

Name _____

TEST, ANALYZE, IMPROVE

Continue the **engineering design process** by testing, then dive into the data.

PART A: Test and Collect Data

1. What will you need to measure as you test your solution?

2. What other observations will you need to record?

3. Create a chart like the one below to record your data from each trial.

	TRIAL 1	TRIAL 2	TRIAL 3
Measurement 1			
Measurement 2			

SEE IT IN ACTION The Food Waste Warriors use their device to measure the amounts of moisture and chemicals released by food that is about to spoil. They test the device in multiple *trials* and record the measurements in a data table. They find that their device was reliable at detecting fruit that was about to go bad, but not meat.

4. Now test your prototype! Be sure to test it in as many situations as you can think of.

PART B: Analyze and Draw Conclusions

1. Which visual representation will work best with your data? Create it!

bar chart

line chart

diagram

infographic

other: _____

2. Based on your tests, did your design address the problem you set out to improve?

3. Was there an issue with a part of the design or the entire design? Which part?

4. What improvements will you make to your design before you test again?

