

## Formal Lab Report Check List

- **Title**
  - Brief and General  
*Frogs and Water Temperature*
- **Purpose Question**
  - Written as a question
  - Testable  
*At what water temperature are frogs most active?*
- **Hypotheses**
  - If...and...then...  
*If frogs are most active at a water temperature of 20 C, and a frog is placed in water ranging from 5 C to 35 C in temperature, then the frog will have the most movement per hour at 20 C.*
- **Materials**
  - Listed or bulleted  
*20 frogs                      water at 20 C*  
*water at 10 C                water at 30 C*
- **Procedure**
  - Listed step by step
    1. *Place a frog in the water at a specific temperature.*
    2. *For ten minutes time how long the frog moves. Wait 10 minutes, then time again. Do this several times.*
- **Diagram of Set Up**
  - Clearly diagram your set-up (a guide for someone else to follow)
  - Identify the independent and dependent variables
  - Identify the constants
- **Data and Graphs**
  - Title data tables appropriately, and include measurement units
  - Title graphs(Dependent vs Independent) and Label axes including units
  - Choose the graphs appropriately and scale logically... EX:
    - Bar graph- for comparison of counts
    - Line graph- for demonstrating change over time
    - Pie graph- for showing parts of a whole
- **Conclusion**
  - Did you accept or reject your hypothesis? Cite specific data for support
  - Scientific explanation of the data (WHY?) RELATE this explanation to your data - how is this shown in your findings
  - Suspected experimental errors or limitations - evaluate error sources - significant?
  - Suggestion for future research - suggest an alternate hypothesis. Give a brief description of the "next step" investigation to test this hypothesis. Perhaps speculate on possible findings base on your current work.
- **Cite Sources**
  - Should be at least 2-3 sources (but don't limit yourself), print or reputable internet.
  - APA style