

# IB CHEMISTRY HL/SL

## Individual Investigation (IA) Timeline

### PART ONE: SUBMITTING AN INVESTIGATION PROPOSAL

1. State your research question.
2. Show how your question connects to the IB Chemistry curriculum.
3. Describe the independent and dependent variables in your investigation.
4. Outline the basic methodology you plan to use.

**On or before January 14<sup>th</sup>, you must submit your investigation proposal.**

### PART TWO: PLANNING YOUR INVESTIGATION

1. Create a timeline that shows when you will be conducting your investigation...
    - a. Include the date(s) you plan to use for primary data collection
    - b. Allow sufficient time to run multiple trials and collect a complete set of valid data.
    - c. Allow extra time in case you discover during data processing that re-testing is necessary.
  2. Determine your variable(s)...
    - a. Independent (what variations will you use?)
    - b. Dependent (what will you measure and how?)
    - c. Control (what need to be controlled and how will you control it?)
  3. Design your methodology and be sure to include the following...
    - a. List *all* chemicals and equipment. Specify the amount of any chemicals you will use.
    - b. Describe your procedure
    - c. State the number of trials you intend to run
    - d. Explain how you will address uncertainty
    - e. Outline why you decided on the specifics of the approach/methodology being used.
    - f. List how you will ensure your safety and the safety of others
- If you are NOT conducting an experiment you must ALSO...*
- a. explain how you will obtain your data.
  - b. explain the statistical tests you will use to analyze your data.
4. Plan how you will present your collected data (graphs, charts, etc.).

**On or before January 19<sup>th</sup>, you must submit a complete (and detailed) methodology.**

### PART THREE: CONDUCTING AND COMPLETING YOUR INVESTIGATION

1. Collect your raw data, and then perform the required data processing.
2. Analyze the processed data, and then complete your report.

*Note – Class time has been set aside for data collection from January 19<sup>th</sup> to January 30<sup>th</sup>*

**You must complete your report and submit it on ManageBac no later than February 9<sup>th</sup>**