

TRASH ISLAND: A GARBAGE PATCH JOURNEY

GRADES 1-6



SUBJECTS

 Oceanography

 Animal Science

 Mathematics

 Environmental Science

 Geography

 Engineering Design

 Speaking and Listening

UNIT OVERVIEW

In Trash Island: A Garbage Patch Journey™, children investigate the extreme buildup of trash in the North Pacific Ocean Gyre between California and Hawaii. They must determine what has contributed to this area, known as Trash Island, and develop solutions to keep it from growing. Children are immersed in ecological topics including ocean conservation and pollution control as they collaborate, conduct research and tap into their creativity to clean up the ocean and secure a brighter, healthier future.

CURRICULUM HIGHLIGHTS

THIS UNIT EMPHASIZES THESE INNOVATION MINDSET HABITS:



Practicing innovation to develop ideas that promote sustainable living and environmental conservation.



Applying design thinking to build devices that collect trash and remove contaminants through water filtration.



Building confidence while taking on ocean research challenges that connect to real-world issues.

UNIT PROTOTYPES

IN THIS UNIT, CHILDREN CREATE:

- Boat Logs
- Waterproof Cases
- Trash-Collecting Trawls
- Fishing Poles
- Egg-Marines
- Robotic Arm for a Remotely Operated Vehicle (ROV)
- Fantasy Clean-Up Machine