Weather Bug Math Project   Name:

Avanti now has a WeatherBug station that is in the main office. You can also obtain information from the website www.weatherbug.com. This project will have you record the data for at least a 2-week period and make some predictions.

Each day at the same time record the information from the weather station (weekends you will have to go to the website to get the information. Research the questions below, do the average calculations and analyze the results:

Source (School or Web)	Date	Time	Temp	Humidity	Wind Chill Index	Barometer	Dew point wet bulb	Light	Rainfall	Wind Speed & Direction
Units										
Averages										

Questions:

1) What is Relative Humidity and how is it measured?

2) What is Wind Chill Index and how is it measured?

3) In what units does the Barometer measure? What are some other units of barometers?

4) How can barometers be used to predict weather?

5) What is Dew point wet bulb measure? What is its significance?

6) What is the Light measurement? What are the units?

7) What are the current inches of rainfall this month?

8) Research how many inches of rainfall we normally get in Olympia? Are we ahead or behind?

9) What was the average Wind speed during the observed time?

10) Produce a graph (use a full sheet of graph paper or print and label a graphing calculator display or print of Graphical Analysis software) with the Date as the x-axis and then choose 2 variables, one for the left scale and one for the right scale; choose between (Temp, Humidity, Wind Chill Index, Barometer, Dew point, Light, or Rainfall).

11) Look to see if there is a correlation between the two variables that you chose and make a statement.

12) Based on your findings, predict the next month's readings on the 2 variables that you chose above. Explain your reasoning (don't just guess).

13) Produce a poster for display showing your work. Be sure it is legible at distance or 10' and neatly done.