Conclusive Paragraphs for Scientific Data

Your conclusive paragraph should communicate the major findings of a set of data. These paragraphs should be clear and concise – generally only 4 sentences long!!

I have provided two examples of data and their appropriate conclusive paragraphs, be sure to look at them both as they are slightly different!!!!

Question: How does the amount of time a battery is charged affect the time the flashlight gives off light?

Time Battery was Charged vs Time Flashlight gave off Light

xxxxxxxxxxxxxxxxx	**Time Flashlight gave off Light**			
Time Battery was Charged (seconds)	Trial 1	Trial 2	Trial 3	Average
30	4.8	5.5	4.0	4.8
60	11.5	11.0	10.5	11.0
120	42.6	34.9	46.0	41.2
240	190.3	192.0	184.4	188.9

Sentence one: Conclusive Statement: correctly answers the investigative question. It should explain the general trend of the data, and state what happens to the RV as the MV is changed.

Notice that as charge time increases, so does the flashlight time. That makes this an easy paragraph to write.

Example: When the amount of time a battery is charged is increased, the time a flashlight gives off light also increases.

The time a flashlight gives off light increases when the battery is charged longer.

- It could include the MV/RV that supports the general trend.
- It cannot be vague
    - *I.e. The amount of time a battery is charged affects the time the flashlight gives off light.*
    - Notice this sentence does not state what actually happened….

Sentence Two: Supporting Data: Gives supporting data for the lowest MV. Includes both the actual MV and the actual RV.

Example: When the battery was charged for 30 seconds, the average time the flashlight gave off light was 4.8 seconds.

Sentence Three: Supporting Data: Give supporting data for the highest MV. Includes actual MV and RV numbers.

Example: When the battery was charged for 240 seconds, the time the flashlight gave off light for 188.9 seconds.

Notice for both sentence two and three…

- Gave actual numbers for the MV and RV from data table
- Gave only the AVERAGES, not the highest/lowest data point on the table

Sentence Four: Explanatory sentence: Not the same as the conclusive statement; should connect the supporting data to the conclusive sentence. *Should use comparative language: longest, shortest, tallest, etc.*

Example: The lights lasted the longest (by 184.1 seconds) when the batteries were charged 210 seconds longer.

- Notice I used a comparative word (longest)
- Notice I came up with two new numbers by subtracting the high data point from the low data point
- Notice it is not the same as sentence 1.

Question: What affect does pH have on the height radish plants can grow?

pH of water	Height of plants
pH 4	0.5 cm
pH 5	0.5 cm
pH 6	12 cm
pH 7	9 cm

Notice that the best pH is 6…the height of the plants does not just increase with increasing pH. You must address the low MV, the high MV, and the MV that has the highest plant height.

Sentence One: The plants grew the tallest (12 cm) with a pH of 6. **(General Trend)**

Sentence Two: At a pH 4, the plants grew 0.5 cm **(Low MV/RV)**

Sentence Three: At a pH 7, the plants grew 9 cm. **(High MV/RV)**

Sentence Four: The plants at pH 6 grew 11.5 cm taller than pH 4 or 5, and 3 cm taller that pH 7. **(Explanatory Sentence)**