her Minnesota childhood, where she spent hours in unfettered play in her father's college laboratory. She tells us how she found a sanctuary in science, learning to perform lab work "with both the heart and the hands." She introduces us to Bill, her brilliant, eccentric lab manager. And she extends the mantle of *scientist* to each one of her readers, inviting us to join her in observing and protecting our environment. Warm, luminous, compulsively readable, *Lab Girl* vividly demonstrates the mountains that we can move when love and work come together. - [amazon.com](https://www.amazon.com)

- How did Jahren's upbringing help determine her dedication to science? Consider her father's background as a science teacher and her mother's love of English literature.





- What do you find most remarkable in Jahren's descriptions of the wonders of the natural world? Consider, for instance, the sheer numbers of the plant world. Or how the willow tree clones itself...or the symbiotic relationship between trees and fungi...or the airborne signals of trees in their perennial war against insects.
- Describe some of the hardships that make life for any scientist difficult—bucking the status quo, the often-endless waiting for results, the grunt work, or the scarcity of funding.
- Will you ever take a tree—or any plant life—for granted again?