Chemistry Lab Assessment Criteria (Rubric)

1.0 Title

Levels	Identifying Information	Points
Complete	Identifies topic of lab (title). Wrote name, names of lab partners and date of lab.	2
Partial	Topic (title) is unclear or incomplete. Did not include lab partners and/or date.	1
Not at all	Does not write topic (title). Name and date missing	0

2.0 Target

Levels	Defining the problem or research question	Points
Complete	Identifies a focused problem or research question (known as the Target)	2
Partial	States the problem or research question but it is unclear or incomplete	1
Not at all	Does not state the problem or research question	0

3.0 Hypothesis (Part 1)

Levels	Formulating the hypothesis or prediction	Points
Complete	Relates the hypothesis or prediction directly to the target and explains quantitatively where appropriate	5
Partial	States the hypothesis or prediction but does not explain it	3
Not at all	Does not state a hypothesis or prediction	0

3.0 Hypothesis (Part 2)

Levels	Selecting variables	Points
Complete	Selects the relevant independent, dependent and controlled variables	**5**
Partial	Selects some relevant variables	**3**
Not at all	Does not select any relevant variables	**0**

4.0 Data Collection (Part 1)

Levels	Collecting and recording raw data	Points
Complete	Records appropriate raw data (qualitative and/or quantitative, including units and uncertainties where necessary)	**5**
Partial	Records some appropriate raw data	**3**
Not at all	Does not record any appropriate raw data	**0**

4.0 Data Collection (Part 2)

Levels	Organizing and presenting raw data	Points
Complete	Presents the raw data clearly allowing for easy interpretation	**5**
Partial	Presents raw data but does not allow for easy interpretation	**3**
Not at all	Does not present raw data or presents it incomprehensibly	**0**

5.0 Calculations (Part 1)

Levels	Processing raw data	Points
Complete	Processes the raw data correctly. Calculations are easy to follow, shows work.	5
Partial	Some raw data is processed correctly. Some work is shown.	3
Not at all	No processing of raw data is carried out or major errors are made in processing raw data.	0

5.0 Calculations (Part 2)

Levels	Processing and Presenting raw data	Points
Complete	Calculations include units. Graphs are clear and labeled appropriately.	5
Partial	Some work is shown. Some errors or omissions. Graph is unclear	3
Not at all	No calculations, no work is shown. No graph	0

6.0 Conclusions and Reflection (Part 1)

Levels	Drawing conclusions	Points
Complete	Gives a valid conclusion based on the correct interpretation of results with an explanation of results. Demonstrates that they clearly understand the target of the lab.	5
Partial	States a conclusion that has some validity	3
Not at all	Draws a conclusion that misinterprets the results	0

6.0 Conclusions and Reflection (Part 2)

Levels	Evaluating procedures and results	Points
Complete	Evaluates procedure(s) and results including limitations, weaknesses or errors	5
Partial	Evaluates procedure(s) and results but misses some obvious limitations or errors	3
Not at all	The evaluation is superficial or irrelevant	0

6.0 Conclusions and Reflection (Part 3)

Levels	Improving the investigation	Points
Complete	Identifies weaknesses and states realistic suggestions to improve the investigation	5
Partial	Suggests only simplistic improvements	3
Not at all	Suggests unrealistic improvements	0

7.0 Integrity Signature

Levels	Improving the investigation	Points
Complete	Signature indication report is authentic	1
Not at all	No signature	0

	POINTS					
LAB REPORT RUBRIC	0	1	2	3	4	5
Title						
Identifies topic of lab (title). Wrote name, names of lab partners and date of lab.	0	1	2			
Target						
Identifies a focused problem or research question (known as the Target)	0	1	2			
Hypothesis (Part 1) *						
Relates the hypothesis or prediction directly to the target and explains quantitatively where appropriate	0			3		5
Hypothesis (Part 2) *						
Selects the relevant independent, dependent and controlled variables	0			3		5
Data (Part 1)						
Records appropriate raw data (qualitative and/or quantitative, including units and uncertainties where necessary)	0			3		5
Data (Part 2)						
Presents the raw data clearly allowing for easy interpretation	0			3		5
Calculations (Part 1) *						
Processes the raw data correctly. Calculations are easy to follow, shows work.	0			3		5
Calculations (Part 2) *						
Calculations include units. Graphs are clear and labeled appropriately.	0			3		5
Conclusion & Reflection (Part 1)						
Gives a valid conclusion based on the correct interpretation of results with an explanation of results, with an explanation and where appropriate compares results with literature values	0			3		5
Conclusion & Reflection (Part 2)						
Evaluates procedure(s) and results including limitations, weaknesses or errors	0			3		5
Conclusion & Reflection (Part 3)						
Identifies weaknesses and states realistic suggestions to improve the investigation	0			3		5
Integrity Signature						
Signature indication report is authentic	0	1				
TOTAL SCORE	**/30**		**/40**		**/50**	