

## Grading Guide, Experiment

Please assign a **Level** (1,2,3or 4) to Parts A,B and C. Level 4 is the best.  
 Then enter a **Rating** from 0 to 9 (9 is the best), that reflects the quality of the project relative to other projects you have assigned the same level.  
 Later **your team** will decide on a **consensus set** of levels and ratings for each project.  
 Awards are based on ranking of marks among competing students.

### Experiment

Undertake an investigation to test a scientific hypothesis by the experimental method.  
 At least one independent variable is manipulated; other variables are controlled.

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
Part A Scientific thought	Replicate a known experiment to confirm previous findings.	Extend a known experiment with modest improvements to the procedures, data gathering and possible applications.	Devise and carry out an original experiment. Identify the significant variables and attempt to control them. Analyse the results using appropriate arithmetic, graphical or statistical methods.	Devise and carry out original experimental research in which most significant variables are identified and controlled. The data analysis is thorough and complete.
Part B Originality & creativity	Project design is simple with little evidence of student imagination. It can be found in books or magazines.	Project design is simple with some evidence of student imagination. It uses common resources or equipment. The topic is a current or common one	Imaginative project makes creative use of the available resources. It is well thought out, and some aspects are above average.	Highly original project demonstrates a novel approach. It shows resourcefulness and creativity in the design, use of equipment, construction and/or the analysis
Part C Communication  The level is based on <b>three</b> elements: visual display, oral presentation, and logbook.	Most or all of the three elements are simple, unsubstantial or incomplete. Little evidence of attention to effective communication. In a pair project, one member may have dominated the presentation.	Some of the three elements are simple, unsubstantial or incomplete, but there is evidence of student attention to communication. In a pair project, one member may have made a stronger contribution to the presentation.	All three elements are complete and demonstrate attention to detail and substance. The communication components are each well thought out and executed. In a pair project, both members made an equitable contribution to the presentation.	All three elements are complete and exceed reasonable expectations of a student at this age/grade. Visual display is logical and self-explanatory. Exhibit is attractive and well-presented. Logbook is informative and clearly written. Oral presentation is clear, logical, and enthusiastic. In a group project, both members contributed equitably and effectively to the presentation.