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## Graphing Questions: Based on Pgs 835-838 of Science Spectrum

### Line graphs

1. The variable that you can control is called the \_\_\_\_\_ variable.
2. The variable that you do not control is called the \_\_\_\_\_ variable.
3. The variable that is plotted on the y-axis/vertical is called the \_\_\_\_\_ variable.
4. The variable that is plotted on the x-axis/horizontal is called the \_\_\_\_\_ variable.
5. In figure 3 on page 835, what is being graphed on the independent variable?  
\_\_\_\_\_
6. On the same graph, what is being graphed on the dependant variable?  
\_\_\_\_\_
7. What does the line on figure 3 show, and what can you conclude about plants in the experiment?  
\_\_\_\_\_  
\_\_\_\_\_
8. On the graph paper provided, create a graph using the data located in the lower right corner in question 2 on page 835.
9. Compare the graph you made with that of figure 3. What can you conclude about the two different groups of plants?  
\_\_\_\_\_  
\_\_\_\_\_

**Scatter Plots** —these questions are based on the practice questions numbered 1-3 on the lower right of page 836.

10. Copy the graph from practice question 1.

11. What does this best fit line represent ?

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12. If these were the data from a different city than the data in figure 5, what conclusions could you draw about the two cities?

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**Bar graphs-** these questions are based on the practice questions numbered 1-3 on the lower right of page 837.

13. What day of the week is most productive, according to figure 8 on page 837? \_\_\_\_\_

14. What day of the week is least productive? \_\_\_\_\_

15. Using the data table located on the lower right of page 837, create a clear and easily readable bar graph on the graph paper provided.

**Pie charts** -these questions are based on the practice questions numbered 1-3 on the lower right of page 838.

16. Using the data table located in question 1 on the lower right of page 838; create a pie chart on the graph paper provided.

17. If humans use half of forests and grasslands, plus all of croplands and urban areas, how much of the total land is used by humans? \_\_\_\_\_

18. Turn to Page 27 and read. On the graph paper provided, make a pie chart for practice question 1.

**Interpreting a graph -** these questions are based on the question number 13 on the lower right of **page 28**.

19. What was the highest temperature reached during the reaction? \_\_\_\_\_

20. How many minutes passed before the highest temperature was reached? \_\_\_\_\_

21. During what period of time was the temperature increasing? \_\_\_\_\_

22. Did heating or cooling occur faster? \_\_\_\_\_

23. The independent variable is \_\_\_\_\_

24. The dependent variable is \_\_\_\_\_

25. What is the answer to question 6 on **page 31**? \_\_\_\_\_