Name _____　　　　　Class _____

Research Group A – Air Temperature

1. What does the x-axis show?

2. What does the y-axis show? What are the units?

3. Draw a vertical line on the graph at the following dates:

　　　First day of spring
　　　First day of summer
　　　First day of autumn
　　　First day of winter

4. What is the warmest daily average temperature for the year? When did that occur?

5. Temperatures are shown in degrees Celsius. Convert your high temperature reading to Fahrenheit so that you can better relate to what the temperature was.

The formula for conversion °C to °F is: Multiply °C by 9, then divide by 5, then add 32

6. What is the coldest daily average temperature for the year? When did that occur?

7. Convert your low temperature reading to Fahrenheit.

8. During which parts of the year would you consider the temperatures in Eureka to be most habitable?

Name _____   Class _____

Research Group B – Wind Speed

1. What does the x-axis show?

2. What does the y-axis show? What are the units?

3 Draw a vertical line on the graph at the following dates:

      First day of spring
      First day of summer
      First day of autumn
      First day of winter

4. What was the maximum daily average wind speed during the year? When did that occur?

5. Convert the maximum wind speed from meters per second to miles per hour, so that the units are easier to relate to.

There are 1609 meters/mile.

6. When were there periods of generally low wind speeds?

7. Can you see any pattern to when the winds were the strongest and when they are quieter?

Name _____   Class _____

Research Group C – Snow depth

1. What does the x-axis show?

2. What does the y-axis show? What are the units?

3. Draw a vertical line on the graph at the following dates:

   First day of spring
   First day of summer
   First day of autumn
   First day of winter

4. When was the greatest snow depth during the year? How deep was the snow?

5. Convert the value from millimeters to feet and inches so that you can better relate to the depth of the snow.

1 foot = 305 mm

6. Note that the snow depth never reads zero, but instead the data "wiggles" around between 15-30 mm of snow. Upon analyzing the data and re-calibrating the instrument, the scientists working on this project realize that these are erroneous readings from the instrument. (See the data analysis tips for more details.)

Given that, what is your **best estimate** of when the snow-free season was in Eureka?

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Name _____   Class _____

Research Group D – Incoming shortwave radiation

1. What does the x-axis show?

2. What does the y-axis show? What are the units?

3. Draw a vertical line on the graph at the following dates:

> First day of spring
> First day of summer
> First day of autumn
> First day of winter

4. What does downward short-wave radiation mean anyway? What is meant by the units of watts per square meter? Explain these concepts in your own words.

5. What was the greatest amount of incoming radiation?

6. On what date did the maximum incoming radiation occur?

7. Why is there zero incoming radiation for a large part of the year?

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