Level	General Descriptors - Criterion C: Processing and Evaluating Grades 7-8 / MYP Years 2-3
7 - 8	i. correctly collect, organize, transform and present data in numerical and/or visual forms ii. accurately interpret data and describe results using correct scientific reasoning iii. discuss the validity of a hypothesis based on the outcome of a scientific investigation iv. discuss the validity of the method based on the outcome of a scientific investigation v. describe improvements or extensions to the method that would benefit the scientific investigation.
5 - 6	i. correctly collect, organize and present data in numerical and/or visual forms ii. accurately interpret data and describe results using scientific reasoning iii. outline the validity of a hypothesis based on the outcome of a scientific investigation iv. outline the validity of the method based on the outcome of a scientific investigation v. outline improvements or extensions to the method that would benefit the scientific investigation.
3 - 4	i. correctly collect and present data in numerical and/or visual forms ii. accurately interpret data and describe results iii. state the validity of a hypothesis based on the outcome of a scientific investigation iv. state the validity of the method based on the outcome of a scientific investigation v. state improvements or extensions to the method that would benefit the scientific investigation.
1 - 2	i. collect and present data in numerical and/or visual forms ii. accurately interpret data iii. state the validity of a hypothesis with limited reference to a scientific investigation iv. state the validity of the method with limited reference to a scientific investigation v. state limited improvements or extensions to the method.
0	The student does not reach a standard identified by any of the descriptors below.

Term	**MYP definition on top** **Our definition underneath**
Data	MYP definition: Measurement of a parameter that can be quantitative (volume, temperature, pH and so on) or qualitative (colour, shape, texture and so on) Our definition: Numbers or descriptions from observations during an experiment.
Dependent variable	MYP definition: The variable in which values are measured in the experiment Our definition: The variable that YOU change during an experiment.
Describe	MYP definition: Give a detailed account or picture of a situation, event, pattern or process. Our definition: Tell how something happened (i.e. “first this, then that, then the next thing”). In experiments, identify the minimum and maximum values of data in experimental results and recount the overall trends between variables.

Discuss	MYP definition: Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence. Our definition: Look at both sides of an argument or an issue, weighing the strengths and limitations of each side. Conclusions should be based on scientific evidence.
Extensions to the method	MYP definition: Developments for further inquiry as related to the outcome of the investigation Our definition: Take the original investigation idea and dig deeper into it; look at more complex 'next steps'
Hypothesis	MYP definition: A tentative explanation for an observation or phenomenon that requires experimental confirmation; can take the form of a question or a statement Our definition: Predict how the dependent variable will respond when you change the independent variable
Independent variable	MYP definition: The variable that is selected and manipulated by the investigator in an experiment Our definition: The variable YOU change during an experiment
Interpret	MYP definition: Use knowledge and understanding to recognize trends and draw conclusions from given information. Our definition: Identify and describe patterns in data, and tell what those patterns mean.
Numerical forms	MYP definition: May include mathematical calculations such as averaging or determining values from a graph or table Our definition: Data tables, processed and calculated data, including formulas used.
Outline	MYP definition: Give a brief account. Our definition: Briefly describe the major points or concepts.
Predict	MYP definition: Give an expected result of an upcoming action or event Our definition: State what you think will happen
Present	MYP definition: Offer for display, observation, examination or consideration. Our definition: Clearly show other people.
Qualitative data	MYP definition: Refers to non-numerical data or information that is difficult to measure in a numerical way Our definition: Descriptions of observations during an experiment, which do not require numbers
Quantitative data	MYP definition: Refers to numerical measurements of the variables associated with the investigation

	Our definition: Numerical measurements of observations during an experiment
State	MYP definition: Give a specific name, value or other brief answer without explanation or calculation. Our definition: Give a one- or two-word answer. Nothing else is needed.
Transforming data	MYP definition: Involves processing raw data into a form suitable for visual representation. This process may involve, for example, combining and manipulating raw data (by adding, subtracting, squaring or dividing) to determine the value of a physical quantity and also taking the average of several measurements. It might be that the data collected are already in a form suitable for visual representation in the case of the distance travelled by a woodlouse, for example. If the raw data are represented in this way and a best-fit line graph is drawn the raw data have been processed Our definition: Using raw numerical data to find more complex patterns within results; changing data tables into visually useful graphs that clearly show the overall trends or patterns in the results.
Validity of the method	MYP definition: Refers to whether the method allows for the collection of sufficient valid data to answer the question. This includes factors such as whether the measuring instrument measures what it is supposed to measure, the conditions of the experiment and the manipulation of variables (fair testing) Our definition: Does the procedure create a fair test for the investigation? Why or why not?
Visual forms	MYP definition: May include drawing graphs of various types appropriate to the kind of data being displayed (for example, line graphs, bar graphs, histograms or pie charts) Our definition: Graphs which clearly show trends or patterns in numerical data