

The Great Pacific Garbage Patch Design Challenge

You are an engineer employed by the Ocean Cleanup company. Your new design, System 001, has malfunctioned and a section of the device has broken off into the Pacific Ocean. You and your design team must work together to engineer a new system to replace the old. Using your knowledge of the Great Pacific Garbage Patch and System 001 which was previously installed to solve the problem of catching the microplastics.

Design Constraints

1. The new system must be in a “U” shape.
2. The system must allow water to flow through it while retaining debris.
3. The system must be designed to float on top of the water but may also have components that submerge below the surface.
4. All components must be attached and secured to the floating device.
5. Your budget for the design is \$12. Keep your total cost at or below \$12.

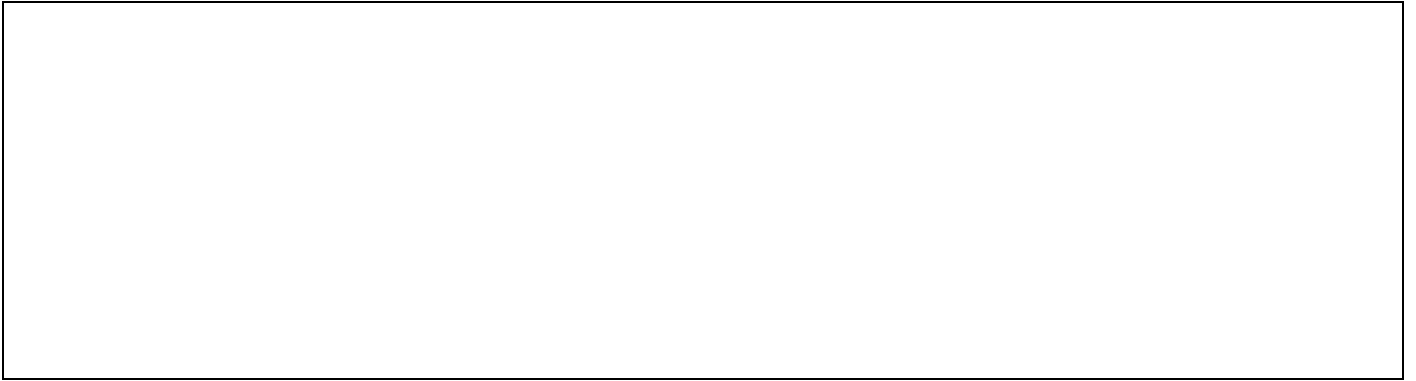
Things to Consider

When designing and testing your device how will you ensure it is effective in cleaning up the test area?

What are some things you can look for?

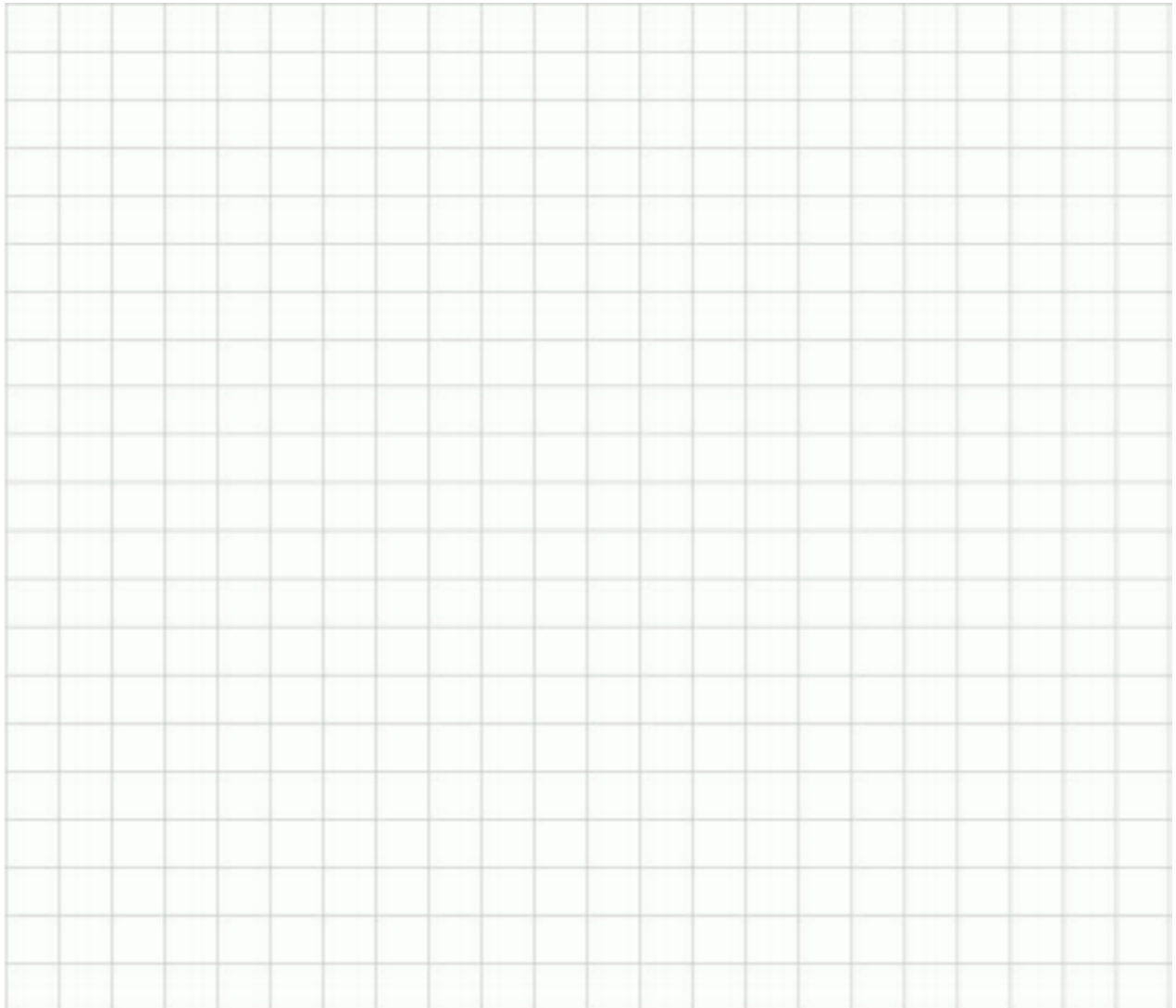
How can you keep in mind the concerns of environmentalists and critics and overcome those challenges with your design?

Brainstorm



Sketch Your Design Plan

Be sure to label components and supplies in your sketch.



Materials and Budget Breakdown

Item	Cost	Amount	Total
<i>Example- String</i>	<i>50¢ per 2 ft.</i>	<i>4 ft.</i>	<i>\$1.00</i>