Mr. Noble

Chemistry

Name:

Date:

Period:

Great Gobs of Graphs

	May 18	Jun 1	Jun 15	Jun 29	Jul 13	Jul 27	Aug 10	Aug 27	Avgs
1.	9.02	7.98	7.46	7.32	7.10	7.48	7.80	7.36	7.69
2.	6.40	8.38	7.62	5.54	7.78	7.78	8.32	7.68	7.44
3.	9.66	7.68	8.00	7.46	6.86	7.14	6.92	6.18	7.49
4.	7.22	6.40	7.08	7.66	6.72	7.78	6.66	7.54	7.13
5.	6.78	6.94	7.82	7.70	7.42	8.10	7.06	7.78	7.45
Avg	**7.82**	**7.48**	**7.60**	**7.14**	**7.18**	**7.66**	7.35	**7.31**	**7.44**

The data above was collected along a river. The numbers are parts per million (ppm) of dissolved oxygen in water samples at various sites (1-5).

Analysis of the data table this is to be done ALONE, BY YOURSELF.
1. What is the highest amount of dissolved oxygen recorded in this table? b) When was that data collected? c) Where was that data collected?
   a)   **9.66**   b)   **May 18**   c)   **Along a river**
2. Which site had the most variation in the amount of dissolved oxygen measured during this time period? Explain how you decided that.
   Site #1 because its highest ppm is 9.66 and lowest ppm is 6.40, this 3.26 difference is the highest among all the sites.
3. Calculate the average amount of dissolved oxygen recorded on August 10.
   (7.80 + 8.32 + 6.92 + 6.66 + 7.06 = 36.76)/ 5 = 7.35

4. Assume the average amount of dissolved oxygen from site 1 is normal. What percent of normal is the data collected at a) Site 2 on June 29. b) Site 4 on July 13. c) Site 5 on July 27.
   a) (5.54/7.69)*100 = 72%   b) 87.4%   c) 105%

5. What does this data indicate about the amount of dissolved oxygen in this river during this time period?
   Even though the numbers may vary, the averages for each site are relatively close. Therefore the relative amount of dissolved oxygen along the river is the same.
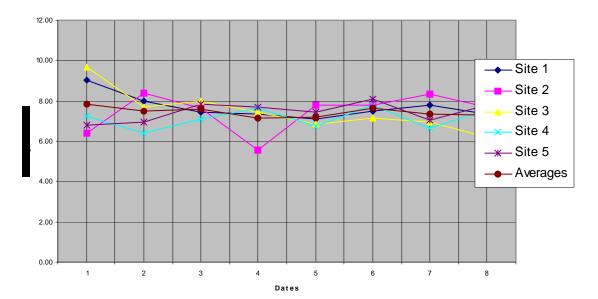
Graphing – To be done ALONE, BY YOURSELF. USE GRAPH PAPER.
1. What is the range of data values for this graph? Show your work or explain your answers. **The date's range from May to August, or 7 actual days. The ppm of oxygen data ranges from a low 5.54 to a high of 9.66 for a difference of 4.14**

2. a) What is the independent variable? **The dates**
   b) What is the dependent variable? Explain. **The dependent variable is the ppm of oxygen because the number or amount depends on the date in which they collected.**
3. What kind of graph will you make? **Line**
4. **Make a graph of this data**. Use a different color for each collection site. **(See below)**
5. Predict the amount of dissolved oxygen at Site 2 on August 3. Explain how you did that and if it is a valid prediction. **Around 8.0. Looking at the line graph**

Amount of Dissolved Oxygen in Water at Various Sites