



PLASTIC FREE HAWAI'I

Marine Debris Sorting & Identification Lesson

Kōkua Hawai'i Foundation's **Plastic Free Hawai'i** program seeks to minimize single-use plastics on our islands by educating and empowering schools, businesses, and community members across Hawai'i.

OBJECTIVE:

Following a beach cleanup, students will sort marine debris, tally items, evaluate data to draw conclusions on prevalent waste sources, and make suggestions to reduce marine debris in our environment.

LENGTH OF ACTIVITY:

40 minutes

AGES: 4+

MATERIALS LIST:

- Debris collected
- First Aid Kit
- Garden Gloves
- International Coastal Cleanup (ICC) Data Card*
- Scale(s)



PROCEDURE:

1. Do a beach cleanup and collect debris
2. Form small teams of 3-5 students. Each team receives its own marine debris samples, ICC Data Card and gloves for sorting.
3. Fill out sections 1 & 2 on ICC Data Card.
4. Using a scale, weigh your team's total marine debris.
5. Sort your debris samples into groups of similar items based on the categories on page 2 of the ICC Data Card.
6. Tally and record the number of items in each category your team has sorted.

7. Samples of marine debris can be kept as a resource for future classes.
8. Separate recyclables (beverage cans and bottles, glass, & plastics #1 & #2) and items for art projects (optional). Recyclables can be placed in a local recycling bin or the school's recycling dumpster, if available.
9. Clean up and dispose all other plastic debris safely and securely in the trash.

TEAM DISCUSSION:

In teams, discuss and record answers to the following questions.

1. What are the three most prevalent debris items from your data card?
2. Where did the debris come from? Is the source land based or ocean based? What indicators did you use to make these assumptions?
3. Identify and describe what effects the debris you have found might have on marine life.
4. How can individuals, schools, businesses or legislative policy help to prevent plastic from entering our ocean and becoming marine debris?

* http://act.oceanconservancy.org/site/DocServer/ICC_Eng_DataCardFINAL.pdf?docID=4221

Plastic Free Hawai'i is a program of

kōkua hawai'i foundation



www.kokuahawaiifoundation.org/plasticfree



PLASTIC FREE HAWAII

Marine Debris Sorting & Identification Lesson



CLASS DISCUSSION:

1. Send one team member to record your results on the collective table to create a class-wide tally.
2. Share your discussion thoughts and conclusions with the entire class.
 - “What can we do as individuals?”
 - “What can we do as a community?”
3. What do the collective results reveal about marine debris and what can be done to get rid of it?

EXTENSION ACTIVITIES:

1. Have each team make a bar and pie graph of their data findings. Make another set of graphs for the class-wide data.
2. Create artwork or come up with other creative ways to reuse or recycle the debris to showcase environmental issues at school.
3. Write an investigative report or newspaper article on the state of your beach or local environment, based on the findings from your beach excursion and marine debris sorting. Reports and articles can be submitted to local publications, KHF, and/or presented to the school.
4. Organize a beach or town cleanup day and get students, parents, teachers, businesses and the entire community involved.
5. Talk with people in the community about the things they have found washed up on the beach. Video or audio record their stories to create an oral history presentation.



6. Investigate how marine debris is traveling around the world and theorize where it might have come from and where it might end up next.
7. Envision a world where there is no single-use plastic. What would daily life look like? How would it be different? Communicate your ideas through words, songs or pictures.
8. Make your own toothpaste, scrubs, reusable t-shirt tote bags, and other plastic free tools.
9. Do a classroom, cafeteria or school-wide waste audit and track the amount of plastic waste for one day.
10. Advocate for your school or a local restaurant to stop using single-use plastics. Check out the Plastic Free Hawai'i Launch a School Campaign Guide for support.

Discuss the ways in which your school community can reduce single-use plastics on campus.

Think outside the box by merging science and math with the arts to find creative ways to share what you've learned and be part of the solution.

Put your ideas into action by launching a Plastic Free Hawai'i School Campaign.

E-mail plasticfree@kokuahawaiiifoundation.org for support or with questions.



For more information visit:

WWW.KOKUAHAWAIIFOUNDATION.ORG/PLASTICFREE

Or find us on social media:  PlasticFreeHawaii.KHF  @kokuahawaiiifoundation #PlasticFreeHawaii



This lesson has been modified from the *Tangaroa Blue Foundation, Marine Debris Education Kit*.
www.TangaroaBlue.org

Plastic free Hawai'i is a program of

kōkua hawaii foundation



www.kokuahawaiiifoundation.org/plasticfree