



## USS MY SCHOOL CURRICULUM



This curriculum is designed for grades four through six.

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The Center for Marine Conservation joins  
the United States Navy  
in celebrating the  
1992-1993 Year of the Gulf of Mexico



Center for Marine Conservation



UNITED STATES NAVY

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# THE USS MY SCHOOL CURRICULUM

**W**elcome to the world of marine debris!

We know that you and your students will enjoy the *USS My School* curriculum because of its hands-on science approach to a very current environmental topic.

Your students will be learning about the marine debris issue and how it affects the health and safety of the world's oceans and beaches.

This curriculum was designed to encourage your students to become creative problem solvers. Your students will experience success working together with team members. As this project continues, your students will become experts on several topics, and will experience the opportunity to teach what they have learned to other students in their school. The *USS My School* curriculum provides students the chance to succeed in areas in which they excel...drawing, math, writing, public speaking, and organizing. They may even become pretty good at washing dishes and storing trash!

This curriculum allows children to use their imagination...the school can become their ship, the cafeteria can become a ship's galley; each day the classroom becomes a place to think about a real life environmental problem and to come up with real hands-on solutions.

The *USS My School* project teaches students a variety of lessons using an inter-disciplinary approach, making each day exciting, fun, and one that they will long remember. The *USS My School* project is special and your students will feel special, too. So set sail, and enjoy the adventure!

## LESSONS INCLUDED IN THIS CURRICULUM:

Lesson 1: What is Marine Debris?

Lesson 8: Educating the Crew

Lesson 2: Living and Working at Sea

Lesson 9: Setting Sail/The Start Date

Lesson 3: What is MARPOL?

Lesson 10: Out at Sea

Lesson 4: The Navy Plan

Lesson 11: Heading Back to Port

Lesson 5: *USS My School*

Lesson 12: Data Collection

Lesson 6: Record Keeping

Lesson 13: What Happened?

Lesson 7: Getting the Message Out

Lesson 14: Rewarding the Crew



## INTRODUCTION

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Over the past few years you have probably been hearing about the problem of trash in the ocean and on our beaches. Major papers, magazines, and television news programs across the United States have featured stories about the tons of trash found on America's beaches. You may have also heard about the hundreds of thousands of volunteers who have participated in beach cleanups. These volunteers have been counting marine debris items and listing them on the Center for Marine Conservation's data cards since 1986. Perhaps you and your students have attended a beach cleanup in your state.

How do buckets, ketchup bottles, plastic bags, egg cartons, milk jugs, rope, soda cans, and light bulbs end up on the sand? Some trash is left at the beach by visitors...that can explain the soda cans. But why do we find vegetable sacks, buckets, shampoo bottles, 55-gallon drums, and toothbrushes? Some marine debris arrives on beaches from inland sources, or floats to the coast down rivers.

And some marine debris washes to the beach from offshore.

For centuries "taking out the trash" on a ship meant tossing it over the rail...into the water. In the past, it wasn't such a visible problem. Metal and glass would sink, and paper and cloth would decay.

Up until December 1988, it was completely legal for people on ships to throw all shipboard trash over the side and into the water. This kind of trash disposal was done by people on cruise ships, recreational boats, commercial fishing boats, and merchant ships.

Plastic trash thrown off ships does not disappear. The increasing use of plastic and the disposal of plastics has caused a multitude of marine environmental problems for both animals and people.

Scientists, conservationists, fishers, policy makers, and the general public have become increasingly aware of the problems caused by debris in the marine environment. Plastic debris items, in particular, cause severe problems for wildlife, mariners, and beach users. Marine animals can die from entanglement in or ingestion of improperly discarded plastic wastes. Plastic debris disables vessels when it gets wrapped around propellers or clogs cooling water intakes. This debris is also a visual nuisance and economic burden to U.S. coastal communities.

One important step toward solving the problem of plastic marine debris occurred on December 31, 1988, when Annex V of the International Convention for the Prevention of Pollution from Ships came into force. As of January 15, 1992, 52 countries – including the United States – have signed Annex V, which prohibits the disposal of plastic trash from ships at sea, and regulates the distance from shore that ships can dump all other solid waste materials.

Unfortunately, enforcement of Annex V by the U.S. Coast Guard in U.S. waters is difficult because of competing priorities and limited resources. However, people can play an important role in fighting the marine debris problem. By monitoring beach debris with data cards at beach cleanups, people can help to identify sources of debris and evaluate the effectiveness of legislation and other management strategies. The involvement of marine user groups and the general public in monitoring beach debris also serves to increase awareness of the marine debris problem and promote participation in cleaning up the world's oceans.

The Navy has begun an aggressive program to comply with Annex V and to reduce the disposal of plastic trash at sea. The lessons learned by the Navy in modifying supply, operational, technological, and educational practices concerning plastic waste disposal are not restricted to ships. Much of the Navy's information also applies to solid waste management by people on land.



The Center for Marine Conservation has created the *USS My School* curriculum to teach students about marine debris and the new legislation that prohibits plastic trash disposal at sea. This curriculum will help students understand the difficulties Navy crew members have storing trash on board a ship. This project requires students to store trash generated in the school cafeteria for several days at school. Using problem solving and creative thinking skills the students will develop ways to minimize the amount of trash generated at school and will develop educational materials for other students at their school to promote these efforts. Ultimately, the lessons learned from this curriculum can be applied by students to minimize the amount of trash in their daily lives.

## SOME BACKGROUND INFORMATION

**F**ollowing the first Texas Coastal Cleanup in 1986, organized by the Center for Marine Conservation's Gulf Coast Office in Austin, Texas, the topic of marine debris became front page news. The Center asked volunteers not only to collect trash, but also to record what they were finding on data cards. The data was analyzed and published in a report.

This first detailed report on the kinds, amounts, and composition of trash helped alert the public and policy makers that offshore dumping of trash was a serious environmental problem. The Center's reports on beach cleanups now include information from 33 U.S. states and more than 30 foreign countries.

Information about the tons of trash littering beaches helped change the way people around the world handle shipboard waste. With the passage of a new law (Annex V of the MARPOL Treaty) making it illegal to dump plastic trash at sea, came the need for people living and working in the marine environment to change their procedures regarding the way they treat shipboard trash. Navies of the world are exempt from the MARPOL Treaty, but the U.S. is requiring our Navy to comply and has given them seven years to come into compliance.

The U.S. Navy was faced with a very complex set of problems. How could they hold trash on a ship at sea? How could they keep trash on board a ship with 5,000 crew members? If trash was held on ships how would they handle odors and insects attracted to the trash? Where would the trash be stored? How long could it be stored until the ship reached a port to offload? Would the stored trash create a fire hazard?

You and your students will learn about the marine debris problem after viewing the slide program from the Center for Marine Conservation and you will get a close-up look at how the Navy is working to comply with Annex V legislation after watching their video, *Plastic in the Ocean: More than a Litter Problem*.

The U.S. Navy is spending millions of dollars for research and development of equipment to handle shipboard wastes. New equipment to handle different types of waste will include trash compactors, solid waste pulpers, and plastic processors.

Plastic processors will compact and sterilize bricks of plastic waste. Many ships will have this equipment installed beginning in 1995, according to the Assistant Secretary of the Navy, Installations and Environment. The processor is 7 feet wide and 6 feet tall. This equipment is being tested on large ships such as the *USS Arkansas*, the *USS Barry*, the *USS Wasp*, and the *USS Kitty Hawk*. Smaller plastic processors will be developed for use on small ships. The Navy plans for no plastic to be discharged from their ships at sea after December 31, 1998.

The solid waste pulper, which stands 6 feet high, turns trash into mush, which then sinks. Paper, non-plastic parts packaging, and other kinds of trash add up to about 2.4 pounds per day of pulpable trash per person. On an aircraft carrier with a crew of about 5,000, this adds up to more than 6 tons of trash per day. The pulper must be reliable to sustain the high volume of trash it will handle daily.

Trash compactors produce slugs of trash so dense that they will sink.

In addition to educating the crew about the new policy to end dumping shipboard trash at sea, the Navy is also reducing the amount of plastic brought on board in the first place. Small packets of crackers are no longer purchased and are being replaced with crackers packaged in bulk. Crew members use ceramic coffee mugs rather than plastic foam cups.

The Navy is also researching ways to recycle their plastic waste. Plastic trash from Navy ships has been converted into "lumber" used for picnic tables and park benches. Navy personnel in Annapolis, Maryland, used plastic lumber to construct a floating pier.



# GETTING STARTED

## MATERIALS INCLUDED IN THIS CURRICULUM:

- Student/Teacher Contract
- A Citizen's Guide to *Plastics In The Ocean: More Than A Litter Problem*
- Copy of CMC data card
- Copy of CMC MARPOL sticker
- Letter from Elsie Munsell, Deputy Assistant Secretary of the Navy for Environment and Safety
- U.S. map
- World map
- List of countries party to the MARPOL Treaty
- Vocabulary list
- Word-search
- Certificate of Appreciation
- Teacher survey

## MATERIALS YOU WILL NEED:

- CMC marine debris slide presentation: *Marine Debris and Entanglement* or video: *Trashing the Oceans* (see below)
- Folders, letter-sized to fit 8 1/2"x11", two-pocket: one per student
- Poster board, felt tip pens
- Notebook paper for folders
- Navy video, *Plastics In The Ocean: More Than A Litter Problem*, and Navy poster about marine debris, *Don't Splash Navy Trash* (see below), for Lessons 4 and 7
- Red and blue ribbons for team members
- Clipboards for team leaders
- Bathroom scale to weigh trash in cafeteria
- Hammer, nails, chicken wire, wood to build a "research station" to display plastic trash brought from home (optional)
- Camera, film, photo album (optional)
- A box of marine debris (read data card for suggestions)

## TO OBTAIN MATERIALS:

- The CMC marine debris slide show, *Marine Debris and Entanglement*, is available for \$25.00.
- The CMC video, *Trashing the Oceans*, is available for \$10.00.
- The Navy video, *Plastics In The Ocean: More Than A Litter Problem*, is available for \$10.00.

Please see page 31 for order form to purchase these materials directly from the Center for Marine Conservation.



**BEFORE YOU START:**

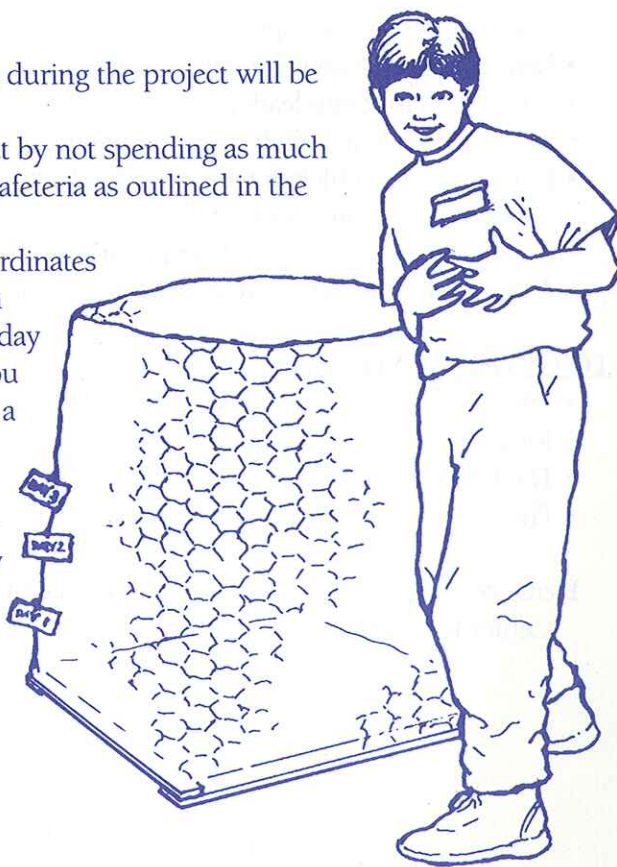
- Obtain permission from your school principal before starting this project.
- Obtain permission from the cafeteria staff for the children to interview them about cafeteria supplies and places to store trash.
- Make sure the school janitor knows that the trash for the project is not to be thrown away for several days.
- Arrange a start date for the holding of trash early in the project so that permission can be gained from all relevant people and so your students can include this date in their educational materials.
- During a staff teachers' meeting briefly explain the project, as the cooperation from all teachers will insure its success.

**GENERAL INFORMATION FOR TEACHERS:**

- This curriculum is designed for fourth to sixth grade students and is to be taught for fourteen consecutive lessons.
- You may want to include a letter or contract to be signed by each student stating their desire to participate in this project. An example is enclosed.
- Students can be given a special folder for *USS My School* papers.
- Ask students to bring plastic trash items from home each day for the duration of the project. These items will begin to pile up in the classroom during the project. The teacher could set up a "research station" where the class trash can be stored during this lesson. Remind students that the plastic trash must be clean.
- The research station is a wire cage made of wood and chicken wire to collect plastic waste from home, not from the school. Tie a card to the chicken wire to mark each day's level of trash: Day 1, Day 2, Day 3, etc.
- You may want to follow the progress of this special project by taking pictures. Use the photos for a *USS My School* photo album.
- The school cafeteria is the "galley."
- The students whose lunch period occurs during the project will be called the "crew."
- You may shorten the length of the project by not spending as much time collecting and storing trash in the cafeteria as outlined in the curriculum.
- The Center for Marine Conservation coordinates the International Coastal Cleanup which takes place every year on the third Saturday in September from 9 am till 12 noon. You may want to partner your students with a group of Navy personnel to do the cleanup together. Please contact CMC for more information on how to participate. Also, CMC would like to hear how the project worked at your school.

Write to:

*USS My School*  
Center for Marine Conservation  
1725 DeSales St. NW, Suite 500  
Washington, DC 20036



See enclosed teacher survey on page 33.





## LESSON 1: What is Marine Debris?

### OBJECTIVE:

To introduce students to the topic of marine debris and to learn about its many sources, both land-based and offshore. To educate students about the negative effects of marine debris to both people and wildlife.

### BACKGROUND:

Marine debris is litter or trash that is found underwater and on beaches. Any trash that is not properly discarded has the potential to become marine debris. Trash not only ends up in the ocean from illegal disposal of shipboard waste but also from land-based sources. Litter on the street is washed down storm drains when it rains. This trash can work its way into rivers and eventually empty into bays and oceans.

People have been throwing trash off ships for centuries, but materials that make up discarded vessel wastes have changed. Since the second half of this century, more and more products are made of plastic. Plastic trash does not sink or decompose at sea, thus increasing its visibility in oceans and on beaches. It is now virtually impossible to cross an ocean or go to a beach anywhere in the world without finding marine debris.

Some plastic products can cause harm to wildlife and vessels alike. Some seabirds eat plastic resin pellets that resemble fish eggs, causing them to die from starvation. Some turtles eat plastic bags, mistaking them for their favorite food, jellyfish, and die. Discarded fishing nets made of strong plastic materials continue to “ghost fish” – trapping marine mammals, sea turtles, birds and fish. Boat engines and propellers are fouled by plastic bags, rope, and fishing line.

### LESSON PLAN:

- Introduce the term “marine debris.”
- Teacher will present the Center for Marine Conservation’s marine debris slide show, *Marine Debris and Entanglement*.
- Teacher will use the slide presentation to introduce the concepts of “entanglement” and “ingestion.” Also, a box of marine debris should be available for students to examine. Use enclosed data card for sample ideas.
- Where does marine debris come from? Discussion should conclude with the concept that **people** cause marine debris and only **people** can stop the problem.
- Following a class discussion students will complete student/teacher contract and make a list for their *USS My School* notebook of why plastic trash in the ocean is harmful to people and animals.

### STUDENT NOTEBOOK ENTRIES:

- Student/Teacher Contract
- List of why plastic trash in the ocean is harmful to people and animals





## LESSON 2: Living & Working at Sea

### OBJECTIVE:

To discuss various occupations that require people to live and work at sea and find out how they may contribute to the marine debris problem.

### BACKGROUND:

Many people use the ocean. For example:

- Recreational fishers
- Recreational boaters
- Commercial fishers
- Merchant shippers
- U.S. Navy
- U.S. Coast Guard
- Cruise line operators
- Oil and gas industry workers

Certain items found as trash on the beach can be traced back to their marine users. These items are called "indicator items." Below are a few examples:

Indicator Items	Marine Source
Fishing net, fishing line, light sticks, salt bags, and buoys	Commercial fishers, recreational fishers
Wooden pallets, plastic strapping bands	Merchant ships, oil and gas industry workers
Hard hat, write-protection ring	Oil and gas industry workers
Vegetable sacks, plastic milk jugs, egg cartons	Galley (ship's kitchen), commercial and recreational fishers, cruise lines, oil and gas industry

### LESSON PLAN:

- Begin a class discussion about jobs at sea. Teacher can list jobs suggested by students on the board. Students will also keep a list of these jobs in their *USS My School* notebooks.
- Marine debris I.D. activity: Provide a copy of the data card to each student, using the CMC data card enclosed. Display a box of marine debris including some of the indicator items listed above. The teacher will present an item and students will identify it on the data card by marking the proper space. Teacher will lead a class discussion about the possible source of each item.
- Students will complete a word-search activity (see enclosed) of occupations at sea. Some students may want to design their own word-search, which could be copied and used by other students later in the project.
- Students will include a copy of a CMC data card in their notebooks.
- Students can research and write a report on one occupation that requires people to live or work at sea.

### STUDENT NOTEBOOK ENTRIES:

- Jobs at sea
- Data card
- Word-search
- Report on one at-sea occupation





## LESSON 3: What is MARPOL?

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### OBJECTIVE:

Students will learn about an international treaty called MARPOL and Annex V of that treaty.

### BACKGROUND:

Annex V of the MARPOL (short for MARine POLLution) treaty is the newest legal tool to stop the dumping of plastic trash at sea. Annex V went into effect on December 31, 1988, and to date, 52 countries have agreed to abide by its requirements. Other sources of marine pollution are covered under MARPOL and they are outlined below:

- Annex I Regulations for the prevention of pollution by oil
- Annex II Regulations for the control of pollution by noxious liquid substances carried in bulk (e.g. toxic chemicals)
- Annex III Regulations for the prevention of pollution by harmful substances carried in packaged forms
- Annex IV Regulations for the prevention of pollution by sewage
- Annex V Regulations for the prevention by garbage with a particular focus on plastics

Annex V prohibits the disposal of all plastics into the ocean and requires that all vessels carry their plastic trash into port for proper disposal. (Trash can be incinerated on board as long as the ashes of plastic trash are not dumped overboard.) The law that implements Annex V in the U.S. authorized the Coast Guard to write rules and regulations regarding the display of placards (see enclosed MARPOL sticker) to notify crew and passengers of the requirements of Annex V. It also requires each vessel to keep a log book describing their ship's garbage disposal activities. An entry in the log is required each time a vessel's garbage is offloaded at a port, or incinerated on board. Large ports, marinas, private docks, and fish processing plants have to provide facilities for trash disposal.

Who must comply with this law?

- All ships, from rubber rafts to tankers
- Crewboats that travel to and from oil rigs
- Commercial fishers
- Recreational fishers and boaters
- Passenger cruise ships
- Ports, marinas, and private docks
- Fish processing facilities owners
- Oil and gas exploration workers
- Public vessels, including the Navy
- Merchant ships

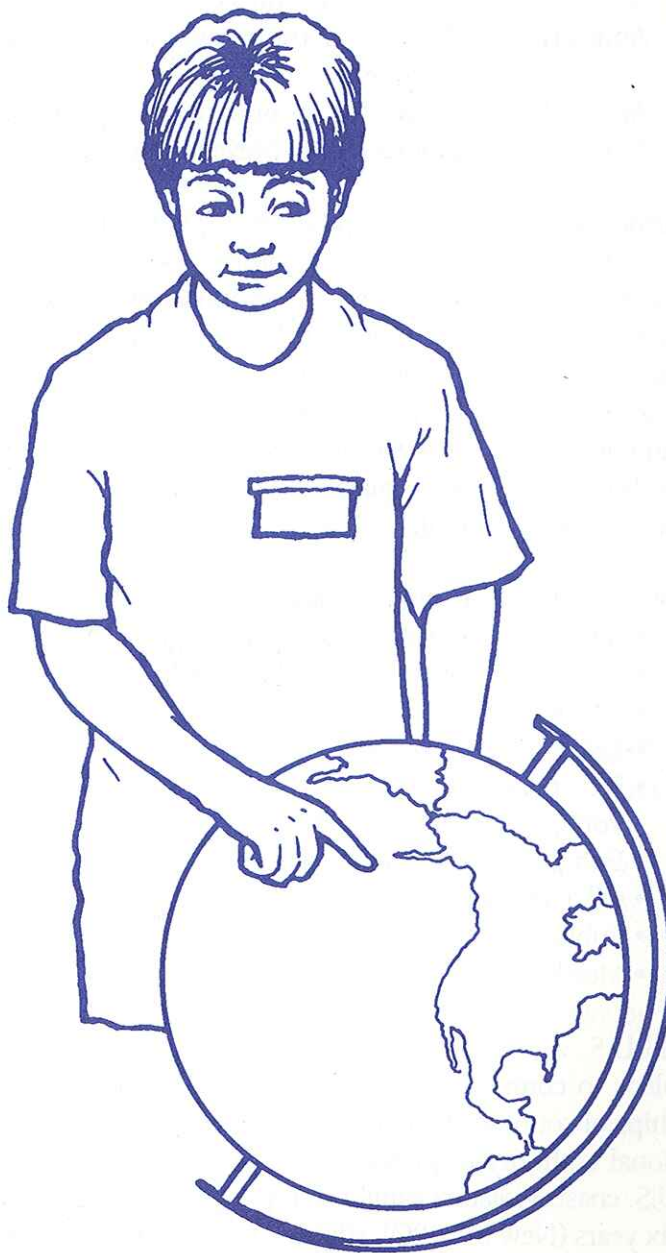
All U.S. vessels must develop and use a shipboard waste management plan specifying how it plans to comply with the provisions of Annex V. In addition, while Annex V applies only to ships of countries that are signatory to the MARPOL Treaty, the law gives the Coast Guard additional authority to prosecute any vessel operator who dumps plastics within 200 miles of the U.S. coast. Violators caught dumping can be fined up to \$500,000 and be imprisoned for up to six years (New MARPOL stickers will announce these increases).

**LESSON PLAN:**

- The teacher will discuss what MARPOL means, and the date Annex V became law. Explain to the students that many nations are working together to protect the world's oceans. In U.S. waters the Coast Guard enforces the law for ships of any size. (U.S. waters extend from shore to 200 miles out at sea.)
- Discuss how this law will change crew behavior and shipboard practices of handling trash.
- Students will be given a world map (see enclosed). Students will locate and name the world's oceans. Read the list of the countries that are party to MARPOL (see enclosed) and have the students locate a few of these countries on the map. This map will be entered into the students' *USS My School* notebook.
- Students will receive a copy of the CMC MARPOL sticker for their notebook and will discuss the fines and penalties for dumping trash at sea and the role that the U.S. Coast Guard plays as the enforcing agency in U.S. waters. (Increased fines are noted on page 13.)

**NOTEBOOK ENTRIES:**

- World map
- List of countries party to MARPOL
- Copy of CMC MARPOL sticker







## LESSON 4: The Navy Plan

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### OBJECTIVE:

To learn about life on a Navy ship and the new solid waste management plans that the Navy will use.

### BACKGROUND:

Since the passage of Annex V, the Navy has been following new procedures to reduce the disposal of plastic trash at sea. However, the lessons learned by the Navy in modifying supply, operational, technological, and educational practices related to shipboard waste are not restricted just to ships. Much of the information acquired by the Navy also applies to students at school and could even be adapted by students at home (especially in terms of sorting, recycling, and minimizing trash). The Navy has developed three new machines to help solve the problem of shipboard trash. A **pulper** grinds paper and food into "mush" for disposal. A **compactor** turns trash into "slugs" that sink, and a **plastic processor** reduces plastic trash into "bricks" for storage.

### LESSON PLAN:

- The teacher will show the Navy video entitled *Plastics in the Ocean: More than a Litter Problem*.
- The teacher will pass out a letter (see enclosed) written by a Navy representative about life on board a ship. This special "Dear Students" letter includes: the number of crew members that live and work on various Navy ships, the cities in the U.S. that have Naval bases, the new plans to reduce shipboard waste, two important ways to make the new program succeed, and reasons why the Navy is making these changes. After the students read the Navy letter for information, the teacher will generate discussion on the ways the Navy will store trash and the ways that the crew will be educated about the changes. The three solid waste management processes being developed by the Navy for shipboard trash will be recorded in the students' *USS My School* notebooks.
- Students will locate several Navy bases on their U.S. maps (see enclosed).
- Teacher will introduce the new words "galley" and "crew."
- Divide class into two teams. Select one team leader for the red team and one for the blue team. Pass out red and blue ribbons for each team member and tell students to pin the ribbons on their shirts. The red team will discuss the problems of holding trash on a Navy ship, and record this list of problems in their notebooks. The blue team will discuss the problems caused by trash dumped at sea, and will record this information in their notebooks.

### STUDENT NOTEBOOK ENTRIES:

- Navy letter (provided)
- Three ways the Navy handles trash
- U.S. map with Naval stations marked
- Problems holding trash on board
- Problems caused by trash in the water



Trash from the galley will begin to  
smell in just a few days.





## LESSON 5: U.S.S. My School

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### OBJECTIVE:

To help students understand what it is like to hold trash on board a ship. Students will pretend that the school cafeteria is a **galley** and the students at the school are the **crew**.

### BACKGROUND:

Life on board a Navy vessel is very different from life on land. The main obstacle to overcome is space. There is very little extra space to store trash on a ship. The average person generates around three to five pounds of trash per day. Although Navy personnel out at sea generate less than that, there may be up to five thousand people living on board an aircraft carrier. Some ships could be at sea for a few months, serving meals four times a day.

Storing plastic trash is a real challenge for the crew. Plastics that are contaminated with food begin to smell after a few days and attract pests.

It will cost the Navy \$400 million to develop and install new equipment to handle shipboard waste. They will also try to reduce the amount of plastic brought on board and recycle as much of the plastic as possible. A new Navy program turns some recycled plastics into plastic benches.

During this lesson encourage your students to discuss what the five R's mean to them. What does it mean to:

1. **RETHINK** the way they buy products and how they will dispose of them.
2. **REUSE** products in order to minimize waste.
3. **REDUCE** the amount of trash generated by purchasing items in bulk quantities or with minimal packaging.
4. **RECYCLE** products at home, at school, and at work. If there is a continued demand for recycled products we will help to generate booming recycling business.
5. **REMEMBER** we all can make a difference in the ways our homes, cities, beaches, and oceans look. Remember to recycle, to reduce, and to be part of the solution, not part of the problem!



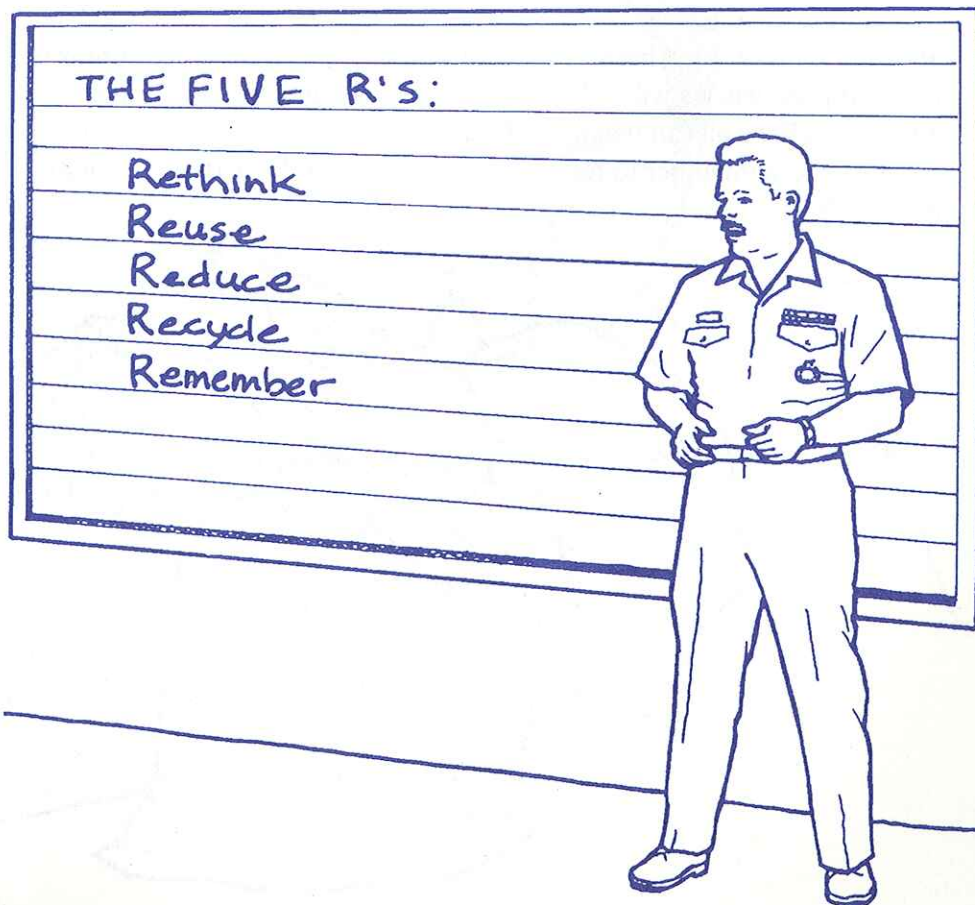


**LESSON PLAN:**

- Students will begin to develop a program at their school that will simulate the procedures being used on Navy ships to comply with MARPOL Annex V involving the reduction, separation, and storage of shipboard trash.
- Discuss the "Five R's," RETHINK, REUSE, REDUCE, RECYCLE and REMEMBER as they apply to shipboard solid waste management.
- Divide class into red and blue teams as done in Lesson 4.
- The red team will visit the cafeteria and meet the cafeteria director. This group of students will make an inventory of supplies used for eating and drinking. Students will find out how many "crew members" eat lunch at the cafeteria.
- The red team reports back to blue team.
- The blue team will visit the cafeteria and meet the cafeteria director. This group of students will conduct a storage space inspection, and will find out how the trash is currently handled. These students will inspect the cafeteria for space to hold plastic trash during their project.
- The blue team reports back to red team.
- When students are not in the cafeteria, they will be writing a news report about their solid waste management program, using their Five R's. Pass out vocabulary list for review.
- The cafeteria reports and the news articles are to be kept in their *USS My School* notebooks.
- If time permits, have students read their news reports to the class.

**STUDENT NOTEBOOK ENTRIES:**

- Both teams: Report from their trips to the cafeteria
- News report including the Five R's
- Vocabulary list (provided)





## Class Enrichment Activities

Give each member of the red and blue teams a 3x5 note card. Have the students write one question about marine debris, the Navy project, or something related to this unit of study. Have the students write the answer to their question on the same note card. Collect all the note cards. Mix up the order of the cards. Have the red team line up along one wall and the blue team along the opposite wall. The teacher will select a card and ask the question to one team member. If the student answers the question correctly, give the team one point. Ask the next question to the other team. If a student is unable to answer a question, he or she must sit down.

### Sample Question Cards

Q: Why is it hard to hold plastic trash on a Navy ship for 10 days?

A: The trash will start to smell, and it takes up space.

Q: Name two ways to educate the crew.

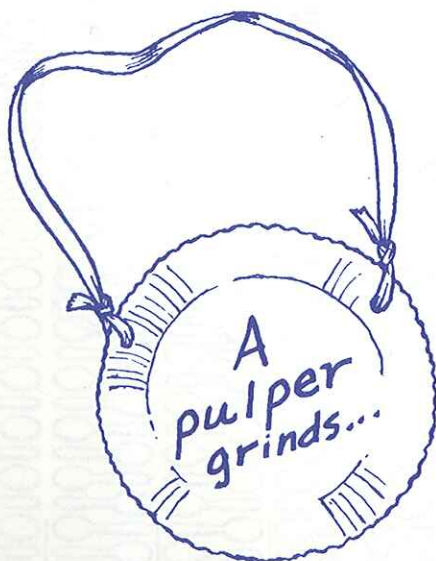
A: Make announcements, design and put up posters, make brochures, display a banner.

Q: Name two pieces of galley trash.

A: Milk jugs, egg cartons, syrup bottle.

Q: What is the kitchen of a ship called?  
A: The galley.

To teach and review new vocabulary words, make signs for students to wear, using white paper plates or pieces of cardboard and colored string or ribbon. One color string, yellow, is used for plates or signs with the first part of sentence. Another color string, blue, is used for the plate or sign with the completion of that sentence. See sample below. Divide your class into their red and blue teams. Have each student wear a paper plate sign. Have students find the person, now a partner, whose plate forms a complete sentence. Have student partners read their complete sentence. Ah, teamwork!



All the ships in the Navy....are called the fleet.

The plastic processor forms....

plastic bricks of trash.

A kitchen on a ship is called....a galley.

The compactor compacts metal and glass....

into slugs of trash.

A pulper grinds....paper and food into mush.

The people on a Navy ship....are called the crew.

A good way to change behavior on Navy ships....

is to educate the crew.

Marine animals can die after eating or....

ingesting plastic trash.

Marine animals can die after being twisted....or

entangled in plastic trash.





## LESSON 6: Record Keeping

### OBJECTIVE:

Students will take the information gathered in the school cafeteria (now called the galley) and record the data in a useful format, such as charts and graphs.

### BACKGROUND:

One of the first steps taken by the Navy to reduce plastic trash was to conduct a shipboard inventory of plastic items used daily. This made it easier to substitute or even eliminate some plastic items. (For example, plastic dry cleaning bags are no longer used and plastic sticks to stir coffee have been replaced with metal spoons.) If the amount of plastic taken on board is reduced, then the amount of plastic waste will decrease.

### LESSON PLAN:

- Members of both red and blue teams will share information obtained during their cafeteria visit in Lesson 5. Have students provide numbers on how many plastic spoons, cups, trays, etc. are used each day, each week, and each month. The class will make charts to show these totals.
- Class will start a display of plastic items and substitutes. For example, display a foam coffee cup next to a ceramic mug. Display a plastic bag next to a reusable lunch box. Display plastic coffee stir sticks next to a metal spoon. Encourage all students to bring from home an example of a plastic item and a substitute.
- Data and charts about the school's "galley waste" will be included in the student's notebook giving daily totals of trash items. Have the class calculate and discuss the amounts that would be generated in five days, seven days, and thirty days.

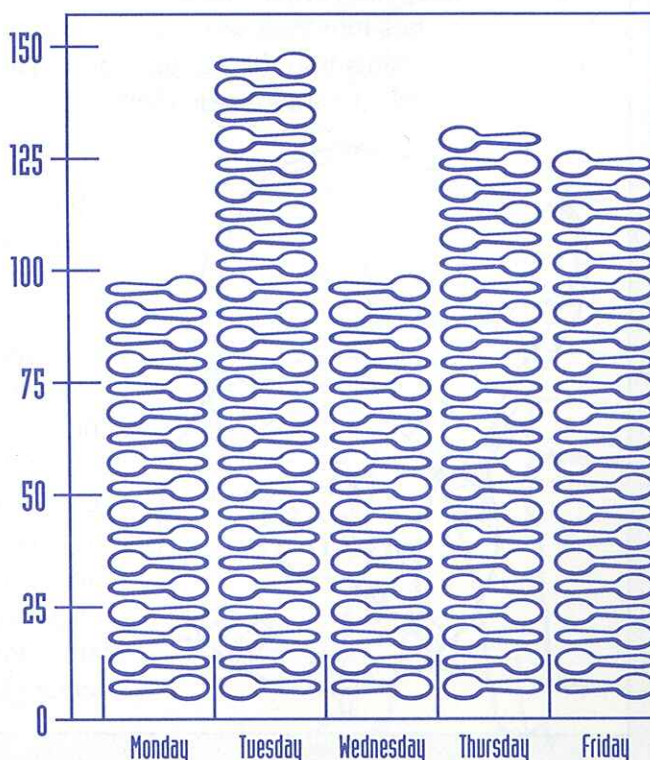
### STUDENT NOTEBOOK ENTRIES:

- Totals of galley items: daily, weekly, and monthly. See examples.

#### PLASTIC SPOONS USED

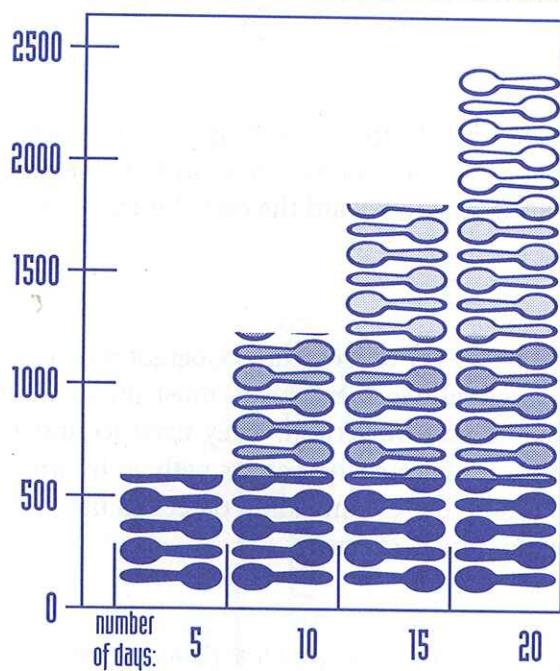
Monday	100
Tuesday	150
Wednesday	100
Thursday	130
Friday	+125
	605

**SAMPLE CHART:  
PLASTIC SPOONS USED, PER DAY**





**SAMPLE CHART:  
CUMULATIVE TOTALS, PLASTIC SPOONS**



**PROJECTED TOTALS OF  
PLASTIC SPOON USED**

5 days	605
10 days	1210
15 days	1815
20 days	2420







## LESSON 7: Getting the Message Out

### OBJECTIVE:

To plan the sorting and cleaning of lunchtime plastic trash in the school's "galley." To understand that education will be an important way to get the student body "crew" to start the new solid waste management program. To select one realistic way to reward the crew for their cooperation with the new "galley waste procedures."

### BACKGROUND:

For a solid waste management program to work it is necessary to have the cooperation of all of the crew. The participation of every individual is essential. Crew members must understand why it is important that they minimize their waste and sort their trash. They need to understand why trash in the ocean causes problems. The Navy educates their crews with an informative video and posters displayed on board ships. Visits by the commanding officer to the crew help them understand the new procedures and why they are necessary.

### LESSON PLAN:

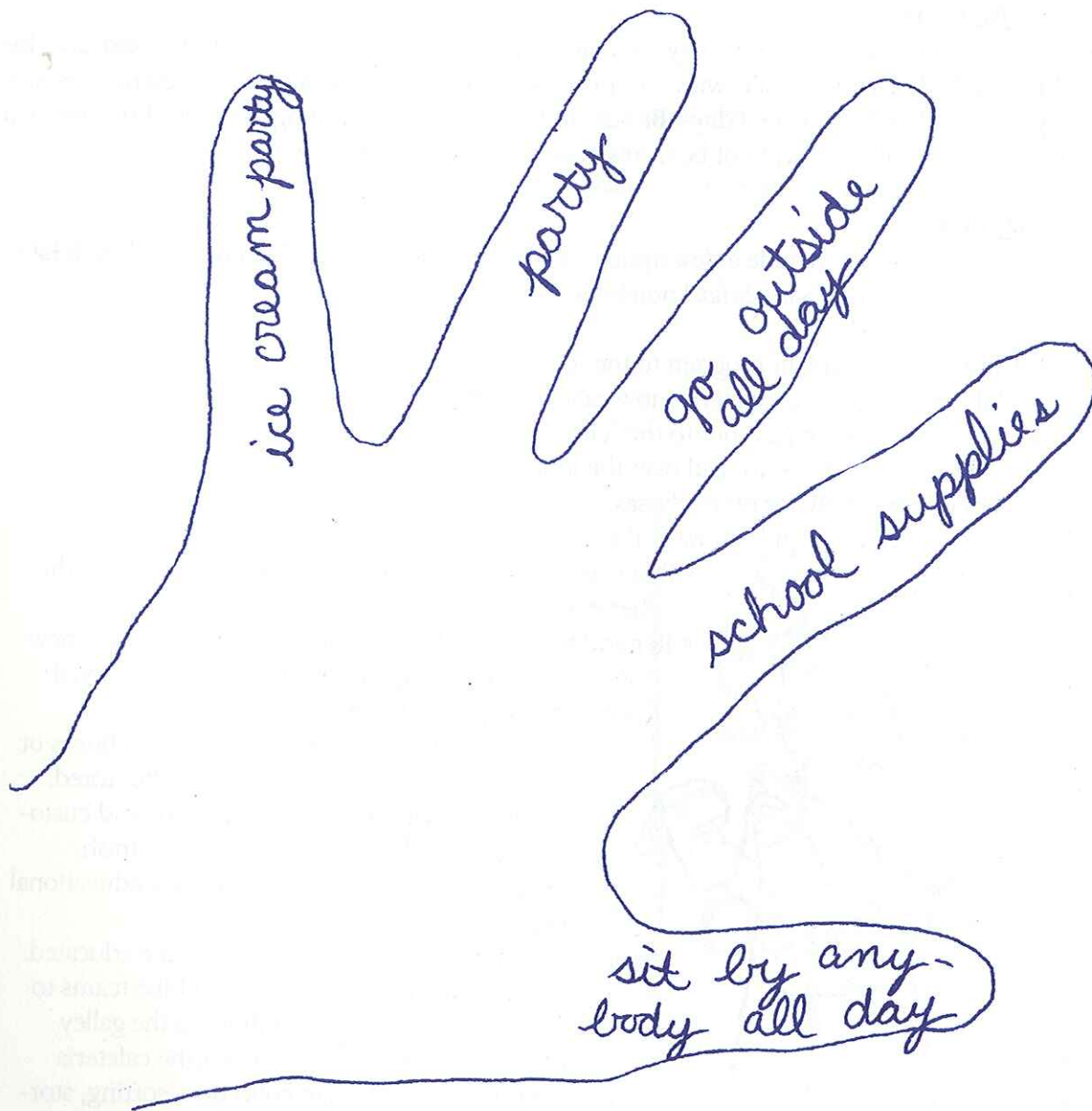
- Begin this lesson by re-showing the Navy video, *Plastic in the Ocean: More than a Litter Problem*.
- Discuss the ways the Navy informs their crews about new procedures for handling solid waste. How does the message get out to the crew? Discuss the ways the Navy educates the crew to change behavior. Teacher puts students' ideas on the board. This list is included in the *USS My School* notebooks.
- The teacher presents Navy posters entitled *Don't Splash Navy Trash* to red and blue team leaders to display in the halls and cafeteria.
- How will the students keep the student body "crew" interested in the new program? The teacher will encourage students to suggest ways to reward good solid waste management behavior in the "galley." Discussion should include how the students think the Navy would reward the crew. One student will write all suggestions on a poster for the class to review. Each suggestion will be discussed and one will be selected to do at the school. Have students include this class list in their notebooks.
- Pass out white unlined paper and let the students trace their hands. Title the paper "ALL HANDS ON DECK." Next, have them write ways on each finger to reward the crew. Ask the students to share their ideas. How many would really work on a ship or at school? Include in the notebooks.
- Allow time for the students to plan ways to sort and store plastic trash in the "galley." Have team leaders discuss final plans with their teams.
- Make sure team leaders make signs for plastic trash storage area to be displayed in the school cafeteria.

### STUDENT NOTEBOOK ENTRIES:

- Ways the Navy educates the crew
- Ways the Navy rewards the crew
- All Hands On Deck



## All Hands on Deck



How to Reward the crew



## LESSON 8: Educating the Crew

### OBJECTIVE:

To review different ways to educate the "crew." To begin making educational materials for the "crew."

### BACKGROUND:

Your class may need two or three days to complete this lesson. Be sure to select a start date for holding trash that is agreeable with the principal, custodial staff, and the cafeteria director. Galley trash will be held several days. Be sure to have a plan for marking the special storage area so that the trash collected will not be thrown away until the project is completed.

### LESSON PLAN:

- Have each student include a description of how they will educate the "crew." This will be included in their *USS My School* notebooks.
- Suggested ideas:
  1. Class visits to explain program to the "crew."
  2. Make posters for the cafeteria, now called the "galley."
  3. Write brochures to pass out to the "crew."
  4. Write announcement to read over the loud speaker.
  5. Do a puppet show for other classes.
  6. Show the video or slide show to the "crew."
- Red team will do half of the ideas. Blue team will do the other half.
- Remind the class to include the starting date for the new trash sorting and storing procedures in all educational speeches, posters, and brochures.
  - Remember: Have some students label boxes or garbage cans for "galley" trash to be stored. Discuss with the cafeteria director and custodial staff where to store the plastic trash.
  - Allow students time to make their educational materials.
- Allow several days for the "crew" to become educated.
- Allow time for members of the red and blue teams to discuss each student's responsibilities in the galley.
- Allow time for team members to visit the cafeteria when it is not in use to plan collection, sorting, storing, and counting areas.



### STUDENT NOTEBOOK ENTRIES:

- I will educate the crew by....

*The "crew" can be informed of new procedures with many different kinds of educational projects.*





## LESSON 9: Setting Sail/The Start Date

25

### OBJECTIVE:

To review cafeteria responsibilities of red and blue teams. Teams will work in the cafeteria to make sure the "crew" separates plastic trash into proper containers. For Day 1, the red team will collect, count, and store plastic trash to record daily totals. The blue team observes.

### LESSON PLAN:

- "Setting Sail Day" begins during lunchtime.
- The red team will work this day in the cafeteria during lunch to make sure the crew is following procedure. The blue team observes.
- Red team will count plastic items collected and record these totals in notebooks.

### STUDENT NOTEBOOK ENTRIES:

- Plastic items collected in one day

SET  
SAIL  
DAY

October  
18

Don't  
Throw  
Plastic  
Trash





## LESSON 10: Out at Sea

### OBJECTIVE:

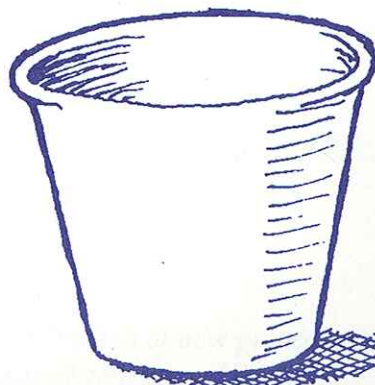
Students will work in the cafeteria to make sure the "crew" separates plastic trash into proper containers. On Day 2, the blue team will collect, count, and store plastic trash. The red team observes.

### LESSON PLAN:

- The blue team will work this day in the cafeteria during lunch to make sure the crew is following procedure.
- The blue team will begin record keeping to determine how much plastic trash was collected.
- The blue team will record these totals in their notebooks.

### STUDENT NOTEBOOK ENTRIES:

- Plastic items collected in one day







## LESSON 11: Heading Back to Port

27

### OBJECTIVE:

Students will continue to collect, count, and store plastic trash in the cafeteria "galley." Students will weigh trash collected.

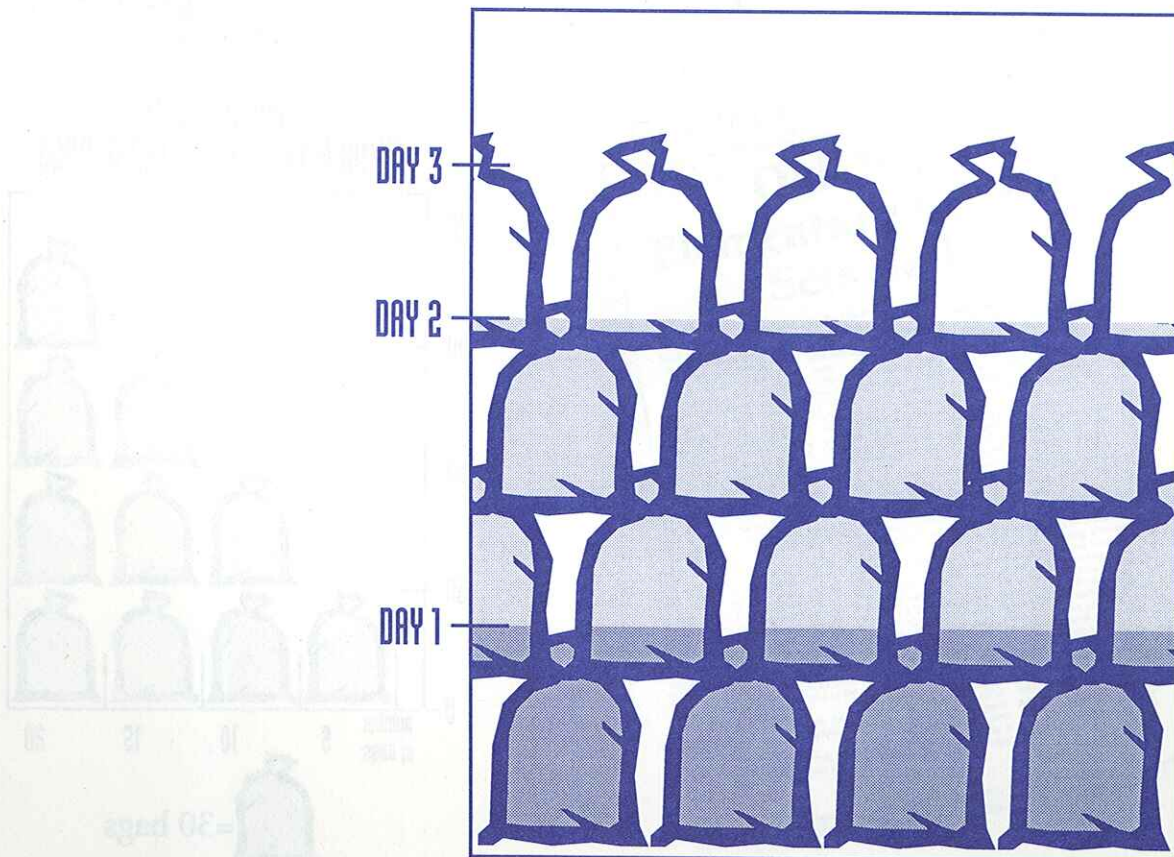
### LESSON PLAN:

- The red and blue team will continue to record plastic galley waste collected. Ask team leaders to share information about trash collected and stored.
- Have students develop charts showing the daily totals of some plastic items collected. Include this information in the *USS My School* notebooks.
- Students will weigh all trash collected.
- After information is recorded and discussed have red and blue team leaders return to the cafeteria to properly dispose of "galley" waste. Make arrangements for the custodial staff to assist these students.

### STUDENT NOTEBOOK ENTRIES:

- Charts of daily trash totals
- Weight of trash collected

### TRASH BAGS KEEP PILING UP







## LESSON 12: Data Collection

### OBJECTIVE:

To total data on kinds and amounts of plastic "galley" waste collected. To analyze the success or difficulties of holding trash for several days.

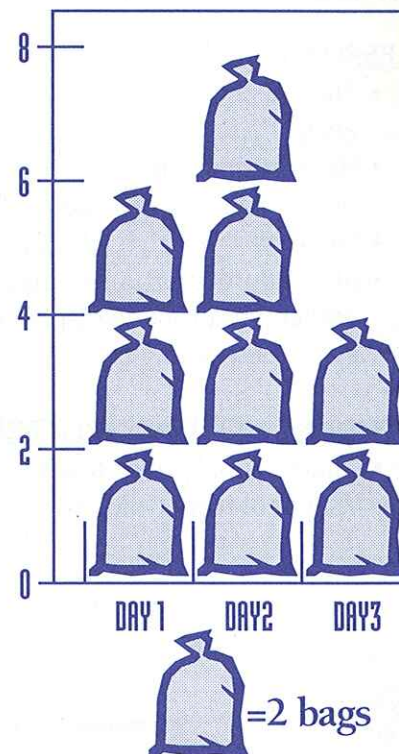
### LESSON PLAN:

- Teacher will begin discussion on how much plastic trash was collected in a one-day period. How much the second day, etc.
- Class will make charts to compare these school galley totals to that of a crew of 5,000 eating breakfast, lunch, and dinner on a ship at sea.
- Discuss which plastic galley items used at their school could be replaced with non-plastic items. Include list in *USS My School* notebooks.
- Discuss and list the changes that would need to occur if plastic items were replaced.

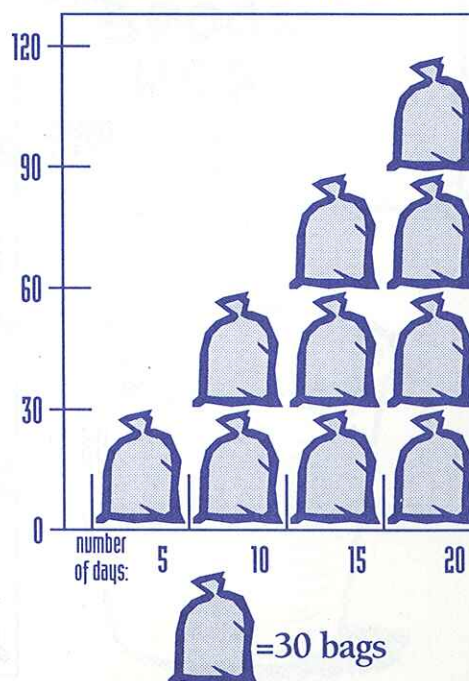
### STUDENT NOTEBOOK ENTRIES:

- Chart of trash bag totals
- List of substitutes for plastic galley items
- List of changes that would take place if plastic items were replaced

**SAMPLE CHART:  
TRASH BAGS COLLECTED**



**SAMPLE CHART:  
CUMULATIVE TOTALS, TRASH BAGS**





## LESSON 13: What Happened?

29

### OBJECTIVE:

To prepare a summary and results of the cafeteria project. To discuss what worked, what didn't, and why. To review data collected.

### LESSON PLAN:

- Discuss which educational materials worked with the student "crew" and why.
- Review and discuss problems and successes in the cafeteria. What changes would they make?
- Students from the red and blue teams will write a news story about the USS My School project.
- Blue team will write and distribute thank-you notes to the "crew" classrooms.
- Red team will write thank-you notes to the cafeteria staff, the custodial staff, and the principal for their support during the USS My School project.

### STUDENT NOTEBOOK ENTRIES:

- News story
- Blue team: thank-you notes to classes (Include one sample draft letter)
- Red team: thank-you note to school staff (Include one sample draft letter)







## LESSON 14: Rewarding the Crew

### OBJECTIVE:

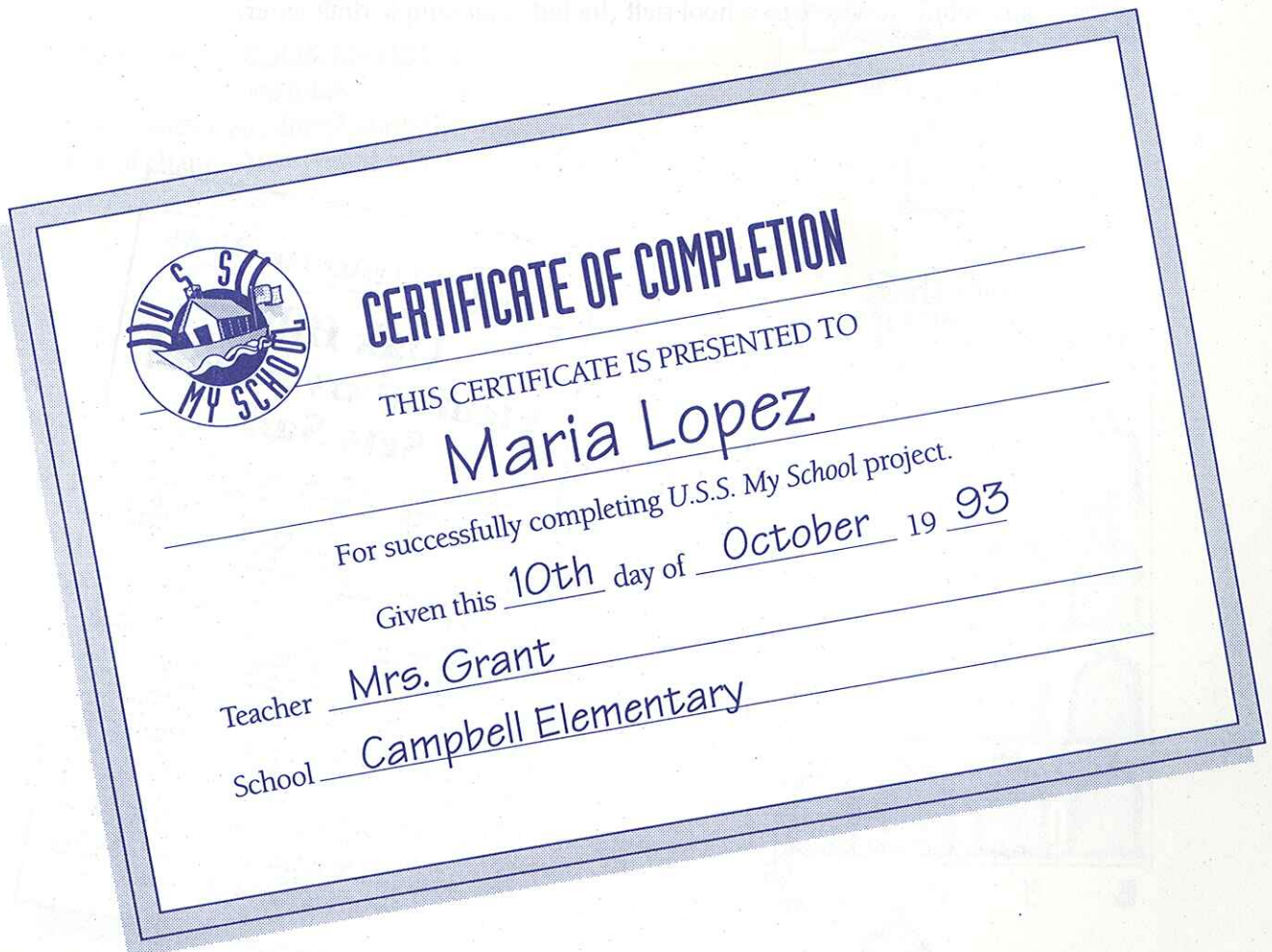
To allow time for students to complete notebooks and to turn them in to the teacher. To take pride in a project completed successfully. To reward the "crew" members from other classes for their good behavior.

### LESSON PLAN:

- Allow time to reward the crew from other classes using the ideas selected in Lesson 7.
- Teacher presents certificates of appreciation (see enclosed) to red and blue team members.
- Invite a Navy representative to your classroom to be interviewed by your students.
- Find out if a Naval Station in your area would allow your class to tour a ship.
- If you take photos of the project, have the film developed. Have students label each picture for a USS My School photo album for the classroom.
- Class and teacher celebrate with a party! How about pizza?
- Congratulations on a job well done!

### STUDENT NOTEBOOK ENTRIES:

- Certificate of appreciation



## TO OBTAIN MATERIALS:

To order the materials mentioned on page 9, please fill out this order form and return with your payment. Make checks payable to Center for Marine Conservation.

- ☐ The CMC marine debris slide show,  
*Marine Debris and Entanglement* .....\$25.00 \_\_\_\_\_
- ☐ The Navy video,  
*Plastic in the Ocean: More than a Litter Problem* .....\$10.00 \_\_\_\_\_  
 (for duplication costs)
- ☐ The CMC video,  
*Trashing the Oceans* .....\$10.00 \_\_\_\_\_
- TOTAL \_\_\_\_\_

*Please send checks only, no cash.  
 Allow 4 weeks for delivery*

### Mail to:

USS My School  
 Center for Marine Conservation  
 1725 DeSales Street NW, Suite 500  
 Washington, DC 20036





## TEACHER SURVEY

We would like to hear from you after you have taught the *USS My School* project. Please take a few minutes to complete this form and return it to the Center's Washington, DC, office. Thanks.

1. Your name \_\_\_\_\_

2. Your school, city, state and zip \_\_\_\_\_

3. Grade taught \_\_\_\_\_

4. Date you used this curriculum \_\_\_\_\_

5. How did this project fit into your curriculum? \_\_\_\_\_

6. What part of the project worked best with your students? \_\_\_\_\_

7. Did any part of this project not work well for you? \_\_\_\_\_

8. Would you do this project again next year? \_\_\_\_\_

Please continue; more on back of page.

9. List any special things that happened while you were teaching this lesson.

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10. What concepts were learned by your students during this project?

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11. Did you use the Navy video? The Center's slide show and video?

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12. If you took photos during the project, please send us a copy. We would love to see your program in action.

Mail to:

USS My School  
Center for Marine Conservation  
1725 DeSales Street NW, Suite 500  
Washington, DC 20036







DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(INSTALLATIONS AND ENVIRONMENT)  
WASHINGTON, D.C. 20360-3000

Dear Students:

My name is Elsie Munsell, and I am the Deputy Assistant Secretary of the Navy for Environment and Safety. The Navy is working on a new program of solid waste management to comply with Annex V of the International Convention for the Prevention of Pollution from Ships, called the MARPOL Treaty.

After doing a study of the supplies brought onto each Navy ship, we made plans to reduce the amount of trash our ships create. For example, the Navy no longer uses 6-pack rings on soda cans. We don't use plastic dry cleaning bags. We also don't use tiny plastic packets of crackers or tiny ketchup and mustard packets. We have changed the way we buy these things. Now we buy large containers of crackers, mustard, and ketchup so we have less plastic trash to handle.

The Navy requires crew members to separate their plastic trash from other kinds of trash like paper, glass, and metal. They then store the plastic that is not contaminated with food until they return to port. The plastic with food on it begins to smell after several days, so they only store that for the last three days before they come into port. When we bring the plastic into port we ship it off to manufacturers who make it into park benches and picnic tables.

The Navy has designed new equipment that will make holding trash on ships easier. In a few years we will be able to make plastic trash into "bricks," to offload when we reach port. We now have compactors to take care of cans, bottles, and papers. We weight these compressed "slugs" down with water so they will sink. We are also developing a machine that grinds up paper and food so that it looks like mush. Most of our ships will have this equipment by 1998. The Navy will spend more than \$400 million dollars to develop and equip our fleet with this equipment.

These new ways to handle trash will only work if the crew members know that they must separate the plastic from other trash. The crew must know that it is illegal to throw plastic trash into the ocean. We also want the crew to know that plastic trash floating at sea can kill animals and cause trouble for ships.



The Navy has a great education program to teach the crew members the new procedures. We also know that it is important to reward the crew when they have done a good job. It is important that everyone on the ship work together to make this program a success. We need everyone's cooperation from the Captain in command to the newest seaman recruit.

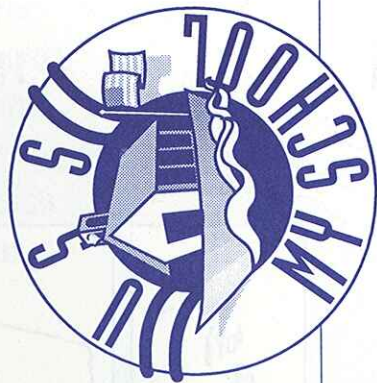
The Navy has major operating complexes in the United States at places such as Norfolk, Virginia, Charleston, South Carolina, and San Diego, California, and more than 150 smaller installations elsewhere in the United States. Some ships, like aircraft carriers, are so large that they can carry 5,000 crew members. Our ships are like floating cities! You can image how much trash we generate on a ship with so many crew members eating three meals a day. Sometimes our ships are at sea for many weeks at a time. Think about how hard it would be to hold trash on a ship for that long. That is why it is so important to reduce the amount of plastic we take on board in the first place. We must reduce, separate, and recycle our waste to keep the oceans clean.

The Navy is excited about all the new changes we have made to protect the marine environment, and to comply with Annex V of the MARPOL Treaty. The Navy cares about the health of the world's oceans and the animals that live in the sea. After all, the sea is our working home. I hope you enjoy your school project about marine debris.

Sincerely,

Elsie Munsell,  
Deputy Assistant Secretary of the Navy  
for Environment and Safety





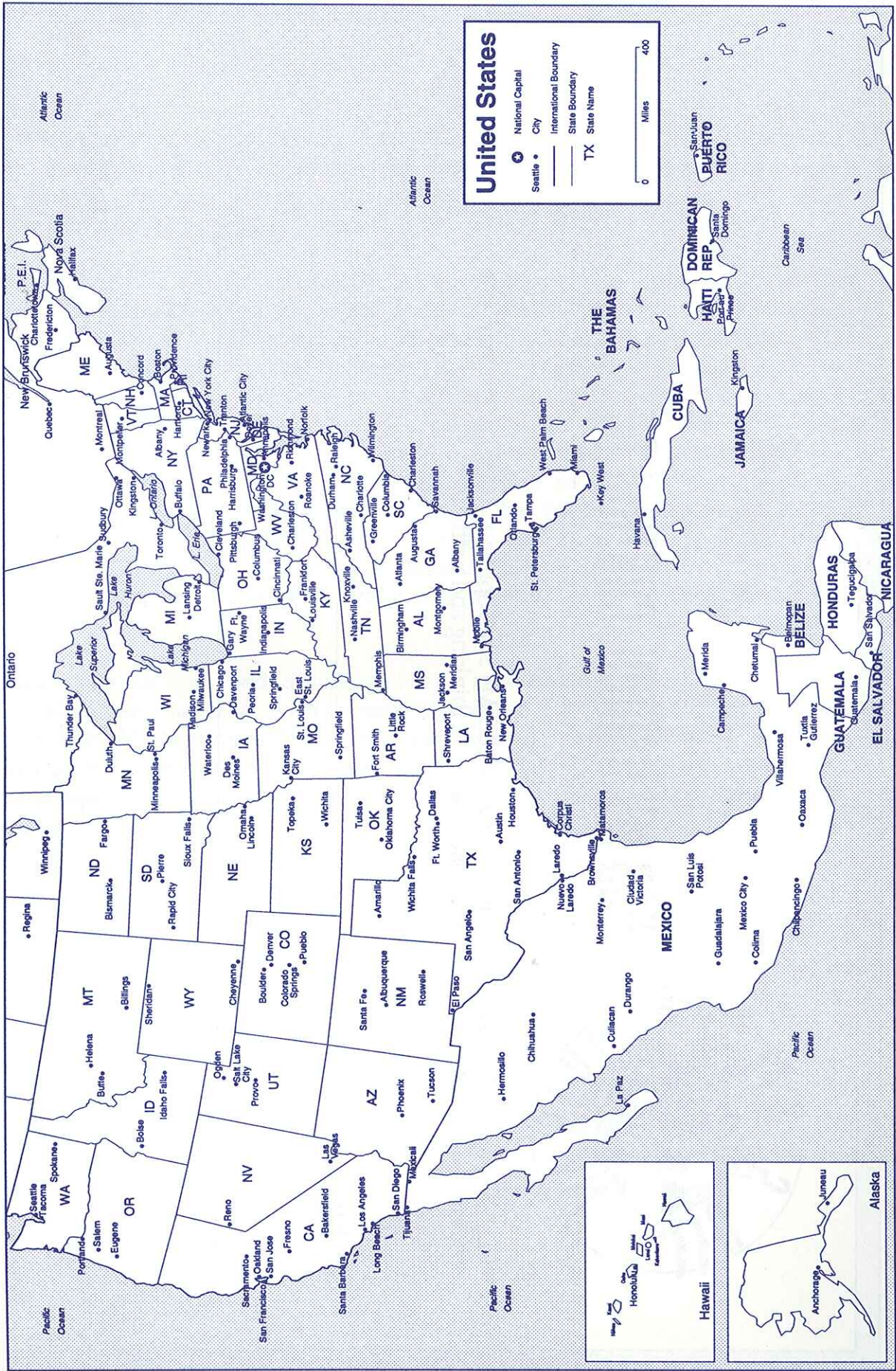
## USS MY SCHOOL CONTRACT

Yes, I am interested in taking part in the special USS My School project. I understand that this project requires cooperation with other students and that I use good thinking and writing skills.

Student \_\_\_\_\_

Teacher \_\_\_\_\_





# United States Map



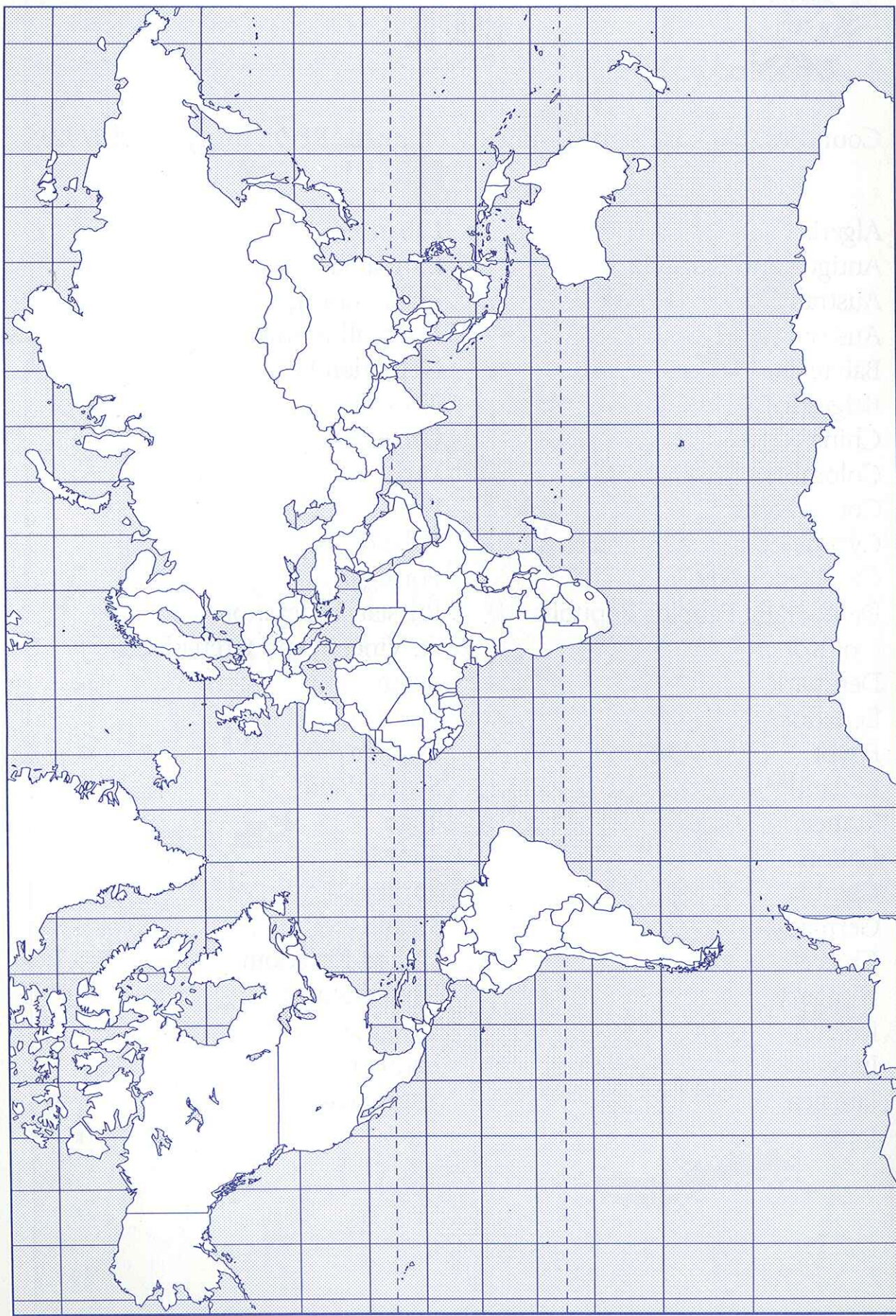


## MARPOL

Countries that have signed Annex V of the MARPOL treaty (as of 1/92).

Algeria	Lebanon
Antigua and Barbuda	Lithuania
Australia	Luxembourg
Austria	Marshall Islands
Bahamas	Netherlands
Belgium	Norway
China	Oman
Colombia	Panama
Cote d'Ivoire	Peru
Cyprus	Poland
Czechoslovakia	Portugal
Democratic People's Republic of Korea	Russian Federation
Denmark	St. Vincent and Grenadines
Ecuador	Spain
Egypt	Suriname
Finland	Sweden
France	Switzerland
Gabon	Togo
Gambia	Tunisia
Germany	Turkey
Greece	Tuvalu
Hungary	United Kingdom
Iceland	United States
Italy	Uruguay
Jamaica	Vanuatu
Japan	Yugoslavia





1. Label the oceans.
2. Locate several "MARPOL" countries.

## World Map





## Vocabulary

**Annex V:** The section of the international MARPOL treaty that deals with the disposal of a ship's garbage into the marine environment, particularly plastic trash.

**Crew:** The personnel of a ship.

**Entanglement:** A word used to describe what happens when an animal is trapped in plastic marine debris.

**Galley:** A ship's kitchen.

**Ingestion:** A word used to describe what happens when an animal has eaten plastic marine debris.

**Marine Debris:** Any unnatural substance found in the marine environment, including beaches.

**MARPOL:** Stands for MARine POLLution and is the agreement by shipping nations to prevent the disposal of certain pollutants from ships into the marine environment.





## Word-Search

### DIRECTIONS:

Complete the word-search below to find seven people who live and work at sea.

N C Y A E G K I O S M W Q H K U O  
L E Q C W I E M B O E D F N B K E  
C R D U S N A V Y C R E W M A N N  
O R S W T F U B D E C A B F G K H  
A D U F K E L C V M H S O W A X Z  
S R D I C R B H J L A J A D F Y T  
T I O F S M W M S E N W T U O P G  
G B I S T E R S K D T F E E T S H  
U K L E W S L T C I S O R H N B C  
A O R W M E K I K S H K K A B G J  
R H I U X F D B N A I F H J P H U  
D P G D P I O P L E P F D W A N G  
O O W S L S Z C W O C L I U B D M  
F A O K Y H C Z K L A A Q A Z S E  
F E R S W E R F G T P N P U E S P  
I S K B H R K W D L T P S T H F T  
C A E V F M H U O P A G N B A R D  
E X R D F A H Y M J I K W L M I Q  
R S D G J N L T Y H N A W Q V T N

BOATER  
COAST GUARD OFFICER  
CRUISELINE CAPTAIN  
FISHERMAN

MERCHANT SHIP CAPTAIN  
OIL RIG WORKER  
U.S. NAVY CREWMAN





# CERTIFICATE OF COMPLETION

THIS CERTIFICATE IS PRESENTED TO

For successfully completing *USS My School* project.

Given this \_\_\_\_\_ day of \_\_\_\_\_ 19 \_\_\_\_\_

Teacher \_\_\_\_\_

School \_\_\_\_\_



It is illegal for any vessel to dump plastic trash anywhere in the ocean or navigable waters of the United States. Annex V of the MARPOL TREATY is a new international law for a cleaner,

safer marine environment. Each violation of these requirements may result in civil penalty up to \$25,000, a fine up to \$50,000, and imprisonment up to 5 years.

U.S. Lakes, Rivers, Bays, Sounds and 3 miles from shore

**ILLEGAL TO DUMP Plastic & Garbage**  
Paper Metal  
Rags Crockery  
Glass Metal  
Food

3 to 12 miles

**ILLEGAL TO DUMP Plastic**  
Dunnage (lining & packing materials that float) also if not ground to less than one inch:  
Paper Crockery  
Rags Metal  
Glass Food

12 to 25 miles

**ILLEGAL TO DUMP Plastic**  
Dunnage (lining & packing materials that float)

Outside 25 miles

**ILLEGAL TO DUMP Plastic**

State and local regulations may further restrict the disposal of garbage.

**WORKING TOGETHER, WE CAN ALL MAKE A DIFFERENCE!**

CENTER FOR MARINE CONSERVATION 1725 DeSales Street, NW Washington, DC 20036 (202) 429-5609

Es ilegal para cualquier embarcación desechos plásticos en cualquier parte del océano o aguas navegables de los Estados Unidos. El Apéndice V del Tratado de MARPOL es una nueva Ley Internacional a favor de un

ambiente marino más limpio y seguro. Cada violación a estas disposiciones de la ley podría resultar en una penalidad civil de hasta \$25,000, una multa de hasta \$50,000, y encarcelamiento de hasta 5 años.

En Lagos, Ríos, Bahías, Sondas y hasta 3 millas fuera de la costa

**ES ILEGAL DESECHAR Plásticos y Basura**  
Papel Metales  
Trapos Loza  
Vidrio Empaques  
Comida Forros

De 3 a 12 millas

**ES ILEGAL DESECHAR Plásticos**  
Paquetes (forros y materiales de empaque que floten) Además, si no está triturado a menos de una pulgada:  
Papel Metal  
Trapos Comida  
Vidrio Loza

De 12 a 25 millas

**ES ILEGAL DESECHAR Plásticos**  
Paquetes (forros y materiales de empaque que floten)

Fuera de 25 millas

**ES ILEGAL DESECHAR Plásticos**

Regulaciones estatales y locales pueden restringir aun más el desecho de basura.

**TRABAJANDO JUNTOS, TODOS PODEMOS HACER LA DIFERENCIA !**

CENTER FOR MARINE CONSERVATION, 1725 DeSales Street, NW Washington, DC 20036 (202) 429-5609

## GARBAGE DUMPING RESTRICTIONS

Under federal law, it is illegal to discharge garbage containing plastic into any waters. Additional restrictions on dumping non-plastic garbage are outlined below. Regional, state and local regulations may also apply. All discharge of garbage is prohibited in the Great Lakes or their connecting or tributary waters. Each violation of these requirements may result in a civil penalty up to \$25,000, a fine up to \$50,000, and imprisonment up to 5 years.

**Within 3 nautical miles of shore and anywhere in U.S. lakes, rivers, bays, and sounds:**

**ILLEGAL TO DUMP**

- Plastic
- All other garbage

**3-12 nautical miles offshore:**

**ILLEGAL TO DUMP**

- Plastic
- Dunnage, lining & packing materials that float
- All other garbage if not ground to less than 1"

**12-25 nautical miles offshore:**

**ILLEGAL TO DUMP**

- Plastic
- Dunnage, lining & packing materials that float

**Outside 25 nautical miles:**

**ILLEGAL TO DUMP**

- Plastic

Center for Marine Conservation  
1725 DeSales Street, NW  
Washington, DC 20036  
(202) 429-5609

Placard development funded by U.S. Environmental Protection Agency



# ITEMS COLLECTED

You may find it helpful to work with a buddy as you clean the beach, one of you picking up trash and the other taking notes. An easy way to keep track of the items you find is by making tick marks. The box is for total items; see sample below.

Example:

egg cartons ||||| ||||| ||||| 11

TOTAL

17

cups ||||| ||||| ||||| ||||| 11

TOTAL

22

## PLASTIC

	Total number of items		Total number of items		Total number of items
bags:		caps, lids		longer than 2 feet	
food bags/wrappers		cigarette filters		2 feet or shorter	
trash		cigarette lighters		6-pack holders	
salt		cups, utensils		strapping bands	
other bags		diapers		straws	
bottles:		fishing lures, floats		syringes	
beverage, soda		fishing nets		tampon applicators	
bleach, cleaner		hard hats		toys	
milk/water gal. jugs		light sticks		vegetable sacks	
oil, lube		pieces		"write protection" rings	
other bottles		pipe thread protector		other plastic (specify)	
buckets		rope sheeting:			

## STYROFOAM®

(or other plastic foam)

	Total number of items		Total number of items		Total number of items
buoys		fast food containers		pieces	
cups		meat trays		plates	
egg cartons		packaging material		other StyroFoam® (specify)	

## GLASS

	Total number of items		Total number of items		Total number of items
bottles/jars:		other bottles/jars		pieces	
beverage bottles		fluorescent light tubes		other glass (specify)	
food jars		light bulbs			

## RUBBER

	Total number of items		Total number of items		Total number of items
balloons		gloves		other rubber (specify)	
condoms		tires			

## METAL

	Total number of items		Total number of items		Total number of items
bottle caps		other		pieces	
cans:		crab/fish traps		pull tabs	
aerosol		55 gallon drums:		wire	
beverage		rusty		other metal (specify)	
food		new			

## PAPER

	Total number of items		Total number of items		Total number of items
bags		cups		plates	
cardboard		newspapers/magazines		other paper (specify)	
cartons		pieces			

## WOOD

(Leave driftwood on the beach.)

	Total number of items		Total number of items		Total number of items
crab/lobster traps		pallets		clothing/pieces	
crates		other wood (specify)			
lumber pieces					

## CLOTH

Remember to turn the card over and fill out your name and address and to record sources and entangled wildlife!



# BEACH CLEANUP DATA CARD

Thank you for completing this data card. Answer the questions and return to your area coordinator or to the address at the bottom of this card. This information will be used in the Center for Marine Conservation's National Marine Debris Data Base and Report to help develop solutions to stopping marine debris.

Name \_\_\_\_\_ Affiliation \_\_\_\_\_

Address \_\_\_\_\_ Occupation \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ M \_\_\_\_\_ F \_\_\_\_\_ Age: \_\_\_\_\_

Today's Date: Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_ Name of Coordinator \_\_\_\_\_

Location of beach cleaned \_\_\_\_\_ Nearest city \_\_\_\_\_

How did you hear about the cleanup? \_\_\_\_\_

## SAFETY TIPS

1. Do not go near any large drums.
2. Be careful with sharp objects.
3. Wear gloves.
4. Stay out of the dune areas.
5. Watch out for snakes.
6. Don't lift anything too heavy.

**WE WANT YOU TO BE SAFE**

Number of people working together on this data card \_\_\_\_\_ Estimated distance of beach cleaned \_\_\_\_\_ Number of bags filled \_\_\_\_\_

**SOURCES OF DEBRIS:** Please list all items with foreign labels (such as plastic bleach bottles from Mexico) or other markings that indicate the item's origin (such as cruise line names, military identification, or debris with names and/or address of shipping/freighting or fishing companies, or oil/gas exploration activities)

SOURCE	ITEM FOUND
Example: ABC Shipping Company	plastic strapping band

**STRANDED AND/OR ENTANGLED ANIMALS:** (Please describe type of entangling debris. Be as specific as you can.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What was the most peculiar item you collected? \_\_\_\_\_

Comments \_\_\_\_\_

**Thank you!**

**PLEASE RETURN THIS CARD TO YOUR AREA COORDINATOR OR MAIL IT TO:**

Center for Marine Conservation, 1725 DeSales Street, NW, Suite 500, Washington, DC 20036

**A Membership Organization**



**Center for  
Marine  
Conservation**

Formerly Center for Environmental Education, Est. 1972

