**Suggested Lab Report Grading Rubric**: 25 possible points.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Points | Introduction | Experimental Design | Results | Conclusion/Discussion | Grammar and Spelling |
| 5 | Well researched, excellent comprehension of material, hypothesis clearly stated | Students relate design to specific question.  Protocols outlined clearly.  Students show understanding of experimental concepts like standardization, replication, etc. | Students have labeled, legible graph of correct data with figure caption that explains graph and data. | Students demonstrate comprehension by linking results back to original hypothesis (i.e. Original hypothesis was supported or not).  Students discuss natural selection implications of osmotic balance using their results. | <3 errors |
| 4 | Decent background, moderate understanding, hypothesis clearly stated | Students detail experimental design but do not link to hypotheses.  Protocols outlined.  Some understanding of experimental concepts. | Neat and clean graph with correct data. Graph has figure captions but no axis labels. | Students link results to hypothesis but do not clearly state whether they hypothesis was supported.  Some discussion of implications towards natural selection. | <6 errors |
| 3 | Some background, little understanding, hypothesis mentioned | Students poorly communicate experimental design, protocols barely mentioned, little understanding of experimental concepts. | Graph does not have proper data or mixed up axes. Graph is missing labels or figure caption as well. | Students do not link results to hypothesis, merely restate methods and results.  Little or no discussion of broader concepts. | <9 errors |
| 2 | Little background information, little comprehension of the topic, no hypothesis | Experimental design is protocols only with no indication that students understand reasoning behind the design or its relationship to hypothesis. | Graph is incorrect data, lacks axis labels, figure captions, etc. | Students repeat previous sections with zero discussion of implications or relationships. | <12 errors |
| 1 | No background research, very little comprehension, no mention of hypotheses | Experimental design is a picture or diagram with little or no text explaining protocols. Hypothesis not mentioned. | Graph is illegible or absent. | Students demonstrate little understanding, do not link the sections together, do not make any broader inferences on work. | >13 errors |