IB Analysis Lab Skills Checklist Name:

On a scale of 1-5, rate your confidence in your ability to perform the following tasks. (1 being low, 5 being high)

\_\_\_\_\_1. Collection of qualitative data.

\_\_\_\_\_2. Collection of quantitative data.

\_\_\_\_\_3. Identification of uncertainties associated with measurements.

\_\_\_\_\_4. Identification of units associated with measurements.

\_\_\_\_\_5. Conversion of units into SI units.

\_\_\_\_\_6. Collection of data into clear and concise data tables.

\_\_\_\_\_7. Assigning and constructing headings for data tables.

\_\_\_\_\_8. Averaging data appropriately.

\_\_\_\_\_9. Assigning a quantitative IV and DV to a graph.

\_\_\_\_\_10. Placing data into a graph.

\_\_\_\_\_11. Labeling units within a graph.

\_\_\_\_\_12. Assigning a title to a graph.

\_\_\_\_\_13. Constructing a best fit line to a graph.

\_\_\_\_\_14. Placing proper units on the best fit line within a graph.

Mark Schemes Analysis Notes:

1. List the essential components of a good data table and provide a 3x3 example.
2. List the essential components of a good graph and provide a theoretical example.
3. Explain the difference between random and systematic errors.
4. What is the difference between qualitative and quantitative data?
5. What determines the values, uncertainties, and units you record in your data table?
6. What is the difference between raw and processed data?
7. What is a best fit line, and why do we include it?