Name: _____ **Date:** _____

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.
    a. Select XY graph.
    b. Design tab:
        - XY Type: select "Scatter"
        - Style: for Grid Lines: select "11"
    c. 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.
    d. Labels tab:
        - Data Labels: select "no"
        - Fonts: choose to your liking
    e. Preview tab:
        - Check your scatterplot for accuracy.
        - If you need to make corrections, go back to the previous tabs.
    f. Print/Save tab:
        - Get your teacher's approval prior to printing.
    g. Analyze your scatterplot.

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

    _____

    _____

    _____

2. **Is there a difference between male/female data in the relationship BMI and systolic blood pressure?**
    a. Select XY graph.
    b. Design tab:
        - XY Type: select "Scatter"

- Style: for Grid Lines: select “11”

c. 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.
d. Labels tab:
   - Data Labels: select “no”
   - Fonts: choose to your liking.
e. Preview tab:
   - Check your scatterplot for accuracy.
   - If you need to make corrections, go back to the previous tabs.
f. Print/Save tab:
   - Get your teacher’s approval prior to printing.
g. Analyze your scatterplot.

Write an explanation of what you observe on the scatterplot.

_____

_____

_____