Name: _____ Date: _____ Period: _____

Weather Data Analysis with Excel
Please Turn This Assignment In

Objective:
 Use the weather data for Durham, NC to draw conclusions for the relationship between different weather variables.

Data Analysis:
 Your data table includes information collected over the last month for Durham, NC.

- **Task-**You will create graphs of the following weather variables. Make sure to line the graphs up one on top of one another for easy comparison. **X Variable vs. Y Variable**
    - o **Graph 1**- Days vs. High Temp and on the same set of axis Days vs. High Dewpoint
    - o **Graph 2-** Days vs. Highest RH (relative humidity)
    - o **Graph 3-** Days vs. Highest Sea Level Pressure

Procedure- How to Create Your Graphs in Excel
- Go to the class website under *Teacher Notes* and download the "Excel Weather Data Template" http://feldmannscience.weebly.com/teacher-notes.html listed under today's date.
- Save the data template onto your computer

    Directions to Create Graph 1:
- Enter in the data for graph 1 in columns B and C.As you enter in your data, graph 1 will populate automatically. Save your work!

    Directions to Create Graph 2:
- Enter in your data for graph 2 in column F
- Create a line graph to display the variables of Day on the x-axis and Highest RH on the y-axis
- *Need Help?* Visit the online tutorial link located on your data template.
- Save your work!

    Directions to Create Graph 3:
- Enter in your data for graph 2 in column I
- Create a line graph to display the variables of Day on the x-axis and Highest Seal Level Pressure on the y-axis.
- Save your work!

Graph 2	Graph 3
(Stamp)	(Stamp)

STOP **When you finish your graphs, have Mrs. Feldmann take a look and give you a stamp!**

Conclusion Questions: Please answer the questions on the backside of this page using complete sentences. Use your graphs and data table to help you!

1. The weather that is associated with the temperature and dew point being close to one another is most likely what? Explain your reasoning
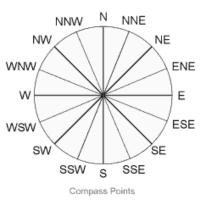
2. The weather that is associated with the RH being relatively high is most likely what? Explain your reasoning.

3. When the air pressure is relatively high what type of weather is most likely taking place? Explain your reasoning.

4. During which days did we experience inclement weather (examples: thunderstorm, rain, snow)? How can you use your pressure data to support this?

Go to: http://www.wunderground.com/history and find the wind speed and direction as well as the max temperature for the zip code 27713 to complete the following table:

Compass Points

Day	Wind Speed	Direction	Max Temperature (°F)
February 7, 2015			
February 8, 2015			
February 13, 2015			
February 19, 2015			

5. What can you conclude about temperature when winds come from the north?

6. What can you conclude about temperature when winds come from the south?