105c_google_graphing

(20pts) Part 3: Analyzing data and creating graphs:

In this activity you will make graphs in a google spreadsheet, insert into a google document and write a figure legend.

- 5pts) for figure 5 graph
- 5pts) for figure legend
- 5pts) for figure 6 graph
- 5pts) for figure legend

Line graphs are best used to show changes over time of a certain sample. They can also be sued to show the relationship between an independent variable and its response. This is done primarily through the use of creating a linear equation based on graphing the data.

 In the following example Ice cubes are melted over time using various quantities of sodium chloride

Time sec	0	5	10	15	20	25	30	35	40
Distance in cm	0	17	34	51	68	85	102	119	136

The best way to represent this change is to show a line that increases over time. The only way a line can attach from one data point to the next is if the measurement is taken from the same sample. In this case it is a cart that is moving away from its starting point and the measurement is taken every 5 seconds.
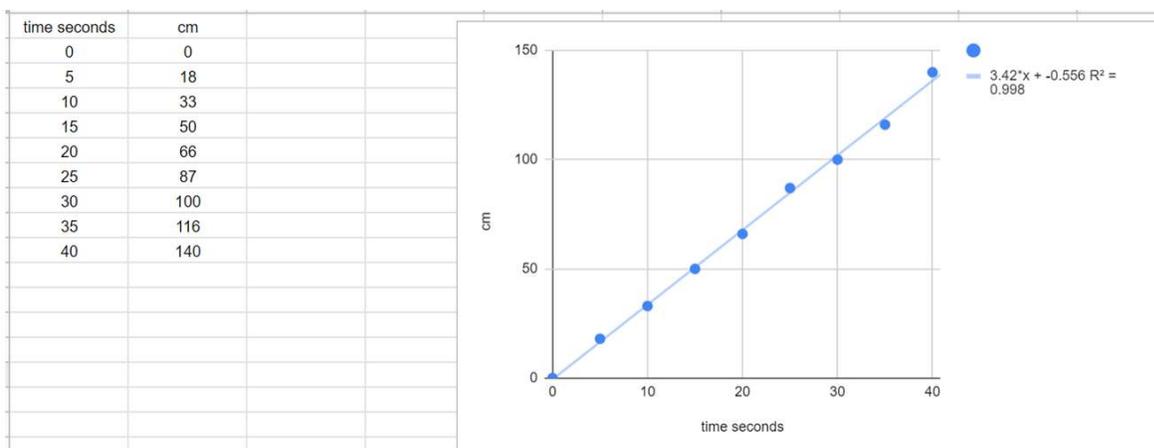
Figure 5: Distance the red force car traveled per minute

Time min	0	1	2	3	4	5	6
Distance in meters	0	4.00	8.25	12.50	15.9	19.8	26.2

Figure 6: Distance the different color force cars traveled per minute

Time min	0	1	2	3	4	5	6
Red distance m	0	5.20	10.6	15.92	20.6	26.22	31.2
Blue distance m	0	8.64	16.24	24.3	31.9	40.32	48.12
Yellow distance m	0	6.04	12.28	18.3	24.0	30.42	36.2

In figure 6 you would want to show a trend line for each trial