CHARTING THE WEATHER

For this activity, you will record data about the weather in three locations for one month. You will then create and analyze a graph based on the data you collected.

Pre-Activity Questions:

1. **Find the town where you live on a globe.** Compare the location of your town to the following cities: San Juan, Puerto Rico and Anchorage, Alaska.
   - What do you notice about these three locations?
   - __________________________________________________________________________
   - __________________________________________________________________________

2. How do you think the weather will differ in these three locations? Why?
   - __________________________________________________________________________
   - __________________________________________________________________________

Instructions:

On the following pages, you will find a data chart for each of the three locations: Your town, San Juan, Puerto Rico, and Anchorage, Alaska. Use the search tool in the top left corner of https://www.weather.gov/ record the weather data onto each of your charts. Be sure to check the website at the same time each day to ensure accuracy!
Name: ____________________

**Location #1 is the town where you live:** ____________________  **Month:** _____________

| Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Temp (F) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Humidity (%) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Wind Speed (mph) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

**Anchorage, Alaska**  

| Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Temp (F) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Humidity (%) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Wind Speed (mph) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
### Post-Activity Analysis

Once you have collected the weather data for one month, create a multi-line graph for the three cities **temperature** data. Use the graph paper on the next page.

1. Pick a color for each city. On the legend, fill in the square next to the cities name with the color you’ve chosen.
2. One city at a time, draw a dot for each day’s temperature.
3. Once all dots have been drawn for a city, draw a line to connect them!
4. Repeat the steps for the next two cities.
Post-Activity Questions

1. In general, how did the temperature differ for each of the three cities?

________________________________________________________________________________________

________________________________________________________________________________________

2. Why do you think these locations experienced such different weather conditions?
   (Hint: Look at where they located on the globe)

________________________________________________________________________________________

________________________________________________________________________________________

3. Could you expect that the weather on this month next year will be similar to the data you collected? Why or why not?

________________________________________________________________________________________

________________________________________________________________________________________

4. What pattern did you notice between Humidity and Temperature? Was it more humid on warm days or cooler days?

________________________________________________________________________________________

Make a Prediction! How do you think the weather might be in the Southern Hemisphere this month? Watch the following video link to help you think through this question: https://youtu.be/nDY_Md-jnY0

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