

Date \_\_\_\_\_

Period

## Hooke's Law Lab

Objective: to determine the spring constant of a spring.

Materials: spring, stand, mass holder, masses

Procedure:

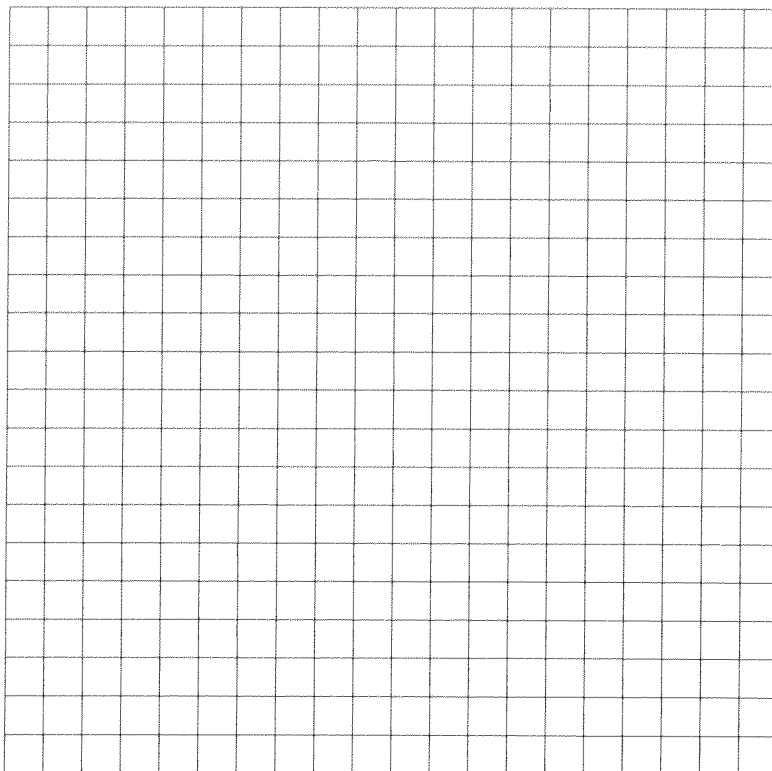
- 1) Hang spring and mass holder on stand. Adjust the scale so that the needle measures 0.0cm if necessary.
- 2) Place some mass on the mass holder. Record the spring elongation in your data table.
- 3) Repeat Step 2 with a different amount of mass seven times.
- 4) Do NOT place more than 150 g on the mass holder. This can damage the spring.

Data:

[illegible]

Graph:

Plot a graph of force versus spring elongation. Draw a line of best fit. Make sure to title the graph, label the axes properly with units, and provide an appropriate scale for each axis.



Conclusion:

What is the spring constant of the spring? Justify your answer based on your graph. Show any calculations you used.