

Internal Assessment Criteria: Design

Level/Marks	Aspect 1: Defining the Problem and Selecting the variables	Checklist
Complete / 2	Formulates a focused problem/research question and identifies the relevant variables	<p>Identify a focused problem or specific research question.</p> <p>Relates the hypothesis or prediction to the research question, and explains it, quantitatively (where appropriate).</p> <p>Explains the theory relating to the research question at the molecular level, including any relevant equations and formulae.</p> <p>Variables identified: manipulated (independent), dependent,(measured, responding),and controlled variables (constant).</p>
Partial / 1	Formulates a problem/research question that is incomplete or identifies only some relevant variables.	
Not at all / 0	Does not identify a problem/research question and does not identify any relevant variables.	
Level/Marks	Aspect 2: Controlling variables	Checklist
Complete / 2	Designs a method for the effective control of the variables.	<p>A detailed list of appropriate apparatus and specific quantities of chemicals.</p> <p>Quantities of chemicals explained in terms of masses, concentrations , volumes, etc.</p> <p>Designs a procedure that controls the variables outlined above.</p>
Partial / 1	Designs a method that makes some attempt to control the variables.	
Not at all / 0	Designs a method that does not control the variables.	
Level/Marks	Aspect 3: Developing a method for collection of sufficient relevant data	Checklist
Complete / 2	Develops a method that allows for the collection of sufficient relevant data.	<p>Describes a method that allows for the collection of sufficient relevant data, and allows for random and systematic error, and allows for repeat trials and/or minimum five data points for graphs.</p> <p>Addresses the research question.</p>
Partial / 1	Develops a method that allows for the collection of insufficient relevant data.	
Not at all / 0	Develops a method that does not allow for any relevant data to be collected.	