COVER PAGE

1. Scientific Title
2. Names of the researchers:
   a. Last Name, First Name
   b. Date
   c. Location were the experiment was conducted

I. INTRODUCTION (2-3 paragraphs long!)

1. Observation
2. Question
3. Hypothesis
4. Prediction
5. Scientific background
6. Scientific Literature Citations

Note: In the introduction you must address the above bullet points especially how do fish breathe and take in oxygen in real nature. Explain this concept and use literature citations. You must primary research articles (Scientific Journals) which discuss how respiratory rates of different organisms are affected by temperature or similar fish. If so, mention it in this section and properly cite them.

II. MATERIALS AND METHODS (1-2 Paragraphs long!)

1. Procedures

Note: Explain and describe exactly: (1) the experiment setup (goldfish, fish bowl, water, outer water container, thermometer, etc. (2) how the respiratory rate was measured (counting of operculum movements in one minute). (3) How the temperature was controlled (adding ice). (4) Define the actual temperatures you used for the measurements. (5) This part of the lab report should be in paragraph form and NOT listed.

III. DATA

1. Graphs:
   a. Figure Legends
   b. Labels
   c. Units (if appropriate)
   d. Correct Graph (bar, line, pi chart, etc.)
   e. Does it make sense? Someone who did not participate in the experiment should be able to describe the results of the experiment based on the graphs.
2. Tables:
   a. Table Legends
   b. Units in the column (if appropriate)
   c. Correct Graph (bar, line, pie chart, etc.)
   d. Does it make sense? Someone who did not participate in the experiment should be able to describe the results of the experiment based on the tables.

3. Drawings:
   a. Figure Legends
   b. Labels (if necessary)
   c. Correct Graph (bar, line, pie chart, etc.)
   d. Are they neatly and presentable?

   Note: The data should be presented in any of the three forms mentioned above and must include both your group’s data and the class data (class average).

IV. RESULTS (1-2 Paragraphs long!)

      a. Graphs
      b. Tables
      c. Drawings

      Note: The results are one paragraph or two that will describe the results presented in your DATA (graphs, tables drawings, etc.) On this section do not analyze your results and do not make any conclusions. THIS SECTION IS A WRITTEN PARAGRAPH (1 or 2) FOR STATING RESULTS GOOD OR BAD ONLY!

V. DISCUSSION (3-5 Paragraphs long!)

   1. Discussion of your results Vs. your work cited
   2. The most important part of your lab report.

      Note: Include any discussion about two or more primary research articles that relate to the experiment performed (Scientific Journals). For example, the articles can explain ectotherms (such as fish, reptiles, etc.,) decrease respiratory rates at cold temperatures or the articles can simply be experiments that support or reject your hypothesis. It has to be noted that you the researcher decides, just make sure that it relates to the experiment and that there’s logic to why you include this in your discussion.
VI. CONCLUSION (2-3 Paragraphs long!)

1. Is the conclusion through?
2. Have you covered each topic? Have you used your worked cited too?
3. Does it make sense?
4. Is the spelling and grammar correct?
5. Did your results support your hypothesis? Why or why not?
6. Did you answer all of the specific questions your instructor may have asked you to answer?

Note: This part of the report should state whether or not your results (data) support or reject your HYPOTHESIS. For example, the hypothesis cannot be “proven” falsifiable or it is accepted. Choose words like support, confirm, suggest, and imply, etc. The conclusion can also discuss or mention any flaws of the experiment and can give suggestions to improve or correct those flaws, but they must be realistic.

VII. WORK CITED / LITERATURE CITED

1. Minimum two Scientific Journals should be mentioned during the introduction and discussion.
2. One book
3. One website
4. Magazines
5. Videos
6. Movies, etc.

VIII. ACKNOWLEDGMENTS (1 Paragraph long!)

1. Anyone who assisted you in any way, either in the lab or outside of lab, should be acknowledged.

[Note: See Example/Format of Scientific Lab Report.]