

SUMMARY

In every community, there are problems that need solving or things that need improving. The most effective solutions are ones that meet the needs and desires of the community. They are invented by leaders, including you, who have the knowledge, experience, creativity, and entrepreneurial skills to make them a reality. Entrepreneurs don't wait on the sidelines for others to do the work. They jump in and use their energy and passion to make change happen. In this Design & Pitch Challenge, you will develop a product that helps solve a problem facing your community.

SCENARIO

In 2015, the residents of Flint, Michigan found lead in their drinking water. The water they had been drinking for years, was so contaminated that it had been causing serious health issues. Gitanjali Rao, an 11 year-old living in Colorado, recognized that Flint wasn't the only community facing this problem and she knew she had ideas that could help. Tired of waiting on adults, Gitanjali decided to take action. She invented Tethys, a device that people can use to test their water for lead before drinking it. She saw a problem, had an idea for how to solve it, and took action.

In every community, there are problems that need solving or things that need improving. For Gitanjali, that problem was access to clean drinking water. For you, that problem is likely something different that is unique to your community.

CHALLENGE

Your challenge is to **design a physical product that will help solve a problem facing your community**. Your solution should include:

1. Research that shows the product helps solve the problem.
2. A prototype of your solution. This should be a 2-D sketch or 3-D model, and also include the dimensions of the product and a description of the materials needed.
3. A description of how the product will be distributed to customers, including the volume and surface area of the shipping container.

Your final submission should include a detailed sketch of your product. You do **not** need to print your solution. Visit the [Prepare](#) page to learn about [TinkerCAD](#), a free program for creating 3D printable designs.