

DESIGN&PITCH CHALLENGE

FIX IT: DESIGN FOR COMMUNITY IMPACT RUBRIC

GRADING RUBRIC

	Getting Started	Improving	Good	Excellent
Describe how you used research in identifying a problem and developing the solution.	We did not use research in identifying a problem to solve so cannot show a mathematically significant need for our solution.	We used research in identifying a problem, and can show a mathematically significant need for our solution but did not research current solutions prior to developing our solution.	We used research in identifying a problem, and can show significant need for our solution, we also researched current attempts to solve the problem and innovated a solution already in existence for our community.	We used research in identifying a problem, and can show mathematically significant need for our solution. We also researched current solutions to the problem but developed a unique solution for our community based on what we learned.
Develop your prototype or model.	We did not develop a prototype or model of the solution- we created a sketch but it was without dimensions, units of measurement, or labels.	We developed a prototype or model and an informational sketch of our prototype. Our sketch contains some, but not all , important information.	We developed a prototype or model. We included a sketch of our product that includes labels, dimensions, and appropriate units of measurement. Our sketch is not drawn to scale.	We developed a prototype or model. We included a sketch of our product that includes labels, dimensions, and units of measurement, and our sketch is drawn to scale.
Create a plan for distributing your solution.	We did not create physical product that could be distributed to customers.	We created a physical product but did not create a plan for distributing it to customers in any way so there are no specifications for how it would be packaged or shipped.	We created a physical product and designed packaging that includes a mathematical justification for materials used and the packaging size needed for distributing our product. But not all of the justifications are correct.	We created a physical product and designed packaging that includes a mathematical justification for materials used and the packaging size needed for distributing our product. We included sustainability principles as part of this justification on size and materials.
Describe how the model or prototype would impact the problem.	We did not connect our prototype to the problem we were trying to solve.	We made shallow connections between our solution and the original problem- but had no evidence to show how it would work.	We made connections between our solution and the original problem- we used mathematics and scientific principles to explain how our product could work in the real world, but did not connect the solution to how it could work in our community.	We made connections between our solution and the original problem- and tested the effectiveness of our product. We then used mathematics and scientific principles to explain how our product would work in the real world and identified how our community could put the solution into action.
Describe how you would share the solution with a wider audience.	We did not plan a way to share our results.	We shared our results using a poster or a flyer.	We created a visual presentation and a verbal presentation to share our results with the class.	We planned multiple ways to share our results with the community beyond just our classroom.

