

Drosophila Investigation Findings

Research Summary for:

Drosophila culturing techniques
 Isolation, transfer and Sexing techniques
 Genetic Crosses

Task	Exceeds Proficiency	Demonstrates Proficiency	Nearly Meets Proficiency	Work does not Demonstrate Proficiency	Points Earned
Format	Work contains all format components and is extremely neat 7 Points	Work : ___ is neatly written ___ is in the correct order ___ is titled ___ is properly dated ___ included headings 5 Points	One component is missing 3 Points	Two or more components are missing 0 Points	
Purpose	Purposes are clearly stated using scientific terms, great insight 17 points	The purpose of each section is stated using scientific terms 15 points	Missing purpose statements and or scientific terminology 10 – 5 points	Missing two or more Components 4-0 points	missing
Focus Questions	Questions are clearly stated using scientific terms, great insight 17 points	Focus Questions for each section are stated using scientific terms 15 points	Missing Focus Questions and or scientific terminology 10 – 5 points	Missing two or more Components 4-0 points	missing
Hypothesis	Hypothesis statements are written correctly, great insight 17 points	Hypothesis statements for each section are stated correctly using scientific terms 15 points	Missing Hypothesis statements and or not written correctly 10 – 5 points	Missing two or more Components 4-0 points	missing
Materials	Materials list follows format and is complete and detailed 12 points	Material list is complete and in three columns format 10 points	List is missing a few items and or not in correct format 3 column list 5 points	List is missing or incomplete 4-0 points	missing
Procedure	Procedure is extremely detailed and contains flow charts/diagrams 22 points	Procedure is: ___ clearly/neatly written ___ written in steps ___ includes Safety Cautions ___ is able to be reproduced 20 points	Procedure is missing one component 15 points	Missing two or more components 10 -0 Points	missing
Data INQ <i>W-10-6.1</i> <i>W-10-7.5</i>	Data is complete and additional data was presented; included Observations 47 Points	Data must include : ___ data table for single pair cross ___ data table for population cross Data presented includes: (5pts ea) ___ dated entries ___ fly counts: live/mortalities ___ phenotypes expressed ___ eye color ___ sex identification ___ Overall observations 45 points	Missing one data table - 25 points One component missing in a category or in more than one categories ____ points earned	Two or more components missing in one or more categories ____ points earned	missing 0 points
Data Table Format	Table was extremely neat and organized 12 points	Data Table is: _____ titled ___ neat and organized ___ used a ruler to draw lines ___ units used 10 points	Missing one criteria 5 points	Missing two criteria 3 points	Data is not in tables 0 points

Data Analysis <i>INQ, FOF, POC</i> <i>W-10-6.1</i> <i>W-10-8.2</i> <i>W-10-8.4</i>	Analysis is in-depth, logical, and supported by data. 26-28 Points	Analysis includes: ___ Discussions for each section ___ logical claims for each section ___ evidence and examples ___ unexpected results ___ possible explanations 25 Points	Missing one component or evidence and claims require more details 20- 15 Points	Missing two or more components. Claims are unclear, not logical or not based on evidence 10 -5 Points	missing
Conclusion <i>INQ</i> <i>W-10-6.4</i> <i>W-10-7.4</i> <i>W-10-8.1</i>	Conclusion demonstrates an in-depth understanding. Additional work was provided 17 Points	Conclusion: ___ provided for each section ___ answers the focus questions ___ supports or rejects hypothesis ___ is logical ___ supported by data 25 points	Missing one component and or is unclear/not logical/not supported by data 20-15 Points	Missing two or more components incomplete not linked to the data collected 10-5 Points	missing
Appendix A Pre-lab Investigations	Data is complete and additional data was presented. 55 points	Data is: (5 pts ea.) ___ is table format ___ has dated entries ___ observation on biotic factors ___ observations on abiotic factors Data includes: (10 points ea.) ___ qualitative data ___ quantitative data ___ diagrams/illustrations 50 points	Data is not presented in table(s) -10 points And or Components are missing ___ points earned	Data is incomplete: Data is missing three or more components ___ points earned	missing
Appendix B Laboratory Reflection	Reflection was detailed, provided additional information. Claims were backed with evidence 22 points	Reflection provided information/comments on: ___ Drosophila's Life Cycle ___ sexing experience/technique ___ Problem encountered ___ educational value/ personal comments 20 points	One component missing And Or information lacks details 15- 10 points	Two or more components missing ___ points earned	missing
Deadlines		Work was turned in on time 15 points	Work was turned in 2-3 days late 5 points	Work was turned in over 3 days late 0 points	

Possible Points = 296 points
 Points 100% = 285 points

Points Earned: ____ / 285

Grade: