IB Science Internal Assessment Report Rubric

Criteria 1: Personal Engagement Mark /2		Level	
Descriptors		**Level**	
The student's report does not reach a standard described by the descriptors below.		0	
The evidence of personal engagement with the exploration is… …independent thinking, initiative or creativity.	**…limited with little…**	1	
	…clear with significant…	2	
The justification given for choosing the research question and/or the topic under investigation… …**personal significance, interest or curiosity**.	…does not demonstrate…	1	
	…demonstrates…	2	
There is… …of **personal input and initiative** in the designing, implementation or presentation of the investigation.	…little evidence…	1	
	…evidence…	2	

Criteria 2: Exploration Mark /6		Level	
Descriptors		**Level**	
The student's report does not reach a standard described by the descriptors below.		0	
Topic of investigation is identified and a research question that is ….	…of some relevance is **stated but it is not focused.**	1-2	
	…relevant but not fully focused is described.	3-4	
	…relevant and fully focused is clearly described.	5-6	
The background information provided for the investigation… …the understanding of the context of the investigation.	…is **superficial** or of limited relevance and does not aid…	1-2	
	…is mainly appropriate and relevant and aids…	3-4	
	…is entirely appropriate and relevant and enhances...	5-6	
The methodology of the investigation is appropriate to address the research question… …the significant factors that may influence the relevance, reliability and sufficiency of the collected data.	…only to a very limited extent since it takes into consideration few of…	1-2	
	…mainly, but has limitations since it takes into consideration only some of…	3-4	
	…highly, because it takes into consideration all, or nearly all, of...	5-6	
The report shows evidence of... …awareness of the significant safety, ethical or environmental issues that are **relevant to the methodology of the investigation**.	…limited…	1-2	
	…some…	3-4	
	…full…	5-6	

Criteria 3: Analysis Mark /6		Level	
Descriptors		**Level**	
The student's report does not reach a standard described by the descriptors below.		0	
The report includes… …conclusion to the research question.	…**insufficient relevan**t raw data to support a valid…	1-2	
	…relevant but incomplete quantitative and qualitative raw data that could support a simple or partially valid...	3-4	
	…sufficient relevant quantitative and qualitative raw data that could support a detailed and valid…	5-6	
Appropriate and sufficient data processing is carried out…	Some **basic** data processing is carried out but is either **too inaccurate or too insufficient to lead to a valid** conclusion.	1-2	
	… that could lead to a broadly valid conclusion but there are significant inaccuracies and inconsistencies in the processing.	3-4	
	…with **the accuracy** required to enable a conclusion to the RQ to be drawn that is fully **consistent** with the experimental data.	5-6	
The report shows evidence of… …consideration of the impact of measurement uncertainty on the analysis.	…little…	1-2	
	…some…	3-4	
	…full and appropriate...	5-6	
The processed data... …to the research question can be deduced.	…is incorrectly or insufficiently interpreted so that the conclusion is invalid or very incomplete.	1-2	
	…is interpreted so that a broadly valid but incomplete or limited conclusion …	3-4	
	…is correctly interpreted so that a completely valid and detailed conclusion…	5-6	

Criteria 4: Evaluation Mark /6

Descriptors		Level	
The student's report does not reach a standard described by the descriptors below.		0	
A conclusion… …the data presented.	…is **outlined** which is not relevant to the RQ or is not supported by …	1-2	
	…is **described** which is relevant to the research question and supported by...	3-4	
	… ,detailed, is **described and justified** which is entirely relevant to the research question and fully supported by…	5-6	
A conclusion… …comparison to the accepted scientific context.	…makes superficial...	1-2	
	…is described which makes some…	3-4	
	…is correctly **described and justified** through relevant…	5-6	
Strengths and weaknesses of the investigation, such as limitations of the data and sources of error, are… …the **methodological issues** involved in establishing the conclusion.	…**outlined** but are restricted to an **account** of the **practical or procedural issues** faced.	1-2	
	…**described** and provide evidence of some awareness of…	3-4	
	…**discussed** and provide evidence of a clear understanding of…	5-6	
The student has… …realistic and relevant suggestions for the improvement and extension of the investigation.	**…outlined** very few...	1-2	
	…described some…	3-4	
	…discussed…	5-6	

Criteria 5: Communication Mark /4

Descriptors		Level	
The student's report does not reach a standard described by the descriptors below.		0	
The presentation of the investigation is…	**…unclear, making it difficult to understand the focus, process and outcomes.**	1-2	
	…clear. Any errors do not hamper understanding of the focus, process and outcomes.	3-4	
The report is... … the necessary information on focus, process and outcomes is….	…not well structured and is unclear: …. ….missing or is presented in an incoherent or disorganized way.	1-2	
	…well structured and clear:… ….present and presented in a coherent way.	3-4	
…the focus, process and outcomes of the investigation…	The understanding of… …is obscured by the presence of inappropriate or irrelevant information.	1-2	
	The report is relevant and concise thereby facilitating a ready understanding of….	3-4	
The use of subject specific terminology and conventions…	…includes many errors.	1-2	
	… is appropriate and correct. Any errors do not hamper understanding.	3-4	

Summary of Marks Achieved on IB Science Internal Assessment Report

Data Management (DM)	*Only **Analysis** Section*	*Mark /6*
Experimental Skills & Inquiry (ESI)	*All sections except **Analysis***	*Mark /18*
Total		**Mark /24**