**IB Diploma Chemistry Investigation**

For the IB Diploma internal assessment you will plan, carry out and evaluate a 10 hour investigation (20% of final grade and total of 24 marks). The investigation should be between 6 and 12 pages of work.

*This document focuses on the planning section.*

**Criteria: Level 5-6**

* The topic of the investigation is identified and a relevant and fully focused research question is clearly described.
* The background information provided for the investigation is entirely appropriate and relevant and enhances the understanding of the context of the investigation.
* The methodology of the investigation is highly appropriate to address the research question because it takes into consideration all, or nearly all, of the significant factors that may influence the relevance, reliability and sufficiency of the collected data.
* The report shows evidence of full awareness of the significant safety, ethical or environmental issues that are **relevant to the methodology of the investigation**.\*

For the real IA assessment there is no recommended format. It is best however to consider the inclusion of the following areas to ensure appropriate detail is included.

* Title of investigation
* Research question
* Background information
* Hypothesis (*Not required but useful to gauge the depth of the background information. May not be relevant*)
* Variables – Independent, dependent and controlled (*Not required but useful to ensure the methodology takes into account factors that may affect results)*
* Method\*
* Safety, environmental and ethical considerations
* References – APA format

\*The method no longer is required to be written as a step-wise procedure as

*“In the new IA students are required to write a methodology, a more evaluative account of the method. In other words the emphasis is more on making their thinking visible with respect to how they developed and came up with their final method, evidenced by the way they communicate the challenges they faced in collecting sufficient data, finding appropriate methods of measurement, modifications made and so on.” (IB internal assessment guide, 2015)*

This means that it is reasonable to write in a prose style and in the past tense to explain why certain decisions or actions were carried out:

*“The acid catalyst was added dropwise to the reaction mixture to prevent rapid increases of temperature and the boiling of any reactants.”*