

*Environmental Engineering and the Science of Sustainability*

**Discussion Guide**

Grades 4-7

**Before Reading: to activate schema, build background knowledge, and set a purpose.**

- Discuss the field of environmental engineering and sustainability. What other science fields are related to this area?
- Before reading, have a class discussion to activate prior knowledge about environmental engineering & sustainability. Make a list of student generated responses on an anchor chart or whiteboard.
- Frontload vocabulary: environmental engineering, sustainability, water conservation, land reclamation, hazardous waste, alternative energy sources, greenhouse gases

**During Reading: to engage students, check for understanding, and make connections.**

- Why do you think the concepts of environmental engineering & sustainability are important in today's world?
- Are the illustrations & examples helpful in understanding the concepts of environmental engineering & sustainability? Why?
- What are you learning about solar cookers, prototypes, waste management, desalination?

**After Reading: to summarize, question, and reflect.**

Think about what you have read and create a chart of jobs that are now part of the environmental engineering & sustainability world. Jobs are always changing and new ones are being developed. The book outlined some. Perhaps you can do some additional research on other changing & developing jobs in this field.

If your students enjoyed this book...

- Encourage them to continue to discuss it and refer to it in other lessons and conversations.
- Let them explore more about the topic by reading other books with similar themes, structure, characters, or content.