

Program Resources: Into the Vortex



Overview

Plastic is an incredible invention. Thanks to its transformative nature it can be turned into almost every texture, shape and size. Plastic is found everywhere – it is so integrated into human culture and economy that often times we do not notice just dependent we are on plastic. While plastic is very useful it also has a dangerous impact on the ocean ecosystems that we also rely on for survival. Our disposal plastic habits contribute to plastic pollution worldwide. Plastic is valuable – it should not be disposable. Students will learn about why plastic is dangerous for the environment and also why it is important. Together we will discuss the ways that every person can have a positive impact on the environment and tackle the plastic problem.

Key Concepts

- Plastic is valuable – it has many amazing features that help humans in various ways
- Single-use plastic is a leading contributor to ocean plastic pollution worldwide
- All water on earth is connected and how we impact our local environment can have an impact on the global ocean
- There are tangible alternative products and actions that can replace single-use plastic in our lives
- Everyone has a part to play in the health of the ocean and your actions both positive and negative contribute to it.
- By better understanding the problem we can come up with positive solutions

Discussion Questions:

- Plastic was first created as a substitute for ivory to reduce poaching of elephants. Why do you think we have transitioned from multi-use plastic designs to single-use items and packaging?
- Why do we need plastic?
- What are the biggest barriers for people to reduce their waste production? Why?
- Whose responsibility is it to clean up or prevent plastic pollution?
- Why do individual actions matter when contributing to plastic pollution – both the problem and the solution
- How does the ocean help us?

Activities

Waste Audit: take a waste audit of your classroom, house or school. See how much waste you produce and research where it is going. <https://education.ocean.org/oceanaction/assignments/1115043>

Plastic Free Challenge: keep track of your single plastic use with this challenge. For one week keep all plastic that would have gone into the recycling/garbage in a clear jar (mason jars or old plastic containers work well). At the end of the week empty your jar and discuss your findings with your classmates. <https://education.ocean.org/oceanaction/assignments/1115045>

Down the Drain Challenge: by increasing our awareness we can improve our understanding and develop solutions. We are highly unaware of most of the waste we produce. Take this challenge to bring new perspective of our connection to water and waste. For one day keep a drain diary of all the things you flush down the sink. <https://www.youtube.com/watch?v=k16ziz1Fz2k>

Videos

What is Plastic? | Brain Waves Episode 1 | Ocean Wise

<https://www.youtube.com/watch?v=ZA7bcm4adE8>

How does your Plastic end up in the Arctic? | Brain Waves Episode 6 | Ocean Wise

<https://www.youtube.com/watch?v=PzURXrrjTKY&t=4s>

What happens to microplastics in the ocean? | Ocean Wise

<https://www.youtube.com/watch?v=Y0Ks8oSUGIs&t=6s>

How Much Plastic is in the Ocean? | It's Okay to be Smart

<https://www.youtube.com/watch?v=YFZS3Vh4lfl&t=7s>

Challenge: A Plastic-Free Grocery Shop | Ocean Wise

<https://www.youtube.com/watch?v=1i9e0kK5gJA&t=4s>

Going green shouldn't be this hard | Vox <https://www.youtube.com/watch?v=BxKfpt70rLI>

Extra Links

- Marine Plastic Litter Program: <http://plasticedkit.ocean.org/>
- Take the Plastic Pledge! <http://ocean.org/plastic-wise/>
- Great Canadian Shoreline Cleanup: <http://shorelinecleanup.ca/>
- Ocean Wise Research: <https://research.ocean.org/>
- Ocean Literacy: <http://literacy.ocean.org/>