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FUN FOR KIDS

A COOPERATIVE PROJECT OF THE SANTA BARBARA NEWS-PRESS AND THE EDUCATORS' ROUNDTABLE, PUBLISHED MONTHLY TO PROMOTE LEARNING AMONG YOUNG READERS IN NATURAL SCIENCE, HISTORY, TECHNOLOGY, AND ART

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## This Month's Theme: Understanding Marine Debris

### What is Marine Debris?

Marine debris includes floating garbage such as bottles, cans, plastic, Styrofoam, cruise ship waste, and fishing equipment. Marine debris is also called litter, flotsam, and jetsam. Marine debris threatens sea life, boats, swimmers, and divers. Each year, millions of seabirds, sea turtles, fish, and marine mammals become entangled in marine debris, or swallow plastics which they have mistaken for food. As many as 30,000 northern fur seals per year get caught in abandoned fishing nets and either drown or suffocate. Animals sometimes think plastic bags are squid or jellyfish, and birds often mistake plastic pieces for fish eggs. Animals may accidentally eat the plastic while feeding on natural food. Marine debris usually comes from sources on land. Various agencies around the world are working to reduce marine debris.



Fishing nets in the Northwestern Hawaiian Islands Marine National Monument.

Photo Courtesy of Claire Fackler.

### Marine Debris in History

In the past, many maritime cultures used marine debris. The Chumash used redwood to build their tomols (boats). Since redwood trees do not grow in this area the Chumash would search the beaches for redwood logs that had washed ashore after floating along ocean currents from northern California.

Ranchers living on the Santa Barbara Channel Islands also made use of items, such as lumber, that washed ashore after ships were wrecked on or near the islands.

Can you think of other items that have made marine debris history?



Chumash have used Tomol canoes to paddle the waters of the Santa Barbara Channel for hundreds of years.

Photo Courtesy of Robert Schwemmer.

### Gigantic Garbage Patch

Just as the conveyor belt at the grocery store moves your items to the cashier, ocean currents carry marine debris. There are ocean currents that carry marine debris all around the world. The world's largest trash dump doesn't sit on some empty field outside a major city. It is thousands of miles from any land — in the Pacific Ocean. Pollution combined with ocean currents have formed the "Great Pacific Garbage Patch," which reaches from California's coast to China and includes bottle caps, soap bottles, laundry baskets, and bits of plastic. Currents in the Pacific Ocean flow in a giant circle that pulls debris from North America, Asia, and the Hawaiian Islands into a huge toxic stew. Then it shoots it into a giant garbage patch in the middle of the ocean which holds 3.5 million tons of trash that's mostly plastic. Scientists are working to figure out the best way to deal with this huge mess.

Marine Debris on Green Island at Kure Atoll State Wildlife Refuge in the Northwestern Hawaiian Islands Marine National Monument.



Photo Courtesy of Claire Fackler.

### Hey Kids!

Guess how long it takes these items to break down in the ocean and then number them in order with item 1 the fastest and item 7 the slowest. Answers are below. (Activity adapted from www.marinedebris.noaa.gov)



Fishing Line



Banana Peel



Cigarette Filter



Aluminum Can



Plastic Beverage Bottle



Styrofoam Cup



Milk Carton

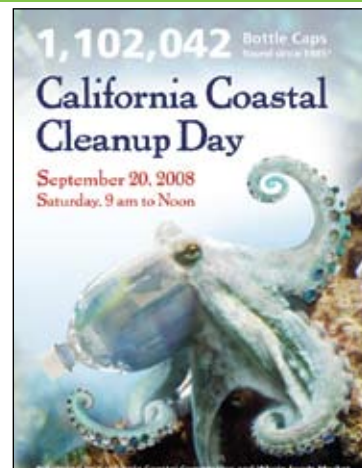
ANSWERS: 1. Banana Peel; 2. Cigarette Filter; 1-5 years; 3. Milk Carton; 2 years (selections for #2 & #3 could be reversed); 4. Styrofoam Cup; 50 Years; 5. Aluminum Can; 200 Years; 6. Plastic Bottle; 450 years; 7. Fishing Line; 600 years.

### How Can You Help?

Unscramble the words below to reveal how you can help!

TIFDN TUO FI  
EHRTE SI A LATCSOA LAPUCEN  
NI OYRU TCIMYOMNU

You can participate in "California Coastal Cleanup Day" in Santa Barbara on September 20th. During the cleanup, kids and adults work together to collect the trash that has been thrown into our waterways. You can help make the environment a cleaner, safer place for people and animals.



### Marine Debris on the Web

To find out more about marine debris and to download some great activities for kids, visit these websites:

- Coastal Cleanup Day — <http://www.coastal.ca.gov/publiced/ccd/ccd2.html>
- NOAA Marine Debris - [www.marinedebris.noaa.gov](http://www.marinedebris.noaa.gov)
- Keep Oceans Clean - <http://www.keeпоceansclean.org>
- Ocean Guardian Kids Club Handbook - <http://www.sanctuaries.noaa.gov/education/pdfs/ogab.pdf>
- Algalita Marine Research Foundation - [www.algalita.org](http://www.algalita.org)

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**msi** Marine Science Institute, UCSB  
805-893-8765 www.msi.ucsb.edu

**Kids Do Ecology**  
National Center for Ecological Analysis and Synthesis  
805-892-2500 nceas.ucsb.edu/nceas-web/kids

**Wildling Art Museum**  
805-688-1082 www.wildlingmuseum.org

**Ty Warner Sea Center**  
805-962-2526 www.sbnature.org

**The Outdoor School at Rancho Alegre**  
805-686-5167 www.theoutdoorschool.org

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