**Scientific Studies**

**Checklist for students when preparing the report for the Individual Inquiry**

There are some particular features in the subject outline that need to be addressed in the report for external assessment of the Individual Inquiry.

The following questions help to guide students through those aspects.

Teachers may also find that these questions are useful when reviewing students’ drafts and /or their final report.

Consider the Introduction:

* Is it clear to someone who is reading about my investigation for the first time what the investigation is about?
* Have I included any changes made as a result of feedback?
* Have I included relevant scientific concepts?
* Have I included the hypothesis or need /opportunity that I investigated?
* Have I identified the independent/dependant/controlled variables?
* Is there a summary of the method or the design/model? Would annotated photographs or diagrams assist in this summary?
* Is it clear what I measured?
* Have I only included relevant information?

Consider the results:

* Have I included measurable outcomes?
* Are the results represented appropriately – line graph for continuous data, bar/column graph for discrete data? Photographs for models?
* Do the results summarise what was measured?
* Does the number of significant figures in the data match the precision of the equipment used? (E.g. if the measuring cylinder is marked in ml, should the data be to the nearest ml/0.5 ml/0.01 ml etc?)
* Is the data displayed in the appropriate order (e.g. data table followed by graph)?
* Have I chosen the most appropriate graph for the type of data?
* Have I identified the trend of the data?
* Has the trend of the data been linked to scientific concepts?
* Have the results been analysed to consider reliability/precision/outliners?

Consider the Evaluation:

* Have I discussed random and systematic errors?
* Have I discussed the effect of these errors on the data?
* Have the sources of uncertainty been identified?
* Have I considered how well the model meets the criteria for success?

Consider the Conclusion:

* Have I justified my conclusion?
* Have I considered any limitations of my conclusion?

Citation and referencing:

* Is there appropriate acknowledgement of sources of information within the report?
* Have references been appropriately detailed? At the end of the report?

*Please note:* It is not intended that this series of questions is responded to one by one in an investigation report. They provide students with prompts to think about when preparing their report.