

Name: _____ Date: _____ Average: _____ out of 4

“Projects with a Purpose” Rubric

Key: 1 = Beginning (little to no mastery of skill) 2 = Developing (some mastery of skill) 3 = Proficient (mostly mastered skill) 4 = Advanced (fully mastered skill)	Student Evaluation	Teacher Evaluation
Connecting Your Project to Philanthropy		
Describe how the idea of philanthropy influenced or inspired your choice of a problem to solve.	1 2 3 4	1 2 3 4
Explain the benefits of your project for your client or recipient.	1 2 3 4	1 2 3 4
Asking Questions and Generating Solution Ideas		
Brainstorm numerous ideas for a problem to be solved.	1 2 3 4	1 2 3 4
Conduct an interview with one or more adults in your community.	1 2 3 4	1 2 3 4
Research existing solutions related to your problem.	1 2 3 4	1 2 3 4
Clearly identify project criteria and constraints.	1 2 3 4	1 2 3 4
Consider multiple ways to solve the problem.	1 2 3 4	1 2 3 4
Developing a Solution		
Justify the chosen design solution based on project criteria and constraints.	1 2 3 4	1 2 3 4
Effectively apply principles of computer-aided design, engineering, science, and mathematics as needed to solve the problem.	1 2 3 4	1 2 3 4
Keep detailed records and sketches of the design possibilities, plans, and revisions in the engineering notebook.	1 2 3 4	1 2 3 4
Review the proposed design with the client prior to making the prototype.	1 2 3 4	1 2 3 4
Constructing and Testing a Prototype		
Persevere to create a prototype.	1 2 3 4	1 2 3 4
Creatively and responsibly use resources and materials.	1 2 3 4	1 2 3 4
Test and revise the prototype to ensure it meets the project criteria and constraints.	1 2 3 4	1 2 3 4
Review the prototype with the client and ask the client to suggest ideas for improvement.	1 2 3 4	1 2 3 4
Improving and Evaluating		
Self-assess the prototype and identify any design flaws or problems.	1 2 3 4	1 2 3 4
Use time and resources effectively to make improvements to the solution.	1 2 3 4	1 2 3 4
Deliver the final solution to the recipient.	1 2 3 4	1 2 3 4
Document the impact of the final solution on the recipient and show how well the solution is working for the recipient.	1 2 3 4	1 2 3 4
Communicate lessons learned from the project.	1 2 3 4	1 2 3 4