

Methodology

The team first had a brainstorming session in order to create possible solutions for the task at hand. After deciding that PVC was the best option for the limited budget, the team then formulated a frame design in order to maximize speed. The team utilized a virtual platform to better encourage participation.

Conclusion

To summarize, in order to combat the growing amounts of plastic in the ocean, our team has designed a craft, that can pick-up and clear the trash from the ocean. This project has taught the team many valuable concepts such as the engineering design process, buoyancy, and vectors.

Results

The possible test for the craft that the team wishes to conduct is

- Wind tunnel
- Buoyancy test
- Motor velocity test

Abstract

Due to the overabundance of plastic pollution, our team has created a SeaPerch to combat such pollution.

Acknowledgements

The team would like to Acknowledge our coordinator and administrator Ms. DiMaggio, and our mentor Jordon McGowan. We would also like to make note of Archimedes, as he was our reference for the buoyancy principle.

Motivation

The concerning levels of plastic in the ocean became a primary concern of the team after being introduced to the topic through the regional SeaPerch Competition. There is a massive floating island of plastic that is the size of Texas currently in the ocean. That plastic is being ingested by sea life, leading to massive amounts of sickness and injury amongst the aquatic life.

Next Steps

The next step for the Team is to create a physical prototype for testing and research. The team would also like to explore the question of how to clear more unconventional waste such as military ordinance.

Neptune's Knights

