Section	Description	Marks Available	Marks Received
Introduction	Provides background information about abiotic factors and their importance. - *Provides a definition of abiotic factors* - *Provides examples of abiotic factors* - *States that abiotic factors* Relates the information to ecosystems - *States that abiotic factors can influence species distribution* - *States that abiotic factors can be limiting factors.*	 1 1 1 1 1	/5
Independent Variable	- *Correctly names the independent variable* - *Correctly names the units for the independent variable*	1 1	/2
Dependent Variable	- *Correctly names the dependent variable* - *Correctly names the units for the dependent variable*	1 1	/2
Controlled Variables	Correctly names at least three controlled variables - *Answers can include type of tests performed at each site, consistent data collection methods, same time of year, similar weather conditions.* States how each variable is controlled - *Answers can include: ensuring each method is followed closely, completing field work at similar times, using the same brand test kits.*	3 3	/6
Hypothesis	Includes independent variable in hypothesis Includes dependent variable in hypothesis	1 1	/2
Method	Lists all materials, including quantities Creates a numbered, repeatable list of instructions for conducting this experiment Method section includes strategies for minimising unctrolled variables and other factors.	2 2 1	/5
Diagram	Includes fully labelled diagram Diagram drawn in pencil	1 1	/2
Results (Table and Notes)	Records raw data using required number of tables - *Water chemistry - Baywater* - *Water chemistry - Point Walter* - *Diversity and abundance of macroinvertebrates - Bayswater* - *Diversity and abundance of macroinvertebrates - Point Walter* Includes dependent and independent variable labels in each table Identifies outliers in the raw data	 1 1 1 1 4 1	/9

Graph	Completes all required graphs - - *Water temperature* - *Turbidity* - *Dissolved Oxygen* - *Salinity* - *pH* - *Phosphates* - *Nitrates* - *Species Abundance* - *Species Diversity* Includes an appropriate title for each graph stating dependent and independent variables - *accept variations of "graph of VARIABLE at Bayswater and Point Walter"* Correctly labels all axes Includes units with labelled axes Uses correct type of graph - *column graph* Correctly plots points on the graph Pencil and Ruler	1 1 1 1 1 1 1 1 1 9 1 1 9 9 1	/49
Discussion	Describes patterns and trends in the data - *Identifies similarities and differences in raw data between sites* - *Identifies patterns/inconsistencies between sites* Accurately relates the patterns observed in the data to the hypothesis. - *states whether their hypothesis was supported or not* - *provides a reason to support this.* Uses questions to form paragraphs rather than simple answers. Relates findings to the effect of abiotic factors on water quality and species diversity and abundance. - *Provides a reason why the following may affect species diversity and abundance:* - *pH* - *Water temperature* - *Salinity* - *Dissolved oxygen* - *turbidity* - *Phosphates* - *Nitrates* - *land use* - *human activity/infrastructure* - *Geography*	4 2 1 10	/17

Evaluation	Comments on the reliability and validity of the data collected Comments on the reliability of the way in which data was collected Describes at least two limitations with the experiment that may affect the accuracy of the data Suggests at least two improvements for the experiment in the future	2 2 2 2	/8
Conclusion	Summarises findings from the investigation Comments on whether the outcome of the investigation was valid	1 1	/3
Total Marks		100	/100