

Chemistry - Rubric for Year 11 Scientific Investigation

Criteria Assessed	4	3	2
Procedure	Clear narrative describing experimental procedure carried out in chronological order with quantities of materials specified and how measurements were made. Dependant and independent variables are correctly identified as well as variables held constant. Mentions safety precautions.	Mostly clear description of experimental procedure carried out in chronological order describing how measurements were made. Dependant and independent variables are correctly identified as well as variables held constant.	Fairly clear description of experimental procedures. No proper chronological order describing how measurements were made. Dependant and independent variables are correctly identified.
Materials & Apparatus	Complete list of the materials and quantities are used. Clear understanding on how and when to use a particular apparatus.	Complete list of the materials are used. Quantities are not properly measured. Understands how to use the apparatus properly. Not clear on when to use such apparatus.	Most of the materials in the list are used. Quantities are not properly measured. Can use the apparatus. Not clear on when to use such apparatus.
Data Collection & Analysis	1) Results presented in properly labelled tables. 2) Graphs follow graphing rules. 3) Measurements have units. 4) Observations are clear and descriptive	3 out of 4 in the previous criteria are met.	2 out of 4 in the previous criteria are met.
Accuracy & Reliability	Student information is completely accurate and the formation provided is reliable.	Student information is mostly accurate & reliable.	Student information is sometimes accurate or reliable.
Timing			Completes the investigation on or before the deadline.
Conclusion			Clear or concise summary of findings that refers a clear understanding of investigation and the scientific knowledge gained. Explains how the results agree/disagree with the hypotheses.

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Narrative incomplete, unclear writing and missing a description of variables.

Irrelevant materials are used. Showing lack of understanding of proper usage of equipment. Quantities are not properly measured. Poor knowledge on how and when to use apparatus.

Only 1 out of 4 in the previous criteria are met.

Student information is unreliable and inaccurate mostly.

Completes the investigation after the deadline.

Shows a minimal understanding of the investigation and the scientific knowledge gained . Does not properly explain how the results agree/disagree with the hypotheses.