## Note: Do not exceed the maximum stretch for your spring which is

Instructions: Explain how you found your answer for each question below.

- 1. Hang up the spring and put different weights on it.
- 2. Record the amount of weight and the amount of stretch for each weight.

Force	Length

3. Which is the independent variable? Which is the dependent variable? Explain how you know.

Explanation #3

- 4. Choose an appropriate scale and plot the points on a scatter plot. Then draw the line of best fit.
- 5. Find the rate of change, including units.

Explanation #5

6. Where is the vertical intercept. What does it mean in terms of the variables? Explanation #6

7. Write an equation for your line that includes force and distance.

Explanation #7

8. Predict how much the spring would be stretched by a weight you have not tried. Explanation #8

9. Predict how much weight it would take to stretch the spring by an amount you have not tried.

Explanation #9

10. If you were using this spring to make a spring scale for measuring weight, what units would you use and how far apart would you place them on your scale?

Explanation #10

11. What is the accuracy of this experiment? List the possible errors. Explanation #11

12. In your own words explain what you learned from this lab. Explanation #12