

Cleaning up the Garbage Patches

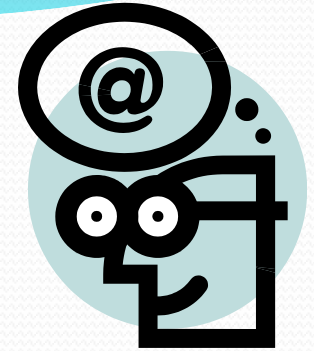


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Once upon a time
the turtle's greatest threat
was a bowl of soup.
Now it's the bag the veggies came in.

Things to Think About



- Cleaning up the oceans takes time – and money!
- Solutions have to be both:
 - safe for the environment
 - worth the cost
- Because the plastic is in the water, it moves around as the water moves. This is another reason cleaning up is a challenge.

What Can I Do?

- You might be wondering “What can I do?”
- There are a lot of things YOU can do to prevent plastic from ending up in the ocean.



What Can You Do?

- Here are a few easy changes you can make:
 - Buy products that have less packaging.
 - Bring your own bags to the supermarket or store so you don't have to take plastic bags from the store.
 - Opt for food products that are sold in recyclable containers: the glass jar of peanut butter, the paper milk carton, or the aluminum can of soda. You can re-use the glass jars for something else when you're done.



What would you keep in a glass jar?

Pencils? Flowers? Buried treasure?

Recycling



- Recycling is when you take something used, convert it back into raw material, and make a new thing out of it.
- Plastic can be recycled. (So can paper, glass, aluminum, newspaper, and other products.)
- Recycling conserves natural resources and reduces the need to put as much waste into our landfills – or our oceans!

Reduce, Re-use, Recycle

- Choosing a product that has less packaging wrapped around it is an example of reducing.
- Bringing cloth bags every time you go to the supermarket instead of taking plastic bags is an example of re-using.
- And, the most important thing you can do is **recycle!**



Recycling

- Want to learn more about recycling?
- Visit Recycle City to learn how the residents of Dumptown protect the environment by taking care of their garbage.
- Check out this website to learn more: <http://www.epa.gov/recyclecity/>



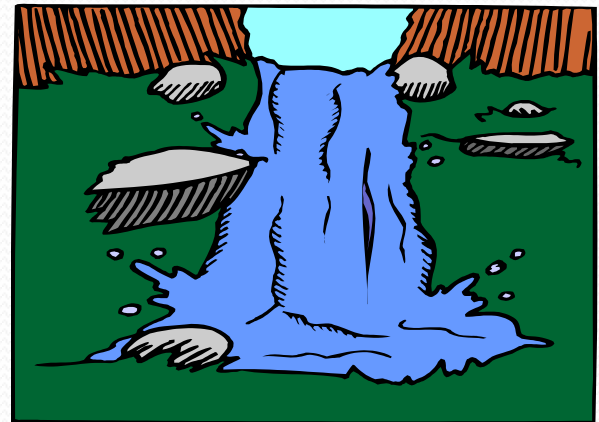
What Can We Do?

- As we have just seen, there is a lot you can do to prevent plastic from piling up and ending up in places where it doesn't belong, like the ocean.
- Individual people can make a difference in preventing plastic from ending up in the ocean.
- But, people working together as a community can do even MORE to help!



Community Clean Up

- Communities can organize clean ups to get plastic and other garbage out of rivers.
- Since almost all rivers flow into oceans, this helps prevent garbage from floating into the ocean.



Spotlight on: Yankton, South Dakota



- In 2010 in Yankton, South Dakota, the community organized a river clean up.
- The community group Keep Yankton Beautiful and the U.S. Army Corps of Engineers got together to plan the clean up.
- Kids came out to help. Not only did they get exercise and spend time outside, but they also helped the oceans!

Ocean Conservancy

- On a bigger scale, an environmental group called Ocean Conservancy organizes an ocean clean up every year.
- In 2009, volunteers all over their world spent the day cleaning up the beaches and coasts of their communities.



Can you guess how many pounds of garbage they cleaned up in one day?

100 pounds? 1,000 pounds?

Ocean Conservancy

7,446,130 pounds!!!



Ocean Conservancy

- Most of the trash that the volunteers picked up was plastic items that had only been used once, like
 - beverage bottles
 - plastic bags, and
 - plastic eating utensils.



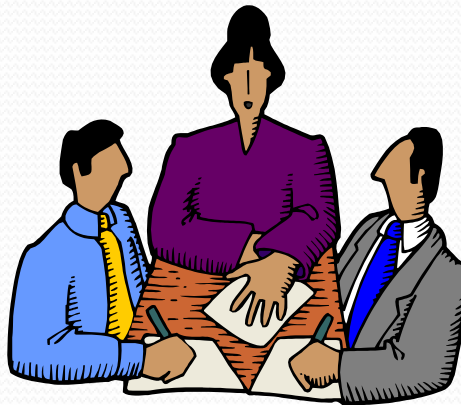
Laws

- Another thing communities can do to prevent plastic from ending up in the ocean is to pass laws about how the community must take care of its garbage.



What's the U.S. government doing?

- One recent step that President Obama has taken is to put together a group of experts.
- This group will do research and then make recommendations about what the U.S. can do to make oceans, lakes, and coasts healthier.



How can states help the oceans?

- Some state governments have tried to pass laws that would help prevent plastic from ending up where it doesn't belong.
- Some of these laws include:
 - charging a small fee (around 5 cents) per single use plastic bag
 - making large retail stores create plastic bag recycling programs.
- California, Delaware, the District of Columbia, Georgia, and New Hampshire have all passed some kind of law about recycling plastic bags or reducing use of plastic bags.

How can counties or cities help?

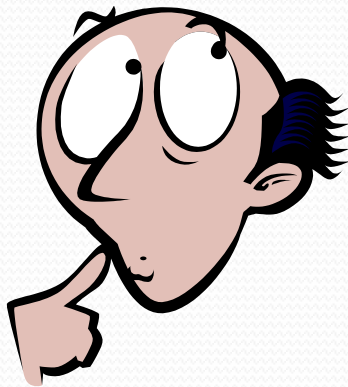
- Many cities or counties have passed laws to ban plastic bags, make it the law to recycle plastic bags, or a something similar:

- Telluride, Colorado
- Westport, Connecticut
- Chicago, Illinois
- Red Bank, New Jersey
- New York, New York
- Austin, Texas
- Madison, Wisconsin



Laws

- What do YOU think about passing laws to ban plastic bags or make it the law to recycle them?
- Do you think this is a good change or a bad change?
Why?



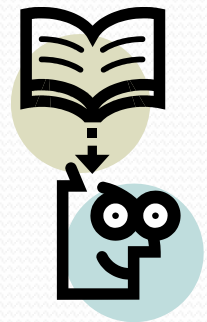
What other solutions are there?

- Some groups are doing research on how to recycle the plastic that's already in the ocean, or turn the plastic into fuel.
- Some of the companies at the forefront of these research plans include:
 - Project Kaisei – a non-profit founded by three ocean lovers
 - Covanta Energy – a renewable energy company
 - Duke University



Are there other solutions?

- Another way to help solve the ocean pollution problem is to teach people about this issue!
- Education helps people be more aware of their trash and how they get rid of it.
 - Aquariums and museums can make exhibits
 - Conferences can be organized to exchange new information about solutions
 - Schools can organize competitions about creative ways to re-use marine debris or local plastic waste



What would you make out of plastic waste?

If your school organized a contest about the best ways to re-use plastic waste, what would you make?

Art? Furniture? A hat?



Summary

- We've talked about a lot of solutions to the ocean pollution problem:
 - Reduce, re-use, recycle
 - Community river clean ups and ocean coast clean ups
 - Laws to ban plastic bags or make it the law to recycle them
 - Research on recycling the plastic that's already in the ocean or turn it into fuel
 - Education to teach people about this problem

can you think of any other solutions?



Solving the Pollution Problem

- Remember that people are part of a larger community: the environment.
- When people buy a lot of plastic products and throw them away, the plastic can end up in rivers and oceans, where it can kill marine life.
- Think about what you can do to make the environment safe for all life, from people to birds to fish.



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