

Criteria	Performance			Weight	Comments
1 Follow the directions to plot the relationship between animal brain size and lifespan.	A scatter plot accurately represents the 27 data pairs. <u>10</u> 9	A scatter plot accurately represents at least 24 of the data pairs. 8 <u>7</u> 6	The scatter plot is missing or is inaccurate. 5 4 3 2 1 <u>0</u>	1	
2 Add a line of best fit (trendline) and calculate the correlation coefficient.	The scatter plot includes a line of best fit and the correlation coefficient has been correctly calculated. <u>10</u> 9	The scatter plot includes a line of best fit or the correlation coefficient has been correctly calculated. 8 <u>7</u> 6	The line of best fit and correlation coefficient are both missing or incorrect. 5 4 3 2 1 <u>0</u>	1	
3 Write complete answers to the four questions in the section titled 'Use the Scatter Plot.'	The four questions are answered completely and correctly. <u>10</u> 9	At least two of the questions are answered completely and correctly. 8 <u>7</u> 6	Less than two of the questions have been answered completely and correctly. 5 4 3 2 1 <u>0</u>	2	
4 Using the same process and the animal data, analyze a different relationship. You will need to create a scatter plot, calculate the correlation coefficient, and write a concluding statement.	Another relationship has been investigated. The scatter plot and correlation coefficient are accurate. <u>10</u> 9	Another relationship has been investigated. There is an error in either the scatter plot or the calculation of the correlation coefficient. 8 <u>7</u> 6	The scatter plot and correlation coefficient are both missing or incorrect. 5 4 3 2 1 <u>0</u>	2	
5 See above.	A logical deduction has been made and is clearly stated. <u>10</u> 9	The concluding statement is not entirely logical or is poorly expressed. 8 <u>7</u> 6	The conclusion is missing or shows no logical reasoning. 5 4 3 2 1 <u>0</u>	1	
6 Gather house data from an appropriate Web site. Use it to create a scatter plot. Reference the source of your data.	A scatter plot accurately represents the size vs. price for 50 houses. The source of the data is referenced. <u>10</u> 9	A scatter plot accurately represents the size vs. price for at least 30 houses. The source of the data is acknowledged. 8 <u>7</u> 6	The scatter plot is missing or represents fewer than 30 houses, or the source of the data is not acknowledged. 5 4 3 2 1 <u>0</u>	2	
7 Add a line of best fit (trendline) to your house data plot.	The scatter plot includes an accurate line of best fit. <u>10</u> 9	The scatter plot includes a line of best fit. It does not correctly represent all of the source data. 8 <u>7</u> 6	The line of best fit is missing. 5 4 3 2 1 <u>0</u>	1	
8 Find the correlation coefficient for your house data.	The correct function and data were used to accurately determine the correlation coefficient. <u>10</u> 9	The correct function was applied to most of the data. The value calculated is not quite correct. 8 <u>7</u> 6	The function was not applied correctly. The value is missing or is not at all reasonable. 5 4 3 2 1 <u>0</u>	1	
9 Write a paragraph to explain your findings. How strong is the relationship? What does this mean? Why might this be the case? Ensure your statements are clearly supported by your data analysis.	Precise concluding statements reflect accurate analysis and logical reasoning. <u>10</u> 9	The concluding statements are not well expressed or contain an error in reasoning. 8 <u>7</u> 6	The concluding statements are missing or do not reflect logical analysis. 5 4 3 2 1 <u>0</u>	2	