**Sensors and Scatterplots Activity –   
Scatterplots with Technology Worksheet**

**Directions**

Using our class data sheets, we will analyze more scatterplots, using the Create A Graph website to make our scatterplots. Access the website by searching “Create a graph” in your browser search bar, or enter the following address: <http://nces.ed.gov/nceskids/createagraph/default.aspx>). Complete the following.

**Questions**

1. **Is there a relationship between BMI and pulse rate?** Follow the steps below to find the answer.
   1. Select XY graph.
   2. Design tab:
      * XY Type: select “Scatter”
      * Style: for Grid Lines: select “11”
   3. Data tab:
      * Fill in Graph Title, X Axis Label, Y Axis Label. Leave Source blank.
      * Data Set: Points: select number of students on your class data sheet
      * Groups: select “1”
      * Group Label: input your class period/section number
      * Input the BMI and pulse rate data under the Points-Value section.
      * Input the Min-Value and Max-Value for the x-axis and y-axis.
   4. Labels tab:
      * Data Labels: select “no”
      * Fonts: choose to your liking
   5. Preview tab:
      * Check your scatterplot for accuracy.
      * If you need to make corrections, go back to the previous tabs.
   6. Print/Save tab:
      * Get your teacher’s approval prior to printing.
   7. Analyze your scatterplot.

Write an explanation of the relationship between BMI and pulse rate.

1. **Is there a difference between male/female data in the relationship BMI and systolic blood pressure?**
   1. Select XY graph.
   2. Design tab:
      * XY Type: select “Scatter”
      * Style: for Grid Lines: select “11”
   3. Data tab:
      * Fill in Graph Title, X Axis Label, Y Axis Label. Leave Source blank.
      * Data Set: Points: select the number of students on your class data sheet
      * Groups: select “2”
      * Group Label: input “Males” for Group 1 and “Females” for Group 2.
      * Input the BMI and systolic blood pressure data under the Points-Value section. (It is okay to leave blank spaces at the end of your list.)
      * Input the Min-Value and Max-Value for the x-axis and y-axis.
   4. Labels tab:
      * Data Labels: select “no”
      * Fonts: choose to your liking.
   5. Preview tab:
      * Check your scatterplot for accuracy.
      * If you need to make corrections, go back to the previous tabs.
   6. Print/Save tab:
      * Get your teacher’s approval prior to printing.
   7. Analyze your scatterplot.

Write an explanation of what you observe on the scatterplot.