

YOUR NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

INVESTIGATION YOU ARE ASSESSING: \_\_\_\_\_

**1. Personal Engagement**

**Total \_\_\_ / 2**

*This criterion assesses the extent to which the student engages with the exploration and makes it their own. Personal engagement may be recognized in different attributes and skills. These could include addressing personal interests or showing evidence of independent thinking, creativity or initiative in the designing, implementation or presentation of the investigation.*

Descriptor	0	1	2
evidence of personal engagement with exploration	standard not reached	limited with little independent thinking, initiative or insight	clear with significant independent thinking, initiative or creativity
justification given for choosing the research question and/or the topic under investigation	standard not reached	does not demonstrate personal significance, interest or curiosity	demonstrates personal significance, interest or curiosity
evidence of personal input and initiative in the designing, implementation or presentation of the investigation	standard not reached	little evidence	clear evidence

**2. Exploration**

**Total \_\_\_ / 6**

*This criterion assesses the extent to which the student establishes the scientific context for the work, states a clear and focused research question and uses concepts and techniques appropriate to the Diploma Programme level. Where appropriate, this criterion also assesses awareness of safety, environmental, and ethical considerations.*

Descriptor	0	1	2	3	4	5	6
topic of the investigation is identified and relevant research question described	standard not reached	some relevance is stated but it is not focused		relevant but not fully focused		relevant, fully focused and clearly described	
background information provided for the investigation	standard not reached	superficial or of limited relevance and does not aid the understanding of the context of the investigation		mainly appropriate and relevant and aids the understanding of the context of the investigation		entirely appropriate and relevant and enhances understanding of the context of the investigation	
appropriate of methodology of the investigation, consideration of factors for reliability and sufficiency of data	standard not reached	limited to research question, few if any factors considered		mainly appropriate but some limits on significant factors		highly appropriate, all or nearly all factors are considered	
evidence of awareness of the significant safety, ethical or environmental issues that are relevant to the methodology of the investigation	standard not reached	limited awareness		some awareness		full awareness	

**3. Analysis**

Total \_\_\_ / 6

*This criterion assesses the extent to which the student's report provides evidence that the student has selected, recorded, processed and interpreted the data in ways that are relevant to the research question and can support a conclusion.*

Descriptor	0	1	2	3	4	5	6
<b>raw data</b>	standard not reached	insufficient to support a valid conclusion		relevant but incomplete. Could support a simple or partially valid conclusion		sufficient; could support a detailed and valid conclusion	
<b>data processing, accuracy and consistent with data</b>	standard not reached	some basic but too inaccurate or insufficient to lead to a valid conclusion		appropriate and sufficient raw data carried out that could lead to a conclusion but with significant inaccuracies and inconsistencies in processing		appropriate and sufficient data processing with accuracy so as to enable a conclusion to the research question to be drawn that is fully consistent with the experimental data	
<b>impact of uncertainties on the analysis</b>	standard not reached	little evidence of the impact of uncertainties		some evidence of the impact of uncertainties		full and appropriate evidence of the impact of uncertainties	
<b>interpretation of processed data</b>	standard not reached	incorrect or insufficient interpretation that may lead to an invalid or very incomplete conclusion		broadly valid interpretation leading to an incomplete or limited conclusion		correct interpretation allowing a completely valid and detailed conclusion	

**4. Evaluation**

Total \_\_\_ / 6

*This criterion assess the extent to which the student's report provides evidence of evaluation of the investigation and the results with regard to the research question and the accepted scientific context.*

Descriptor	0	1	2	3	4	5	6
<b>conclusion statement</b>	standard not reached	outlined but not relevant to the research question or not supported by the data presented		described, relevant to the research question and supported by the data presented		described in detail and justified, entirely relevant to the research question and fully supported by the data presented	
<b>conclusion and accepted theory</b>	standard not reached	superficially compared to the accepted scientific context		some relevant comparison to accepted scientific context		correctly described and justified through relevant comparison to the accepted scientific context	
<b>strengths and weaknesses of the investigation, such as limitations of the data and sources of error, are discussed and provide evidence to a clear understanding of the methodological issues involved in establishing the conclusion</b>	standard not reached	outlined but are restricted to an account of the practical or procedural issues faced		described and provide evidence of some awareness of the methodological issues involved in establishing the conclusion		discussed and provide evidence of a clear understanding of the method-ological issues involved in establishing the conclusion	
<b>realistic and relevant suggestions for the improvement and extension of the investigation</b>	standard not reached	very few outlined		some described		are discussed	

**5. Communication**

Total \_\_\_ / 4

*This criterion assesses whether the investigation is presented and reported in a way that supports effective communication of the focus, process and outcomes.*

Descriptor	0	1	2	3	4
<b>presentation of the investigation</b>	standard not reached	unclear, making it difficult to understand the focus, process and outcomes		clear, any errors do not hamper understanding of the focus, process and outcomes	
<b>report structure</b>	standard not reached	not well structured and is unclear: the necessary information on focus, process and outcomes is missing or is presented in an incoherent or disorganized way		well structured and clear: the necessary information on focus, process and outcomes is present and presented in a coherent way	
<b>report relevance</b>	standard not reached	the understanding of the focus, process and outcomes of the investigation is obscured by the presence of inappropriate or irrelevant information		relevant and concise thereby facilitating a ready understanding of the focus, process and outcomes of the investigation	
<b>terminology</b>	standard not reached	there are many errors in the use of subject specific terminology and conventions		the use of subject specific terminology and conventions are appropriate and correct; any errors do not hamper understanding	