Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_\_\_\_\_

Analyzing Data Using Graphs:

 Hurricane Humberto (Category 1)

Purpose: Scientists often use graphs to analyze data and look for relationships between variables. You will graph your data and see if you can find relationships.

Procedure: Graph the data in table below. Then answer the questions analyzing the data in the data table and using your graph.

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| Date  | Wind Speed (mph)  | Pressure (mb)  |
| Sept. 8, 2013 at 5 p.m. | 30 | 1007 |
| Sept. 9, 2013 at 5 a.m. | 40 | 1005 |
| Sept. 9, 2013 at 5 p.m. | 50 | 1002 |
| Sept. 10, 2013 at 5 a.m. | 65 | 998 |
| Sept. 10, 2013 at 5 p.m. | 70 | 993 |
| Sept. 11, 2013 at 5 a.m. | 75 | 992 |
| Sept. 11, 2013 at 5 p.m. | 85 | 986 |
| Sept. 12, 2013 at 5 a.m. | 85 | 982 |
| Sept. 12, 2013 at 5 p.m. | 85 | 982 |
| Sept. 13, 2013 at 5 a.m. | 75 | 984 |
| Sept. 13, 2013 at 5 p.m. | 50 | 996 |
| Sept. 14, 2014 at 5 a.m. | 40 | 1003 |

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Extension Questions

1. What is the benefit of graphing both sets of data on one graph?

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1. What happened to the wind speed over time?

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1. What happened to the pressure over time?

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1. Do you see a relationship between wind and air pressure? Explain.

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1. Using the data table and your graph, extrapolate the wind speed and pressure data would be for Hurricane Humberto on September 14, 2013 at 5 p.m. Graph these points on the graph and circle your data points.
	1. Wind Speed = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Pressure = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_