Sensors and Scatterplots Activity – Creating and Analyzing Scatterplots Worksheet

Question 1
Is there a relationship between systolic blood pressure and BMI?

Hypothesis
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Scatterplot 1 Creation
Use the data from the Class Data Sheet to create a scatterplot. Make sure you label your axes and include a title.

Scatterplot 1 Data Analysis
1. With your team, discuss the trend you see in the scatterplot. What type of trend do you observe in the scatterplot?

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2. Write an explanation of the relationship between systolic blood pressure and BMI.

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3. Using a ruler, draw a line of best fit on your scatterplot. Using the line of best fit, predict the value of systolic blood pressure a person would have if their BMI value is 24. What would the BMI value be if the person’s systolic blood pressure is 135?

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Question 2
Is there a relationship between pulse rate and systolic blood pressure?

Hypothesis

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Scatterplot 2 Creation
Use the data from the Class Data Sheet to create a scatterplot. Make sure you label your axes and include a title.
Scatterplot 2 Data Analysis

1. With your team, discuss the trend you see in the scatterplot. What type of trend do you observe in the scatterplot?

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2. Write an explanation of the relationship between pulse rate and systolic blood pressure.

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