

## Grading Guide; Innovation

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.

### Innovation

Develop and evaluate new devices, models, theorems, physical theories, techniques, or methods in technology, engineering, computing, natural science, or social science.

	<i><b>Level 1</b></i>	<i><b>Level 2</b></i>	<i><b>Level 3</b></i>	<i><b>Level 4</b></i>
<b>Part A</b> Scientific thought	Build a model or device to duplicate existing technology or demonstrate a well-known physical theory or social/behavioral intervention.	Improve or demonstrate new applications for existing technological systems, social or behavioral interventions, existing physical theories or equipment, and justify them.	Design and build innovative technology; or adapt existing technology to social or behavioral interventions; extend or create new physical theory. Human benefit, advancement of knowledge, and/or economic applications should be evident.	Integrate several technologies, inventions, social/behavioral interventions or design and construct an innovative application that will have human and/or commercial benefit.
<b>Part B</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
<b>Part C</b> 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.