

Lab: Hooke's Law

Name _____

mass (g)	force (wt) exerted (N)	stretch (cm)
0	0	0
20		
60		
100		
160		
200		
240		

Label the x-axis with the _____ variable.

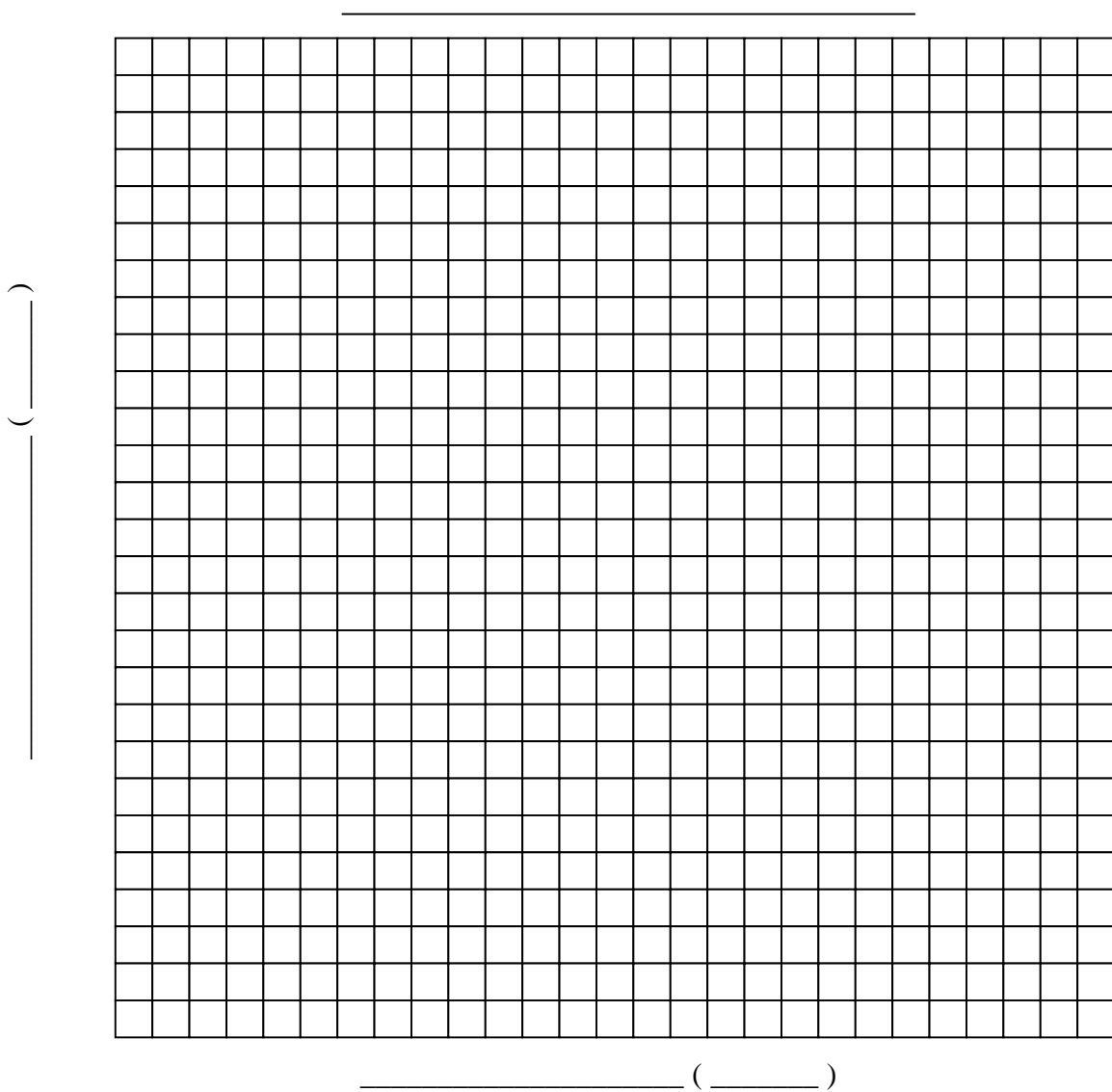
In this experiment, this is _____.

Label the y-axis with the _____ variable.

In this experiment, this is _____.

Make a best-fit line or curve and add a title when instructed to do so.

Complete the graph when instructed to do so. Do NOT work ahead.



Conclusions/Questions:

This graph shows a _____ proportion. This is evident because the shape of the graph is a _____.

Interpolate and extrapolate these answers. Circle which process you used to find your answer.

1. How far will the spring stretch if 1.8 N of force is applied?
_____ (interpolated, extrapolated)
2. What force was exerted if the spring stretched 7.0 cm?
_____ (interpolated, extrapolated)
3. What force was exerted if the spring stretched 0.05 m? (*Notice the unit here!*)
_____ (interpolated, extrapolated)
4. How far will the spring stretch if 2.5 N of force is applied?
_____ (interpolated, extrapolated)