Analysis of C. elegans on Drugs Lab Report

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#	Drug A	Control A	Drug A - Control A
1	40.20	22.40	17.80
2	7.60	9.90	-2.30
3	0.00	6.20	-6.20
4	15.10	18.10	-3.00
5	10.50	20.50	-10.00
6	5.50	2.00	3.50
7	22.50	25.00	-2.50
8	12.60	23.30	-10.70
9	3.00	15.00	-12.00
10	0.00	11.00	-11.00

#	Drug B	Control B	Drug B - Control B
1	33.70	26.30	7.40
2	18.90	8.00	10.90
3	15.00	9.00	6.00
4	19.40	20.60	-1.20
5	41.20	13.57	27.63
6	49.80	18.50	31.30
7	36.10	21.90	14.20
8	28.50	24.90	3.60
9	23.90	22.10	1.80
10	35.50	16.90	18.60

$$n = 10$$
$$\overline{x} = \frac{x_1 + x_2 + \cdots + x_n}{n}$$
$$\sigma_x = \sqrt{\frac{|x_1 - \overline{x}|^2 + \cdots + |x_n - \overline{x}|^2}{n-1}}$$
$$\epsilon_x = 2 \times \left(\frac{\sigma_x}{\sqrt{n}}\right)$$
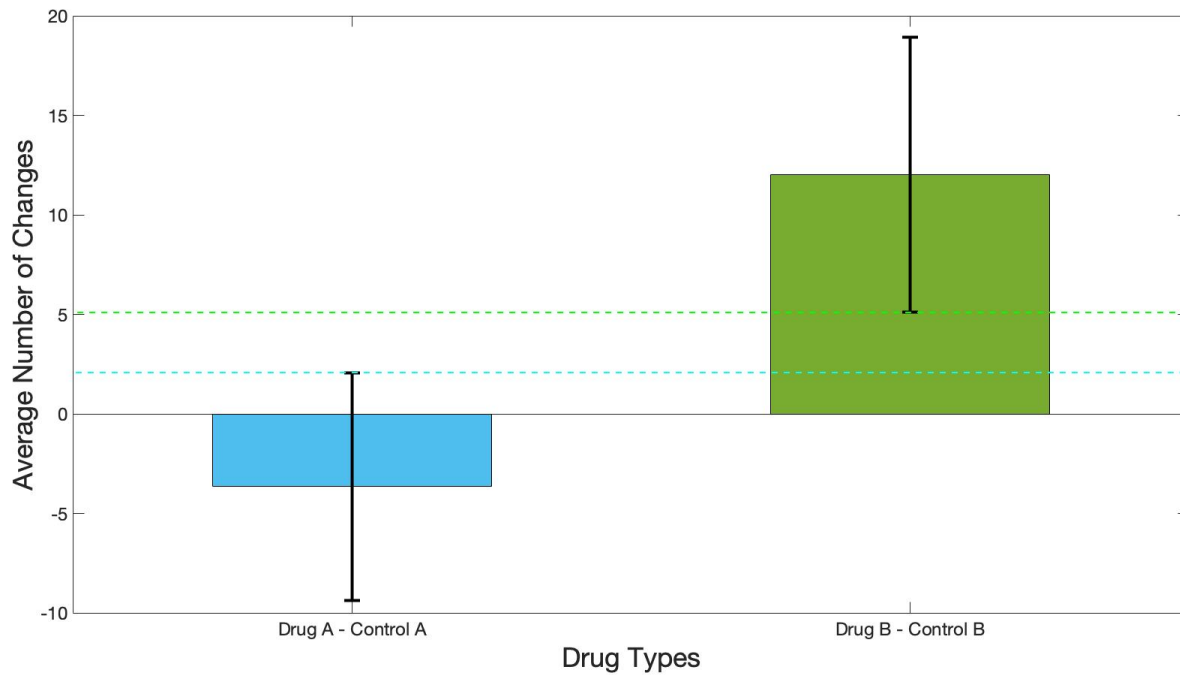
1. What was your hypothesis?

   a

2. Does the data support your hypothesis? In other words, what were the results of the experiment? Did Drug A have a significant positive or negative effect? Did Drug B have a significant positive or negative effect? (Significance = the confidence intervals do not extend past 0)

   b

3. If the data does not show significance, why might this be?

   c

4. (In reference to experiment video) Do you think it's an issue that Robyn knew which side of the slide was the control and which side contained the drug? Could this influence results?

   d