

# The Green Team Gazette

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## Get Your Internet Gazette!



In addition to all the regular places you can find the *Green Team Gazette*, you can now add 1 more. Come & get it, & find us here:

<http://greenteamgazette.blogspot.com/>.

Then mark your calendars for these upcoming eco-events!

## Earth Hour 2010 ~ March 27<sup>th</sup> from 8:30 pm to 9:30 pm

It's the antithesis of "Lights, Camera, Action!" Rather, it's more like: "Lights Out--Take Action!" Since 2007, March 27<sup>th</sup> has gained speed with solidifying its spot on eco-calendars. It started in 2007 with Sydney, Australia with 2.2 million people turning off their light to speak for climate change. In 2008, 50 million people spoke through their light switch, representing 370 cities and over 35 countries. Last year, those numbers exploded, becoming 4,000 cities in 88 countries who flicked their switches off! To learn more, including watching videos of past worldwide events and getting ideas for hosting your own neighborhood, school, or city event, go to <http://www.earthhour.us/>, <http://www.earthhour.org/>, or <http://www.earthhourus.org/>. To find interactive games for kids, go to <http://www.earthhourkids.org/>.



### *The Green Team Gazette*

is a publication co-sponsored by the founders of CynerGreen, CGKidz, and Eagle Cove School (formerly Gibson Island Country School), a Green School in Pasadena, Maryland. Our mission is to educate and share ways to "go green"—both big and small—and be environmentally-proactive at home, in school, and beyond. It is written by Vicki Dabrowka, and edited by Danelle Hoffer; ECS Science Teacher Tim Decker; ECS Head of School Laura Kang; CGKidz creator, and twelve-year old Riley Hoffer. To learn more, visit [www.cynergreen.com](http://www.cynergreen.com), [www.cgkidz.com](http://www.cgkidz.com) and [www.gics.org](http://www.gics.org).

Or check us out at our blog: <http://greenteamgazette.blogspot.com/>



Please print on recycled paper.

## World Water Day: March 22<sup>nd</sup>



Water makes the world go 'round...

As long as it is clean! Each year, nearly 1,000 cubic miles of wastewater is "born." Water pollution is a real problem, especially when you consider these facts:

- ◆ Each year 1.1 billion people globally do not have access to safe drinking water, which causes over 2 million deaths per year from unsafe drinking water & improper sanitation.
- ◆ Every 15 seconds, a child dies somewhere in the world based on water-related diseases.
- ◆ In America, we average 100—175 gallons of water/ day, where in Africa, the average family usage is 5 gallons.
- ◆ 40 billion hours a year are spent collecting water in parts of Africa—mostly by women, carrying the water mainly on their heads, at the weight of over 40 pounds per jug, and for distances greater of approximately 6 miles.

Due to these saddening facts and more, the United Nations has created a day dedicated to this awareness: World Water Day. The theme this year is "Communicating Water Quality Challenges and Opportunities"

Communities such as Portland Oregon are sponsoring their own events to address the importance of clean water worldwide. To learn the why's of World Water Day, watch Portland's succinct 2 minute video at <http://worldwaterdaypdx.com/>

## Earth Day Is On Its Way

These days, Earth Day is not a new concept. "Green" is much more than shamrocks, the color of grass, and Kermit the Frog. "Green" is a mindset, and **Earth Day (April 22<sup>nd</sup>)** is the day to celebrate it. To help you with your planning for next month's day of planetary awareness, visit the following website to get some helpful tidbits in Earthday.net's "Earth Day in a Box."

<http://www.earthday.net/node/88>

Whether your Earth Day event is the size of your home, your classroom, your school, your church, your campus, or your city, here you will find an organizer's guide, a list of things you can do, and project ideas. You can even register your event on their site. Now is the time to make your plans!



## How Biodegradable is Biodegradable?



Standing up at the top of Anne Arundel County Maryland's landfill, seeing plastic lawn chairs and fridge boxes that appear no more than two inches tall from our vantage point, you start to wonder: how biodegradable is biodegradable when it's at the bottom of a landfill? Especially after learning that each night, the plastic liners seal over the day's delivery, sandwiched in there, snug as a bug in a rug, will something very biodegradable like a hotdog ever decompose when there's no way for air to get to this newly sealed garbage package?

According to <http://environment.about.com/od/recycling/a/biodegradable.htm>, items tend to break down much faster in aerobic conditions, where oxygen aids in breaking the objects down. Yet, landfills are packed tight—not leaving much wiggle room for air, soil, or even the wiggliest of worms that could also help with break down organic matter. No air—nothing is going to break down anytime quickly, so the biodegradation process slows down. Core samples of landfills have found multi-decade old food items that look good as new, and newspapers that are still readable. As for petroleum-based plastic—if a hotdog is still recognizable, a plastic toy that's tossed inside is not going anywhere anytime soon!!

Some items (like thin plastic mailers) claim they are photodegradable, which means sunlight exposure will do the trick in breaking it down. But how much sunlight gets to the bottom of a landfill? Zip, zilch, nada. Add in, how much solar time and SPF is needed to make it disappear out in the open? And does it truly disappear? No. All it does is reduce it to smaller pieces of plastic (called nurdles)—not to mention, the wind will likely carry that photodegradable polybag into our waterways, which sea creatures will then eat, creating another toxic turmoil, polluted rivers & oceans, ultimately winding up in the oceanic Garbage Patches.

So, once again, the solution seems to rest in those very 3 familiar "R"s...reduce, reuse, and recycle. The vision into the crater called the landfill comes back to mind...that plastic lawn chair had no need to be there. It could have been recycled, saving precious space in that hometown landfill that we were told will be filled sometime between 2030 and 2040. That's a little too close for comfort!! Let's hope a grand new plan, new awareness, and greater recycling attitudes take place between now and then!

## Landfill Life Spans

Here's a critical thinking activity that will really get you and your students thinking about what they use and how they dispose of it. Depending on your class size and age group, pick a smattering of the items from the list below. Write only the name of the item on a card (leaving off the time span, which tells the rate at which it will biodegrade). Then invite your students to put them in the order they think the items will break down.

Make it an individual or small group activity by making a blackline with students to cut out and rearrange as a hands-on activity, or put them on full size sheets for the class to sequence in a full-body way. Then give hints to help them rethink and reorder.

You could also pose questions such as "Which takes longer to decompose: \_\_\_\_\_ or \_\_\_\_\_?"

It won't take long for your students to see with new eyes after activities such as these. Likewise, they'll see the moral of the story: reduce, reuse, recycle, change what you use, & compost what you can! By doing those simple things, you can eliminate a bulk of this landfill list!

1. **Paper:** 2-4 weeks
2. **Banana or orange peels:** 3-5 weeks
3. **Paper grocery bag:** 1 month
4. **Cardboard:** 2 month
5. **Cotton cloth:** 1-5 months
6. **Rope:** 3-14 months
7. **Wool clothing:** 1-5 years
8. **Cigarette butt:** 2-5-10 years
9. **Milk cartons (plastic coated):**
10. **Lumber:** 10-15 years
11. **Disposable diaper:** 10-20 years
12. **Plastic bags:** 20-1000 years  
(depending on if it is exposed to sunlight)
13. **Hard plastic container:** 20-30 , ---
14. **Nylon fabric:** 30—40 years
15. **Leather:** up to 50 years
16. **Rubber boot sole:** 50-80 years
17. **Tin can:** 50-80-100 years (depending on the source)
18. **Batteries:** 100 years
19. **Aluminum can:** 200-500 years (but can be reused w/in 6 weeks)
20. **Disposable diapers:** 550 years
21. **Plastic 6-pack holder:** 450 years
22. **Plastic jugs:** 1 million years
23. **Glass bottles:** 1-2 million years
24. **Styrofoam:** 1+ million years
25. **Tin foil:** Does not biodegrade



(The above list is a compilation from the following sources:  
<http://www.blm.gov/education/int/background/packing.htm>;  
<http://www.greenecoservices.com/how-long-does-it-take-for-trash-to-biodegrade/>;  
and <http://behealthyandrelax.com/2007/11/how-long-does-it-take-to-decompose/>)