DIRECTIONS: Write conclusion paragraphs for each of the following experiments. You have been provided with the hypothesis, results sentence, and graph from which to make conclusions about the experiment. You are only required to do the first three parts of the conclusion. Then evaluate each conclusion paragraph using the checklist at the end of this assignment.

1. **Hypothesis**: If the temperature is increased, then the average number of seeds that germinate will increase.

   ![Graph of Temperature vs. # Seeds]

   **Results Sentence**: As the temperature increased, the number of seed that germinated increased, but above 25°C the number of seed that germinated decreased.

   **Conclusion Paragraph**:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2. **Hypothesis**: If different video games are played, then the pulse rate of the player will change.

   ![Graph of Pulse Rate vs. Video Games]

   **Results Sentence**: As the video games were played, the pulse rate of the player changed. Star-Pods produced the highest pulse rate, SpaceRace produced the lowest pulse rate, and ScooterBoy produced a moderate pulse rate.

3. **Hypothesis**: If the concentration of Chemical X is increased, then the height of plants exposed will increase.

   ![Graph of Plant Height vs. Chemical X Concentration]

   **Results Sentence**: As the concentration of Chemical X was increased, plant height increased, but above 10% concentrations, plant height decreased.
Conclusion Paragraph:

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

WRITING CONCLUSIONS CHECKLIST:
A conclusion paragraph usually contains a description of the purpose of the experiment, a discussion of your major findings, an explanation of your findings, and recommendations for further study.

1. What was the purpose of the experiment? (Include I.V. and D.V. in this sentence.)
   Format: The purpose of the experiment was to study (Insert Title.)
   Example: The purpose of the experiment was to study the effect of stress on the growth of bean plants.

2. What were the major findings?
   Format: The major findings were (Insert Results Sentence.)
   Example: The major findings were As the amount of stress increased, the height of the bean plants increased.

3. Was the hypothesis supported by the data?
   Format: The hypothesis that stated (Insert Hypothesis) was (supported, not supported, or partially supported.)
   Example: The hypothesis that stated If the amount of stress is increased, then the height of the bean plants will decrease, was not supported.

4. How did your findings compare (or contrast) with those of researchers?
   Format: In comparison (or contrast), (state similarity or difference.)
   Example: In contrast, Japanese farmers found that hitting rice plants was beneficial to plant height.

5. What happened that you did not expect? How can you explain this?
   Format: I did not expect (state anomaly if there was one.) I can explain this (Insert explanation.)
   Example: I did not expect bean plant height to increase with added stress. I can explain this by assuming something about stressing plants makes them grow better. Perhaps stressed plants release a chemical in response to stress which causes more growth.

6. What recommendations do you have for improving this experiment?
   Format: To improve this experiment, I recommend (Insert your Recommendation.)
   Example: To improve this experiment, I recommend including a larger sample of plants.

7. What recommendations do you have for further study? (This is above and beyond this experiment.)
   Format: For further study, I recommend (Insert your Recommendation)
   Example: For further study, I recommend measuring stress on monocots versus dicots.

© Copyright 2011. M. J. Krech. All rights reserved.