

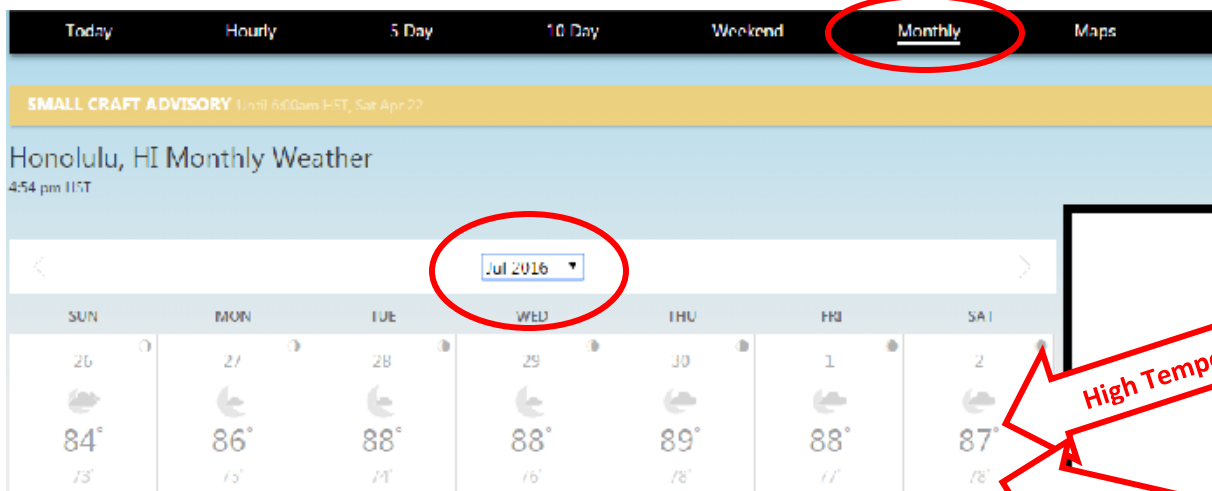
Weather Project - Unit 14

Name: _____

It's summer vacation time!!

One of the most important things to consider when going on vacation is the weather... I would hate to pick a week trip to Hawaii when it was raining or cold!

Using <https://weather.com> choose any location that you would like to vacation to by typing into the search bar at the top of the website. Click on **"Monthly"** at the top of the page and you should see a calendar of weather data for your location. Change the month to **"July 2016"** so that we can see what the weather was like **LAST** summer and use this data to plan your trip!!



Gather data from the website for an entire week (7 days). You will need to include the high temperatures and low temperatures for the entire week (so you should have 14 temperatures in all). **YOU WILL BE PRESENTING!!**

- Calculate the average high temperature, and the average low temperature separately.
- Describe your observations about these two averages and what might account for the differences.
- Then put all of your data together to calculate the average temperature with the standard deviation.
- Describe the meaning of the standard deviation in context.
- Calculate the five number summary for all of the temperatures.
- Create a boxplot for all of the temperatures on graph paper (or the number line provided). Make sure to label each part! **(PRESENTED)**
- Describe the boxplot in context! Discuss the shape and spread of your data. **(PRESENTED)**
- Discuss the difference between the median and the mean of all of the temperatures. What does this say about the weather at your location? **(PRESENTED)**
- Make a list of important items you will pack for your vacation based on your data! (Have fun with this!) **(PRESENTED)**
- **BONUS:** Research other information you may need for your vacation plans and include them in your final draft. This could be costs of hotels, activities to participate in, or prices for flights!

Rubric

Due Date: _____

Name: _____

_____ / 10	<p>Average Calculations and Description: All three average calculations are included and reasonable. There is a good description for the difference between high/low temp averages.</p>
_____ / 10	<p>S.D. Calculations and Description: The standard deviation is calculated, reasonable, and described in context in relationship to the average.</p>
_____ / 20	<p>Five Number Summary Calculations: All five of the five number summary calculations are included and reasonable.</p>
_____ / 20	<p>BoxPlot: (PRESENTED) Matches the five number summary data. Each part is labeled correctly and the box is drawn correctly.</p>
_____ / 10	<p>BoxPlot Descriptions: (PRESENTED) The spread and shape of the boxplot are described correctly.</p>
_____ / 10	<p>Mean vs. Median Description: (PRESENTED) Accurately describe the difference between the mean and median of the data and what it means for the weather at this location.</p>
_____ / 10	<p>Presentation AND Packing List! Tell the audience about your location! Your presentation should be fun and informative. Share your packing list, which will have items that are appropriate for the weather at your vacation location. <i>Show</i> and <i>describe</i> your boxplot to help us understand the possible weather.</p>
_____ / 10	<p>Neat/Professional Final drafts are written in pen or typed! Boxplot is neat and legible. Presentation is Professional.</p>
_____	<p>Extras: +5 for turned in early -10 for turned in late (each day) +5 for including EXTRA travel information +5 for putting your BoxPlot Page on a POSTER</p>
_____ / 100	<p>TOTAL</p>

Data Collection:

High Temperatures:							
Low Temperatures:							

Calculations:

Average High Temperature: _____

Average Low Temperature: _____

Average Temperature: _____

Standard Deviation: _____

Five Number Summary:

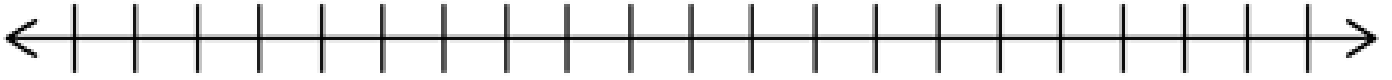
Descriptions:

Describe the difference between the Average High Temperature and the Average Low Temperature and explain why there may be a difference.

Describe the meaning of the standard deviation in context.

Describe the difference between the median and the average of your temperatures. What does this mean about the temperatures at your vacation location?

Boxplot:



Describe the SHAPE of your boxplot and what this means in context.

Describe the SPREAD of your boxplot and what this means in context.

Packing List:

- _____
- _____
- _____
- _____
- _____
- _____
- _____