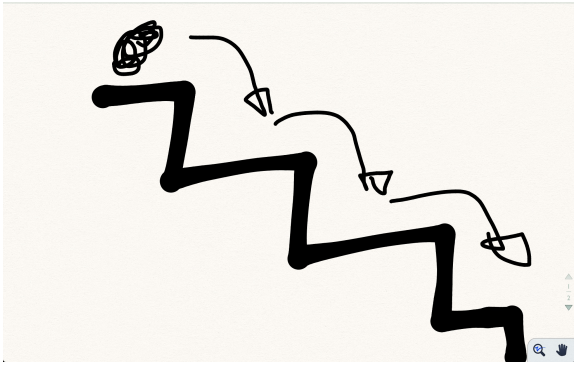
Purpose: To determine what the rate a slinky falls from different numbers of steps
Independent variable: stairs
Dependent variable: time

Anticipated domain and range: 1-6

I think this will be linear because I think the slinky will fall slower from a higher number of steps but will travel faster from a lower number of steps. This will make a linear line.

Apparatus:



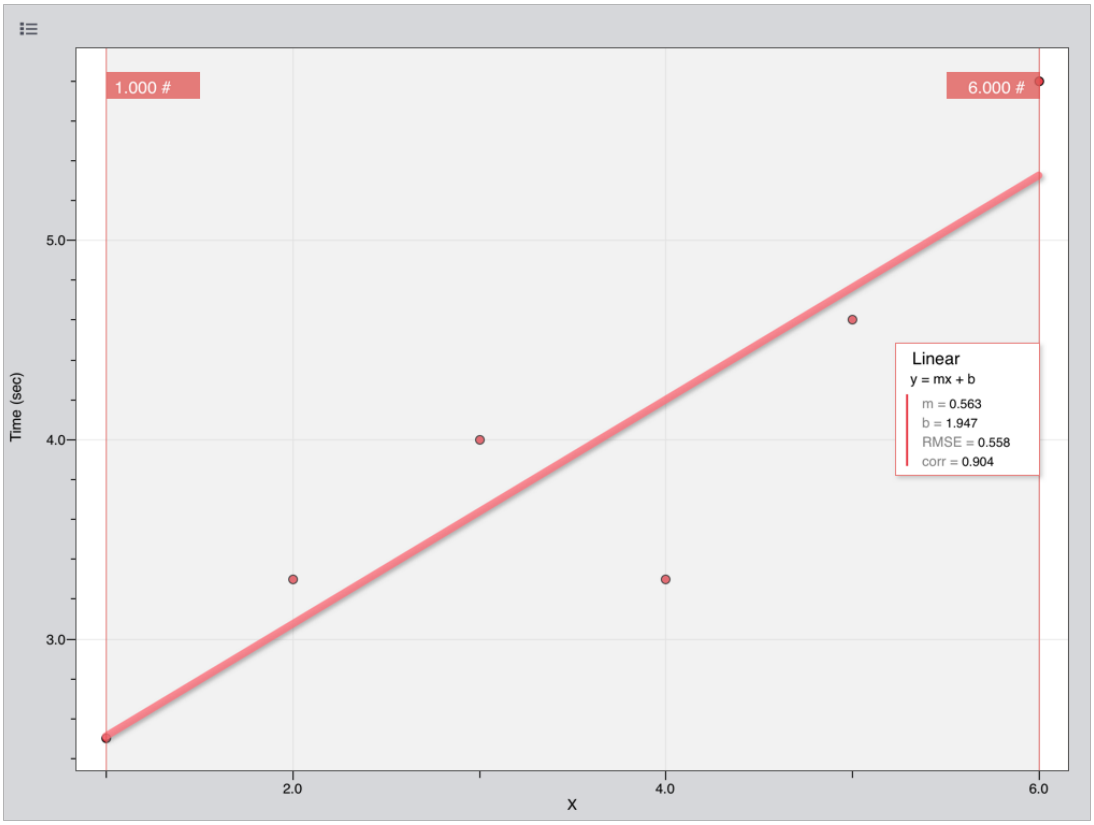
Procedure:
1. Set up slinky at top of step
2. Get timer ready
3. Using your hand, grab the top of the slinky an push it forward
4. Let the slinky fall down the steps
5. Stop timer when slinky stops
6. Repeat for each step

Data Table

	Step 1(sec)	Step 2 (sec)	Step 3 (sec)	Step 4 (sec)	Step 5 (sec)	Step 6 (sec)
Trial 1	2.9	3.5	3.5	3.0	4.5	5.8
Trial 2	2.0	2.7	2.9	3.3	4.6	5.9
Trial 3	2.8	3.7	5.7	3.6	4.8	5.7

	Steps (#)	Time (sec)
1	1	2.5
2	2	3.3
3	3	4
4	4	3.3
5	5	4.6
6	6	5.8

Graph



S=.6sec+1.947steps

This graph shows that the line is not very linear. I think it wasn't as linear because the experiment was flawed in that the slinky did not fall correctly and wasn't very reliable. You can see this in the difference in data in terms of the fourth step average drops very low. I think that I would change that if I were to do the experiment again and try and fix the slinky.