**Turtle Lab**

**LABORATORY REPORT Brainstorm**

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| **A. Title**   * Summarizes experiment   **Lab Report: TURTLE RACES – The Effect of Temperature on Turtle Speed** |
| **Intro:**  **B. Purpose**   * Relevant information * Purpose of conducting the experiment * What do you hope to learn   **C. Hypothesis**   * Use if/then/because statement * Explanation of prediction-predict outcome * Should be based on the purpose of the lab (not a summary of the purpose) * Homeostasis: maintaining internal conditions, happy zone. This applies to this lab. Body temp returns to normal in endotherms using negative feedback loops. In ectotherms they have to move themselves. Endotherms are… warm blooded   Ectotherms cold. If trapped in a temp they cannot maintain homeo. So it effects there speed via there metabolism.  CONNECT WARM VS COLD BLOODED TO THE WAY MAINTAINs HOMEOSTASIS.  - Talk about negative feedback loop parts.   * Ectothermic * Endothermic * Feedback loop * Western Pond Turtle (*Clemmys marmorata*)   Explain – species of special concern list \*almost endangered  Newly hatched juveniles. |
| **Materials and Methods**  **D. Materials/Procedure (Experimental Design)**   * List of all materials * Independent variable (if applicable) * Dependent variable (if applicable) * Controls/constants (if applicable) * List of procedure |
| **Results and conclusion:**  **:Phys_Data_Sheet.jpg**  **E. Data/Results**   * Qualitative data: Observations/Drawings/Notes:   + Didn’t like containers * Quantitative data: Calculations, numbers, values * Data table with clear data * Data table is labeled and units are noted * Graphs present to show quantitative data * Both axis labeled properly * Key for data table * Units marked clearly * Proper type of graph used   Summary Data:   * Cold: 55.7 sec to cover 28.5cm * Room temp: 39.39 sec * Hot: 44.2 Sec   Conclusion: Fastest group was the room temp turtles. Was this expected? No, We hypothesized that the fastest turtles would be the hottest and our data does not reflect that. a possible reason is that the “hot” group was heated above their happy temperature – Above their maximum thermal threshold. (Please explain why this is in your report)  Throw out turtle 24 from hot data set for “Failure to move”  **F. Discussion/Questions**   * Analyze controls and variables * Compare findings to research * Make suggestions for improvement * Analysis questions (if present)   **G. Conclusion**   * Restate your purpose * Explain major findings * Does data support your conclusion * Explanation of observed phenomena * Explain why data does/does not confirm your hypothesis. |