Teaching Through Trade Books NSTA Connection Additional Resources:

Middle School Cardboard Boat Races

www.youtube.com/watch?v=MHyqAaFKWe8

This video shows eighth graders participating in a competition to see which of their cardboard boat designs worked.

STEM Design Challenge Edible Car Video

www.teachingchannel.org/videos/engineering-design-process-stem-lesson

This video shows students designing and building cars out of edible materials to solve a problem—travel the farthest on a ramp. This could be an additional design challenge.

"Will It Sink or Will It Float?"

http://static.nsta.org/files/sc1409\_18.pdf

This column teaches about the idea of buoyancy with boats and could connect to this lesson by providing the science content.

For Teacher Background and Development:

Why the Maker Movement is Important to America's Future

http://time.com/104210/maker-faire-maker-movement/

This is an interesting article that appeared *Time Magazine* and highlights the need for students to think through the process and make things.

Making Matters! How the Maker Movement Is Transforming Education

<u>www.weareteachers.com/blogs/post/2015/04/03/how-the-maker-movement-is-transforming-education</u>

This link provides a list of lessons learned from engaging in the process of making or engineering design.