Compute This
Northmont Invitational 2009

The health of Ohio's Construction Industry can be surveyed by reviewing the amount of Sand and Gravel produced for that industry. Using the www.usgs.gov website, locate the amount of Construction Sand and Gravel **produced** in the State of Ohio in the years 1996 through 2003, in metric tons (x1,000)

DATA FORMAT:
In Cell A1 enter your Team Number
In Cell B1 enter your School Name
In Cell C1 enter your Name
In Cell D1 enter your teammates Name
Adjust Column A to 17 spaces wide and label it as "Year:" in Cell A2
Adjust Column B to 17 spaces wide, and label it "1,000 Metric Tons Produced" in Cell B2
Adjust Column C to 55 spaces wide and enter the complete website the data was located, wrapping text as necessary (copy / paste from the address bar is ok)
Adjust the entire data page to an Arial 10-point font
Enter your data in the labeled Columns

GRAPH FORMAT:
Create a line graph with the years on the X-axis (1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003) and label it "Year"

Adjust the Y-axis to cross the X-axis at a value of 40,000, with a maximum value of 60,000.   Create major labels at increments of 5,000 and minor gridlines of 2,000. Label this Axis "Metric Tons (x 1,000)"

The Title of your line graph should be "Metric Tons of Construction Gravel Produced in Ohio 1996 - 2003 (x 1,000)" in **Bold**, 12 point Arial font

The background of your graph should be gray, with both minor and major grid lines turned on from both axes.

There should be 2 lines of your graph:
▪ The first identifies the amount of gravel produced by year (x 1,000)
    ▪ Label each of these points with values
    ▪ Modify the points of this line to a diamond shape. Set the foreground of these points to dark blue and the background to yellow
▪ The second line should be a straight line located at the bottom of the graph and serve to number the year shown (i.e 1=1996, 2=1997, etc.)
    ▪ Modify the points on this line to squares and adjust the color for both foreground and background to black

Below the graph there should be 3 rows of data cells:
▪ The first data row should be the number of the year in question (i.e. 1, 2, 3, 4, etc.)
▪ The second data row should be the actual year (i.e. 1996, 1997, 1998, 1999, etc.)
▪ The third data row identifies the quantity of metric tons in 1,000s of gravel produced that year that is graphed directly above it.
▪ To the immediate left of the second data row should be a legend that states "Year"
▪ To the immediate left of the third data row should be a legend that states "1,000 Metric Tons Produced"

The entire Graph should be set up as a separate page to the Excel Workbook, not pasted on the data sheet:
▪ Label the Workbook page containing the Graph as "Chart1"
▪ Label the Workbook page containing the Data as "Data1"

SHORT ANSWER QUESTIONS:
On the Data1 Page, label Cell A21 as 1, A22 as 2, A23 as 3, A24 as 4, and A25 as 5
On the Data1 Page, label Cell B20 as "Answer:"
On the Data1 Page, label Cell C20 as "URL:"
Now, beginning on line 21, and ending on line 26, answer the following questions and provide the URL Reference

1. As of today, how many wastewater Membrane Bioreactors does Ohio currently have operating?
2. What were the magnitude, location, and year of the largest earthquake ever recorded in the world?
3. In March of 1937, Anna, Ohio suffered 2 medium strength earthquakes. What outstanding phenomena were common to both quakes that would have creeped residents out?
4. What were the magnitude, nearest town, and year of the largest earthquake ever recorded in Ohio?
5. Has Ohio ever had a naturally occurring significant deposit of Gold?