7. MAKE CONCLUSIONS

- Summarize the WHOLE experiment in a QUALITY, 3rd person PARAGRAPH! Include:
  - Restate the problem *(The problem in this experiment was "…?".)*
  - State the MAJOR findings of the experiment (what is the answer to the problem?) AND explain how the findings relate to the problem. *(The major findings of the experiment included…. The connections between the findings and the problem are……)*
  - Tell if the hypothesis was SUPPORTED or DENIED. Explain why. *(The hypothesis was….because…..)*
  - Rewrite a hypothesis based on the experimental results *(Based on the results, the hypothesis should be, "if…, then…because…".* OR *Based on the results, the hypothesis remains, "if…, then… because…".)*

7. MAKE CONCLUSIONS (cont.)

- Compare the original (book) and experimental (lab) research. Explain similarities & differences. *(The original research stated…..; however, in the experiment….* OR *The original research stated….. and the experimental research found the same.)*
- Explain sources of error. What went wrong? What affected the results? Tell HOW the errors affected the results. *(Sources of error throughout the experiment include… These errors affected the results because….)*
- Make recommendations for future research. (Write a NEW problem to experiment with in order to get more information on the topic) *(In the future, scientists should investigate the problem, "What is the effect of…. on….?" to learn more about this topic.)*
- Explain the impact on the scientific community (why would others care about what was learned?) *(The scientific community is interested in the findings from this experiment because they….)*

Sample conclusion:

The problem in this experiment was "What is the effect of convection currents on movement of the earth's plates?". The major findings included that a current was created from the hotter area towards the cooler area and the plates moved with the current. The hypothesis was supported because it predicted that the plates would move along with the currents. Based on the results, the hypothesis remains: "If convection currents occur in the asthenosphere below the lithospheric plates, then the plates will move in the direction of the current because of the current's force.". The original research stated that the plates above the convection currents are constantly in motion because of the currents and the experimental research found the same. Sources of error throughout the experiment include the air conditioning coming on and using too many "paper dots" creating too much weight for the currents. In the future, scientists should investigate the problem, "What is the effect of temperature differences on the speed of convection currents and plate movement?" to learn more about this topic. The scientific community is interested in the findings from this experiment because they can predict the speed and direction of plate movement using data from the convection currents.