

Task #1: Read & Synthesize.

Please read [Data Organization in Spreadsheets \(Broman & Woo 2018\)](#). The authors present and discuss 11 practical recommendations for organizing spreadsheet data so it can be easily-read by a computer and understood by a human.

1. Please list and summarize the 11 recommendations. For each: discuss and explain a specific example to illustrate.
2. Which of these 11 tips did you find most-surprising, most-interesting, and/or most-useful. Please list and explain!

Task #2: Data Prep in MS Excel & Google Sheets.

Please read [How to prepare your data for analysis and charting in Excel & Google Sheets](#) for 15 more tips and ideas.

- List your Top-5 Steps and explain your reasoning.

⇒ The key is to have an organized and properly-formatted spreadsheet for your data viz.

Task #3: Line Charts & Scatter Plots.

Please open this spreadsheet: [Time Series Data](#)

Here you have temperature data (deg F) from two data loggers for 24 September 2020, measured once every hour.

1. Make yourself your own copy or download as an MS Excel file.
2. Create a line chart showing the two data series.
3. Create an XY scatter plot showing the relationship between the two data series.
4. Create the charts in both MS Excel and in Google Sheets to get a better sense of the differences between these two tools.

You can watch [Creating an XY Scatter Plot in Google Sheets](#) and [Creating an XY Scatter Plot in Excel](#) for reference.

To be honest, there's not much of a story in this data, so focus instead on good visual design of the charts.

Deliverables.

Please prepare a 8-page report:

Page 1	Cover page
Page 2, 3	Task 1
Page 4	Task 2
Page 5, 6	The MS Excel charts for Task 3
Page 7, 8	The Google Sheets charts for Task 3

Please contact me for help or clarification as needed!