**PHYSICS Unit 1 and 2 Open Investigation: Final Report**

**Student name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Section** | **Content** | **Maximum Mark** | **Student Mark** |
| **PLANNING STAGE** | | | |
| Intro | Aim  Background  Hypothesis | 1  2  1 |  |
| Variables | Controlled  Independent  Dependent | 2  1  1 |  |
| Methodology | Equipment  Method  Safety  Creativity  Completion on Due Date | 1  1  1  1  1 |  |
| **TOTAL** | | 14 |  |
| **CONDUCTING STAGE** | | | |
| Pre-Trials Table | Suitable table with headings and setting out  Trials and Averages calculated | 1  1 |  |
| Pre-trials Graph | Suitable Graph  Line of Best fit  Error Bars | 1  1  1 |  |
| Table | Suitable table with headings and setting out  Trials (more than 3)  Averages  Absolute Error | 1  1  1  1 |  |
| Graph | Title, Axis title  Clear Scale  Axis Unit  Error Bars  Line of Best Fit | 1  1  1  1  1 |  |
| Observations | Stating relationships and observations  Changes made to the procedure and why | 2  3 |  |
| **TOTAL** | | 20 |  |
| **DISCUSSION STAGE** | | | |
| Structure | Comprehensive  Clear Paragraphs and ease to read | 2  2 |  |
| Physics Theories | What is the accepted theories currently?  Relate to background information  Mathematical relationships between variables  Hypothesis relate to theory | 3  2  1 |  |
| Results Analysis | State relationships in your results  Using Theories to process results Conclusion about results  Final Concluding statement | 2  2  3 |  |
| Relation to Hypothesis | Results support hypothesis?  Explanation why | 1  1 |  |
| **TOTAL** | | 19 |  |
| **EVALUATION STAGE** | | | |
| Errors | Sources of Errors Estimation of Absolute Errors  How could errors be reduced?  Validity of Investigation | 2  2  2  2 |  |
| Other | Improvements  References | 2  2 |  |
| **TOTAL** | | 12 |  |
| **OVERALL MARKS** | | | |
| STAGE 3 RAW | | 65 |  |
| Weighting | STAGE 1  STAGE 2  STAGE 3 | 15  30  55 |  |
| **TOTAL** | | 100 |  |