

Environmental Science Fair Project : Design Thinking - YES Charter 2019

Student Name: _____

CATEGORY	4 Thorough Understanding and Application	3 Adequate Understanding and Application	2 Partial Understanding and Application	1 Minimal Understanding and Application
Choose an issue 12/3	Independently chose an environmental science related issue, that is personally meaningful. Posed various questions to explore.	Chose an environmental science related issue that is personally meaningful. Posed one or two questions to explore.	Chose an issue that may or may not be related to environmental science. It is not clear that the issue is personally meaningful. Posed one question to explore.	Chose an issue unrelated to environmental science. The issue is not personally meaningful. Did not pose a question to explore.
Empathize 1/11	Learn from the people, animals, and environment that are impacted by your issue. Learn about multiple perspectives and opinions by first identifying personal perspectives and opinions conducting research, and multiple interviews.	Learn from the people, animals, and environment that are impacted by your issue. Learn about one or two perspectives and opinions by first identifying personal perspectives and opinions conducting research, and one or two interviews.	Learned minimally from the people, animals, and environment that are impacted by your issue. Learned one perspective or opinion may or may not have identifying personal perspectives and opinions. Conducted one interview and did some minimal research.	Did not learn about the people, animals and environment that impacted by your issue. Did not learn different perspectives, or explore personal perspectives. Did not interview or conduct research.
Define 1/31	Used new understanding of the issue to clearly define a specific focus for the project.	Used new understanding of the issue to define a focus for the project.	Issue is not clearly defined and is not necessarily related to the research done.	Did not define an issue and it is not related to research.
Brainstorm 2/08	Brainstormed lots of ideas to address the defined issue. Used creativity and "outside the box thinking."	Brainstormed some ideas to address the defined issue.	Brainstormed one idea to address the issue.	Did not brainstorm any ideas to address the issue.
Prototype 2/15	Chose one unique and creative idea to draft a prototype as a solution to the defined issue.	Chose one idea to draft a prototype as a solution to the defined issue.	Chose one idea to draft a prototype but it is not related to the issue as a solution.	Did not chose an idea to draft a prototype as a solution.
Test 2/22	Tested and reworked the prototype several times to come up with the best solution or design.	Tested and reworked the prototype one or two times to come up with the best solution or design.	Tested the prototype one time.	Did not test the prototype.
Implement 3/01	Made a clearly stated plan to implement the project in the real world.	Stated a plan to implement the project in the real world.	Stated a plan to implement the project, may not be appropriate for the real world.	Did not have a clear plan to implement the project in the real world.
Share 3/08	Shared the project with others, the judges, and at the STEAM Fair. Presentation was clear and specific using visual aids, detailing each step of the design thinking process in a logical manner. Thoughtfully responded to questions from the judges.	Shared the project with others, the judges, and at the STEAM Fair. Presentation used visual aids, showing each step of the design thinking process. Responded to questions from the judges.	Shared the project with the judges, and at the STEAM Fair. Presentation showed the work completed. Responded to questions from the judges.	The project was not shared with the judges or at the STEAM fair. Presentation did not show the work completed. Did not respond to the questions.

3/15 - Environmental Science Fair