Long Beach Unified School District — Science & Engineering Fair

Environmental Innovation (K-5th Grade)
Rubric for School Site Fair

	Attempted 1 point	Proficient 3 points	Advanced Proficient 5 points
Environmental Problem	States the environmental problem as a question that is vague, or as a statement, or addresses an issue to which the student already knows the answer. Shows limited or no connection to societal benefit.	States environmental problem as a question, which represents a genuine learning opportunity for the student. Generally addresses a benefit to society.	States the environmental issue or problem as a question, provides evidence that it comes from the student's personal interests or experiences, and represents a genuine learning opportunity for the student. The project has a specific beneficial application to some aspect of society.
Preliminary Research	Cites fewer than three sources. Or, the description of the research is incomplete, or has little connection to the problem, or is not written in the student's own words. Or, fails to mention other attempts to address this problem.	Cites three or more sources from one or more types of resources (e.g., text, encyclopedia, businesses, magazines, catalogs, internet, or interviews). The student generally connects the research to their problem in their own words. Mentions some other solutions attempted by others.	Cites three or more sources of information about an environmental problem, in the correct format, using at least three types of information resources. Clearly explains the connection to their identified problem and what others have done to address this problem.
Innovative Idea *(Double Points)* **(x2)**	Attempts to explain the innovative idea. Visuals and notes may be incomplete or fail to show a new or original approach. It may be unclear how the idea could possibly minimize impact or counter the threat of the environmental problem.	Explains the innovative idea. Visuals and notes show that the idea attempts to solve the problem with a new or original approach. The student mentions a possible way their idea might minimize impact or counter the threat of the environmental problem.	Clearly explains the innovative idea in detail. Visuals and notes show how the idea attempts to solve the problem with a new or original approach. The student identifies a specific way their idea will minimize impact or counter the threat of the environmental problem.
Action Plan with Timeline *(Double Points)* **(x2)**	Timeline of the action plan may be incomplete or neglects to reference supports for success, such as resources, materials, people, etc. Action step labels or explanations are vague or missing.	Timeline shows the order of the action plan and refers to supports for success, such as resources, materials, people, etc. All action steps are labeled and explained.	Timeline clearly shows each step of the action plan and thoroughly addresses necessary supports for success such as resources, materials, people, etc. All action steps are labeled and explained.
Obstacles *(Double Points)* **(x2)**	Student provides little description of difficulties in making their innovation practical, efficient, or sustainable. Or, fails to mention realistic ways that people needed to carry out the action plan would be impacted.	Student describes difficulties they can see in making their innovation practical, efficient, or sustainable. Mentions some ways that people needed to carry out the action plan would be impacted.	Student thoroughly describes difficulties they can see in making their innovation related to practicality, efficiency, and/or sustainability. Explains the impact on people needed to carry out the action plan.
Reflection	Student is unclear about challenges and rewards of the project. Or, makes vague applications to personal strengths or neglects possible use of the idea in other settings. Or, neglects or argues with little evidence about why the problem should be addressed.	Student lists challenges and rewards of the project, making applications to personal strengths and possible use of the idea in other settings. Uses some evidence to explain why the problem should be addressed.	Student clearly describes challenges and rewards of the project, making numerous applications to personal strengths and possible use of the innovation in other settings. Takes a well-reasoned stand to persuade others that a problem exists and should be addressed.
Visual Quality of Display	Project has limited eye appeal or is not easily readable at approximately two feet distance. The project has limited organization, or contains confusing visuals, or contains major language or spelling errors.	Project is appealing and readable at approximately 2 feet distance. It is organized and clear, uses understandable visuals and/or models, and contains few language and spelling errors.	Project is appealing and neat, and is readable at approximately 2 feet distance. It is well organized and clear, makes striking use of inventive or amusing visuals and/or models, and uses language and spelling flawlessly.

(Projects will receive between 10 and 50 points when all rubric criteria have been addressed.)

Environmental Innovation
(Kindergarten through 5th Grade)
Judge's Score Sheet for School Site Science & Engineering Fairs

	Teacher: Room:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:	Student(s): Project:
Environmental Problem																
Preliminary Research																
Innovative Idea (Double Points) **(x2)**																
Action Plan (Double Points) **(x2)**																
Obstacles (Double Points) **(x2)**																
Reflection																
Visual Quality of Display																
Total Score																

NOTES TO TEACHER: For grading purposes, 5-10 pts = Not Proficient (1),   11-24 pts = Partially Proficient (2), 25-39 pts = Proficient (3), 40-50 pts = Advanced Proficient (4).
Complete grading should also include other details not included here as Judging Criteria: for instance, written report details, completion of deadline tasks, display guidelines, model quality, etc.