Creating Algorithms: Troubleshoot a Design Problem

An algorithm is a repeatable process that delivers an expected result. An engineer might use an algorithm to help others troubleshoot common design problems.

1 Part 1: Describe Your Design

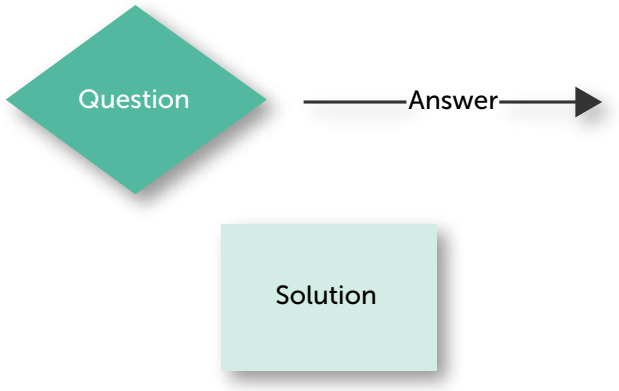
Sketch and **label** your design here:

Think about the **parts** of your design and the **purpose** of each part (what it does and what makes it important to the overall function). Then, **troubleshoot** to identify why this part might not work.

Part	Purpose	Troubleshoot

2 Part 2: Draft Your Algorithm

In this assignment, you are going to create an algorithm to solve a design problem. In the example, there are different shapes that represent different types of steps. Use the key below to use the same shapes in your algorithm and create new shapes to show other types of steps. You can also create your own shapes to draft your algorithm on a computer using a tool such as LucidChart, Smartdraw, or Draw.io.



Start by writing your problem below, and then add clarifying questions and solutions to help someone solve it.

3 Part 3: Pair Debugging Algorithm

After completing your algorithm, work with a partner to debug -- which is to find and fix errors -- and improve it: