



Build a Boat Challenge



Funbotics Build a Boat Challenge

CHALLENGE OBJECTIVE

Your objective is to construct a boat that can hold the most weight while on water without capsizing or sinking. You will be judged in 4 different categories outlined in the rubric below. Good luck!

RULES

- You may only use the follow materials to construct your boat:
 - Straws, paper, popsicle sticks, toothpicks, tape, glue, styrofoam, cups of any material
- The boat must be no larger than 30 square inches in area
- To demonstrate the strength of your bridge, place coins or any other similarly sized material on the boat until it sinks
- The weights placed on the boat may only be supported by the boat that you built
- The boat must be on water when placing weights (you can fill up a bowl with water and place it on top)
- You must submit all necessary documentation by August 10, 2021 at 5 PM EST via the submission guidelines outlined below

DELIVERABLES

Photos: Submit a minimum of one photo showing the boat supporting the weights placed on top.

Document (Optional): Submit a document detailing the design process. The design process may detail brainstorming, selecting the idea, construction, testing, and any conclusions.

SUBMISSION

Click the following link to submit your completed challenge! All submissions are due by September 17, 2021 at 5:00 PM EST.

RUBRIC

Structure 8 Points	2 Points	4 Points	6 Points	8 Points
	The construction of the boat is poor and supports minimal weight	The construction of the boat is adequate and supports some weight	The construction of the boat is good and supports moderate weight	The construction of the boat is exceptional and supports a lot of weight
Design 4 Points	1 Point	2 Points	3 Points	4 Points
	The boat demonstrates poor design	The boat demonstrates average design	The boat demonstrates good design	The boat demonstrates extraordinary design
Creativity 4 Points	1 Point	2 Points	3 Points	4 Points
	Design exhibits little creativity.	Design exhibits adequate creativity.	Design exhibits good creativity.	Design exhibits outstanding creativity.

Total /20

TIPS

- Think about and draw inspiration from different types of boats used in the real world
- Think about what types of materials would be strongest and most suitable for this challenge
- Test different designs with different materials