HOOKED ON HOOK'S LAW!

NAME AND CLASS PERIOD _____

1. Text, page 23. Read
2. Watch the demonstration.
3. Each group has a set-up of a slinky, a cup holder and marbles to conduct an experiment on Hooke's law. You will add items as instructed by the teacher in the same amount to the cup and record your findings in centimeters.

Objects in Cup x	Floor to Bottom of Cup y	
0		DEFINITIONS input= x-values (independent) output=y=value (dependent)
3		
6		
9		SLOPE FORMULA $\frac{y_2 - y_1}{x_2 - x_1}$
12		

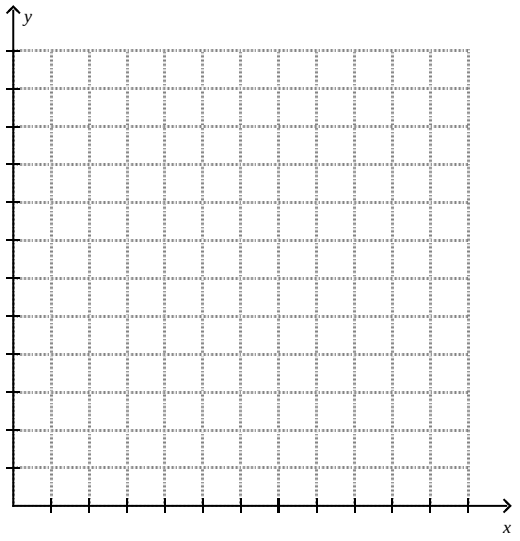
Using this data, we will make a scatter plot that will compare:

- the total objects in the cup to the distance from the floor to the bottom of the cup.

What will be our dependent (y value— output) _____

What will be our independent (x value – input)_____

<u>On graph label your axis and reasonable intervals</u>



Plot your data.

Is this a discrete or continuous graph?_____

Does the graph go through the origin?_____

What is the y intercept (b)_____

Find the slopes of the graph using the slope formula.

Write an equation y = _____

Is this a proportionate or non-proportionate graph?_____