

Name _____

BUILD YOUR VISION

The next step in the **engineering design process** is to create your prototype and make revisions to your design.

PART A: Build

1. Use your design to build your prototype. As part of the process, make any necessary adjustments to the design.
2. As you build your prototype, write down the steps you take.
3. Did you make any adjustments to your original plan while building? Why or why not?

4. What safety precautions did you follow while building your prototype?

PART B: Prepare to Test

Write the procedures for testing your prototype on a separate sheet of paper. Be specific, so that someone else could follow your instructions. Make sure to:

- ☐ Include a plan for collecting your data and making sure your results are reliable.
 - ☐ Include any safety precautions.
- ★ Remember that the engineering design process is a cycle—you may want to repeat some of the steps as you improve your design!

SEE IT IN ACTION The Food Waste Warriors make a safety plan, then start building a working model of a sensor that alerts people when fresh food is about to go bad. They follow their diagram, but some of the parts don't fit, so they make adjustments along the way. Then they make a plan to test the sensor to make sure it will work with different foods and in different refrigerators.

