




PASCO, REDUCE, REUSE, RECYCLE!

PRACTICE SUSTAINABLE LIVING



- Calendar of recycling events – Page 2
- Scholarship opportunity – Page 7
- Pasco Art of Recycling Contest winners – Pages 8-9
- Pasco County recycling drop-off center locations – Page 11

Newspaper in Education

The Tampa Bay Times Newspaper in Education program (NIE) is a cooperative effort between schools and the Times Publishing Co. to encourage the use of newspapers in print and electronic form as educational resources – a “living textbook.”

Our educational resources fall into the category of informational text, a type of nonfiction text. The primary purpose of informational text is to convey information about the natural or social world.

Since the mid-1970s, NIE has provided schools with class sets of the daily newspaper plus award-winning original curriculum supplements, teacher guides, lesson plans, educator workshops and many more resources at no cost to schools, teachers or families. Each year, more than 5 million newspapers and electronic licenses are provided to Tampa Bay teachers and students free of charge thanks to our generous individual, corporate and foundation sponsors. NIE teaching materials cover a variety of subjects and are correlated to the Florida State Standards.

For more information about NIE, visit tampabay.com/nie, call 800-333-7505, ext. 8138 or email ordernie@tampabay.com. Follow us on Twitter at [Twitter.com/TBTimesNIE](https://twitter.com/TBTimesNIE).

NIE staff

Jodi Pushkin, manager, jpushkin@tampabay.com
Sue Bedry, development specialist, sbedry@tampabay.com
Noelle Sansom, coordinator, nsansom@tampabay.com

© Tampa Bay Times 2016

Credits

Project manager: Sue Bedry, *Times* staff
Curriculum activities by Jodi Pushkin, *Times* staff
Designed by Stacy Rector, Fluid Graphic Design LLC

Articles written by

Tony Bartenope, Pasco County Schools recycling coordinator
Rachelle G. Dobbs, Pasco County project coordinator II
Andy Dunn, Pasco County Schools media specialist
Francis Galdo, Pasco County Utilities Water Conservation and Efficiency coordinator

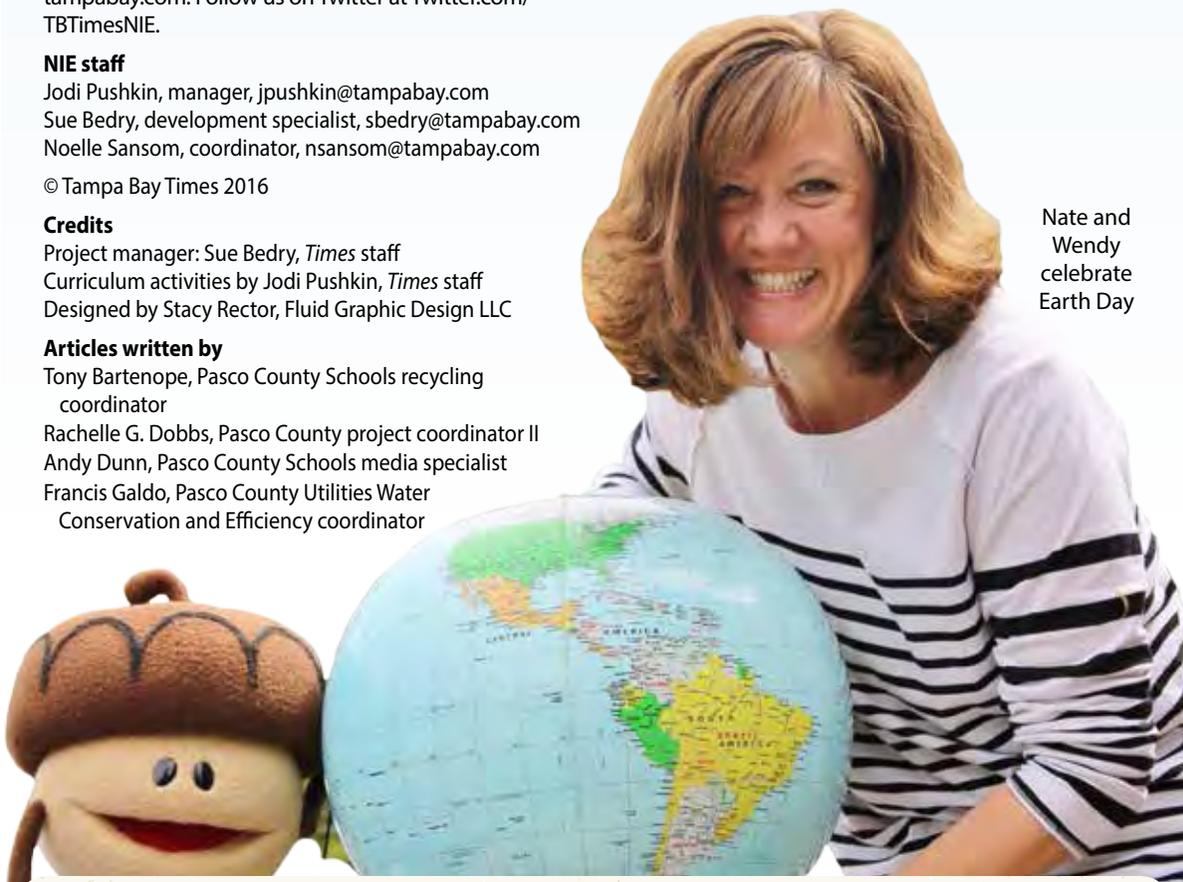


Lottie Kelley, Covanta Energy Inc. public relations coordinator
Charles Ryburn, Pasco County Utilities Environmental manager
Jennifer Seney, Pasco County recycling coordinator
Jennifer Sharples, Pasco County Stormwater public communications specialist
Salinda Strandberg, Pasco County Schools operations services specialist

Florida Standards

This publication and its activities incorporate the following Florida Standards for middle and high school students:

LAFS.L.1.1; LAFS.L.1.2; LAFS.L.2.3; LAFS.L.3.4; LAFS.L.3.5; LAFS.L.3.6; LAFS.RI.1.1; LAFS.RI.1.2; LAFS.RI.1.3; LAFS.RI.2.4; LAFS.RI.2.5; LAFS.RI.2.6; LAFS.RI.3.7; LAFS.RI.3.8; LAFS.SL.1.1; LAFS.SL.1.2; LAFS.SL.1.3; LAFS.SL.2.4; LAFS.SL.2.5; LAFS.SL.2.6; LAFS.W.1.1; LAFS.W.1.2; LAFS.W.1.3; LAFS.W.2.4; LAFS.W.2.5; LAFS.W.2.6; LAFS.W.3.7; LAFS.W.3.8; LAFS.W.3.9; LAFS.W.4.10; LAFS.RST.1.1; LAFS.RST.1.2; LAFS.RST.1.3; LAFS.RST.2.4; LAFS.RST.2.5; LAFS.RST.2.6; LAFS.RST.3.7; LAFS.RST.3.8; LAFS.RST.3.9; SC.E.6.6; SC.L.17.3; SC.N.4.1; SC.N.4.2; SC.E.7.7; SC.L.17.12; SC.L.17.13; SC.L.17.14; SC.L.17.15; SC.L.17.16; SC.L.17.17; SC.L.17.20; SS.C.2.14; SS.E.1.5; SS.C.2.5; SS.C.2.8; SS.FL.2.2; SS.FL.2.3; VA.C.1.1; VA.C.1.2; VA.C.1.3; VA.C.2.1; VA.C.2.2; VA.C.3.3; VA.C.3.4; VA.F.1.1; VA.F.3.2; VA.F.3.3; VA.F.3.4; VA.O.1.4; VA.O.2.3; VA.O.2.4; VA.O.3.1; VA.O.3.2



Nate and Wendy celebrate Earth Day



Celebrating Earth

For people who care about the environment, every day is Earth Day. One day each year, people from all over the world join together to call attention to the beauty of the earth and the ways in which we can protect it. You can celebrate Earth Day with your Pasco County neighbors at Crews Lake Wilderness Park, but you also can celebrate with your classmates by helping address some of the environmental issues in your community. Some of those issues are written about in the newspaper. Look in the *Tampa Bay Times* for a story about an environmental issue. Read the article and write down the problems presented. With your classmates, discuss potential solutions. Using the letters to the editor in the *Times* as models, write a letter to the editor expressing your thoughts about this issue.

Pasco Calendar of Events for Recycling 2016-2017

APRIL 2016

Great American Cleanup
April 16, 2016

Earth Day at Crews Lake
Wilderness Park
April 23, 2016

SEPTEMBER 2016

Coastal Cleanup
September 17, 2016

NOVEMBER 2016

America Recycles Day
November 12, 2016

UPCYCLE Festival
November 12, 2016

DECEMBER 2016

Christmas tree recycling
December 26, 2016 –
January 13, 2017

Pasco Art of Recycling Scholarship applications begin December 2016. Contact the Pasco Education Foundation at 727-774-2705 or info@pascoeducationfoundation.org for details.

FEBRUARY – MARCH 2017
Pasco Art of Recycling Contest for high school students.

APRIL 2017
Great American Cleanup
April 15, 2017

All dates subject to change. Visit pascoeducationfoundation.org and pasco.k12.fl.us for updated information.



This year at Earth Day 2016

What better place to recycle than at an Earth Day celebration? Come to Crews Lake Wilderness Park on April 23, 2016, from 9 a.m. to 3 p.m. The park is located off Shady Hills Road, just south of the Suncoast Parkway and north of State Road 52 in Spring Hill.



FLASHBACK: Last year's Earth Day

Begun in April 1970 by Wisconsin Senator Gaylord Nelson as a way to spotlight the need for environmental protection, Earth Day has become a staple in communities around America and internationally. Each year, Earth Day is celebrated across the world with festivals, fairs and community celebrations.

Last year's Pasco County Earth Day celebration featured information and fun, hands-on activities from Pasco County Schools Conservation and Recycling Operations as well as other county departments including Animal Services, Cooperative Extension, Recycling and Education, and Stormwater.

Highlights included Crystal Springs Preserve's WaterVentures Learning Lab, a traveling science center based in a 53-foot semitrailer with interactive displays to teach about Florida's ecosystems and water. The engineering firm CH2M HILL



offered an activity in which children built layers of the aquifer out of ice cream and cookies. The event also offered face painting and arts and crafts.

The event was sponsored by Covanta Energy and hosted by Pasco County's Crews Lake Wilderness Park, while JROTC students from Hudson High School served as volunteers. Thanks to their support and dedication, each year's event has been more successful than the previous year's.

BRING US YOUR:

- **Mercury-containing devices:** Receive a \$5 gift card for each mercury-containing device, such as thermometers and thermostats, that you bring. Excludes light bulbs.
- **Household hazardous waste:** batteries, pool and household chemicals, fertilizers, pesticides and herbicides, paint, automotive fluids and oil, fluorescent bulbs. Residential only, no commercial.
- **Medicines:** expired and unused medications, including sharps.
- **Personal documents for shredding:** identity-sensitive documents for secure on-site shredding. You can watch as they are destroyed. Limit five boxes or bags per resident. Shredding 10 a.m. – 1 p.m. only.

SPECIAL FEATURES INCLUDE:

- Hits 106 live broadcast 10 a.m. – 1 p.m.
- Croc Encounters live reptile wildlife show
- Rain harvesting and composting workshops (advance registration required)
- Lady bug release
- Central Pasco and Gulf Railroad train rides
- Florida native plant sale
- Water Ventures Learning Lab
- Children's crafts and educational displays
- Recycling information
- Geocaching

Join us for a fun, educational day in the park. For more information, contact Lottie Kelley at lkelly@covanta.com or 727-856-2917, ext. 201.



YOU'RE INVITED!

EARTH DAY 2016 CELEBRATION
Saturday, April 23, 2016, 9 a.m. – 3 p.m.
Crews Lake Wilderness Park
16739 Crews Lake Dr.
Spring Hill, FL 34610

Very brainy bears

Cypress Elementary students' STEM project solves real-world problem



create the greenhouse. The completed project provides enough warmth to keep the vegetables from freezing and kept thousands of bottles from ending up in the waste stream.

The Brainy Bears at Cypress Elementary School found a creative way to tackle a major problem with their school vegetable garden: If the crops were planted early enough in the spring to ripen before school let out for the summer, there was a chance they could freeze.

With the help of their teacher, Sharon Robinson, the third grade class brainstormed a solution that also addressed an overabundance of plastic bottles.

Their solution? A plastic bottle greenhouse! The Brainy Bears gathered more than 2,000 plastic bottles from Pasco County schools to



Field trip to M.A.R.S.

The Earth Patrol from West Zephyrhills Elementary School recently took a field trip to M.A.R.S. – but not the planet. M.A.R.S. (M-PowerTech Asset Recovery Services) specializes in electronics recycling.

Electronic waste, or e-waste, is the fastest-growing waste stream in the world, with tens of millions of tons of devices and appliances being disposed of each year.

Electronics contain toxins such

as cadmium, mercury and lead that cannot be landfilled or incinerated because those processes would contaminate the environment.

At their facility in Hudson, M.A.R.S. takes in and gives a second life to discarded computers, cellphones and other electronics that come to them for processing, and ensures environmentally responsible destruction or recycling for items that have reached the end of their useful life and have no recovery potential.



Chasco Elementary School's fifth graders recently learned that you can make a difference in your community and have a positive impact on the environment – no matter what your age.

During a unit about animal adaptations and the environment, they researched the gopher tortoise population on their campus and discovered that the slow-moving tortoises faced daily danger from the fast-moving vehicles on Galen Wilson Blvd.

With the help of teacher Marie Branch, the students wrote letters, petitions and proposals to various groups and government agencies requesting help with this problem. Their efforts were rewarded with a bright yellow, custom-made turtle crossing sign from the Pasco County Schools Conservation and Recycling Department.

With the help of their teacher and custodial staff, the students installed the sign on school property on Galen Wilson Blvd. to warn drivers to slow down.

ALL ABOUT UPCYCLING

UPCYCLE

Upcycle (verb): To reuse discarded objects or material in such a way as to create a product of a higher quality or value than the original.

— Oxford Dictionaries



Upcycling, also known as creative reuse, is the process of transforming byproducts, waste materials and useless or unwanted items into



Upcycling project: Tin can lantern

Perhaps you are not ready for a huge project, but you would like to give upcycling a try. Here's something you can try at home.

MATERIALS:

Empty tin can	Pencil	Paper
Tape	Nail	Hammer
Wire	Paint (optional)	Candle

DIRECTIONS:

- Remove the label from your can.
- Fill the can with water and place in the freezer until frozen.
- Using a piece of paper the size of your can, make a pattern that you want to have on your lantern.
- Once the water in the can is frozen, remove it from the freezer and tape the pattern on the can where you would like it.
- Hammer the nail into the can, following the pattern. Place two additional holes across from each other on the top for the wire handle. You may need to place the can back in the freezer periodically.
- When you are finished with your design, place the can in the sink and let the ice melt.
- If desired, paint your can with your chosen color.
- When the paint is dry, attach the wire to the corresponding holes. Your lantern is complete and you are on your way to being a world-class upcycler.



new materials or products of better quality or for better environmental value.

Many people think upcycling is a new term, perhaps something to describe a trendy behavior, but upcycling has been going on forever! Did your grandma make quilts out of old fabric? Did she ever make a hook rug? Guess what? She was upcycling old fabric, such as clothing that had outlived its usefulness, to make something new.

Some artists take old eating utensils or antique silver spoons and forks and turn them into jewelry or other objects, such as coat hooks.

Another common example of upcycling is pallet furniture. People repurpose old shipping pallets and crates into chairs, desks and tables. It definitely takes a little elbow grease, but the results are beautiful.



Upcycling

Recycling is a great way to help protect the environment, but sometimes recycling is not possible. Upcycling, or creative reuse, means taking something that would have been thrown away and finding a new use or purpose for it. The artworks depicted on Pages 8 and 9 are examples of creative upcycling. There are many different ways to repurpose and reuse items.

How creative can you be? Look in the *Tampa Bay Times* for items that cannot be recycled. How can you repurpose or reuse them? Make a chart showing your ideas. Share your information with your class and family. Take the activity a step further and create your own upcycling project, different than the tin can lantern.



Keeping it sunny

Pasco County Schools took full advantage of Duke Energy's SunSense program for schools in 2015, adding seven solar arrays to the existing nine arrays at county schools. Pasco now has the most solar arrays of any school district in Florida, and plans to eventually install arrays at every district school.

SunSense, a rebate program offered by Duke Energy and the Florida Solar Energy Center, gives grants to Florida schools for the installation and monitoring of solar arrays.

Each of the schools that participated in the 2015 grants was given a 10 kilowatt solar array, power panels, data collection equipment and monitoring

abilities. The lead teachers from each school attended a training workshop, led by the Florida Solar Energy Center, which featured the different ways teachers can incorporate the solar array into their curriculum.

The seven new solar arrays were integrated into each school's electrical grid, and offset the cost of electricity by about \$300 per month each. But more importantly, the arrays are used for classroom education. Science teachers are able to pull up real-time information for their school's array that shows how much electricity the array is making currently, over the last month, over the last year and over its lifetime.

Recycling paper and cardboard in Pasco County

Pasco County does not collect paper and cardboard in its residential curbside recycling program, but it does have more than 100 drop-off locations countywide.

More than 20 percent of what goes into Pasco's Waste-to-Energy incinerator is recyclable

paper. Based on the total tons incinerated each year, 63.3 tons of paper is currently trashed rather than recycled annually.

Paper comes from trees, and trees are not an endless resource. It takes 15 years to grow a tree large enough to make 700 paper grocery bags.

If you recycle your paper in a Green Fiber container, you earn revenue for Pasco schools, parks, libraries and fire stations. For a list of GreenFiber sites, visit pascocountyfl.net and search for recycling.

Your trash is not landfilled



Trash is picked up by trash haulers.



Garbage is converted to electricity at Covanta Energy's Pasco County Waste-to-Energy (WTE) facility. A total of 1,050 tons of garbage per day is processed in Pasco County to produce energy.



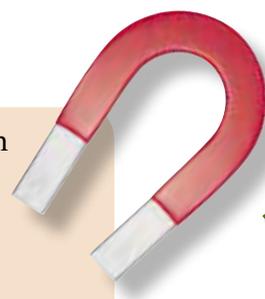
Incineration produces energy. This energy is sold to Duke Energy and provides enough power for 23,000 homes per year.



Nonprocessable materials (construction and demolition debris) go into a landfill. Remaining ash can be landfilled or used in roadbeds.



Metal is removed from ash by a magnet. Aluminum also is removed from ash. Metal is sent to the scrap metal dealer for recycling. Aluminum is sent to market.



Reclaimed (reused) water from the wastewater treatment plant is used in the WTE facility's cooling tower.



Think globally, act locally

Use current and archived issues of the *Tampa Bay Times* to find articles, photos or cartoons about recycling and the environment in your local or regional community. Based on your news research, write an analysis essay that describes how the issue specifically impacts your community. Identify individuals or groups in your area that are helping to improve the community by protecting the environment. You can include related headlines, articles and photos in your paper. You may wish to complete further research using additional resources. Write a blog post about what you have learned. What are the most important needs in your community? What volunteer opportunities are available? How can people help keep Pasco schools and Pasco County beautiful? Share your research with your class.

WASTING ENERGY = WASTING MONEY

Wasting energy is the same thing as wasting money. How many times have you heard your parents or teachers say, "Close that door. Are you trying to air condition the neighborhood?" Do you know why they say that? It's simple. Energy isn't free or unlimited.

In the United States, energy usage has almost doubled over the past 20 years. But energy resources such as coal, natural gas and oil are limited. Once we use them up, they can't be replaced.

There's also a price for all this energy. When you look at the rising costs of all forms of energy, you begin to understand why adults are always asking for your help in lowering the electric bill. It pays to conserve as much as we can. After all, we are all in this together.





The three R's: **REDUCE** **REUSE** **RECYCLE**

The three Rs are in order of importance: Reduce, reuse and recycle. Recycling takes on a whole new aspect when we consider how much better it would be if we reduced the amount of trash that we produce in the first place. It's easy to get started:

- Use a refillable water bottle rather than a single-use plastic water bottle. This will save you money, too.
- Use a ceramic mug rather than a Styrofoam cup for your coffee or tea at the office.
- Use reusable cloth carry bags for your grocery shopping rather than accepting paper or plastic bags.
- Compost your kitchen veggie scraps and use them to fertilize your garden rather than tossing them in the garbage.

Be smart. Recycle right. Don't trash your recyclables.

It takes more brains and know-how to recycle than it does to throw out trash. It's easy to throw things in the garbage. It takes more awareness to recycle. Every recycling program has its simple Dos and Don'ts of what to recycle. Make sure you are putting the right things into your recycling container. Putting the wrong thing in your recycling contaminates it and lowers its value.

For more information about what types of recyclables Pasco County accepts, visit pascocountyfl.net and search for recycling.



Looking to find money for college? You're in luck! The Art of Recycling Committee offers two separate \$750 scholarships for qualifying high school students. Check out the Pasco Education Foundation website at pascopeducationfoundation.org for more information on these and other scholarship opportunities for seniors



Pasco's trash and recycling collection system

Pasco County does not pick up your trash and recycling. Instead, your curbside garbage and recyclables are picked up by one of six independent haulers. You pay directly for service; this is called subscription service. Residents need to sign up in order to receive garbage and recycling collection service. If you live in a newer subdivision, your homeowner's association (HOA) or community development district (CDD) may contract for pickup for the whole community.

For your trash and recycling pickup schedule, contact your hauler:

County Sanitation • 888-522-5794
countysanitationservice.com

J.D. Parker & Sons • 727-845-1024

Progressive (east) • 352-583-4204
progressivewaste.com/pasco-east

Progressive (west/central) • 727-849-3333 or 727-847-9100
progressivewaste.com/pasco-west

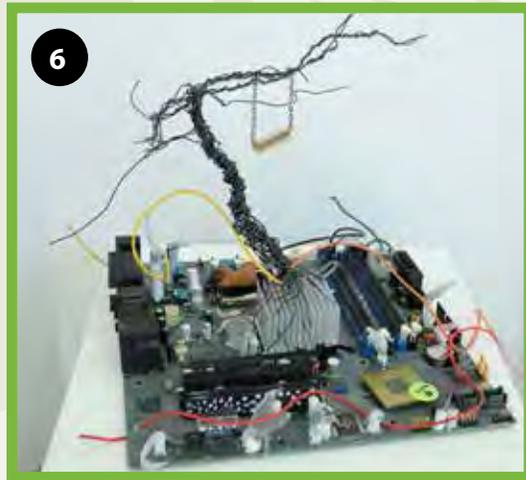
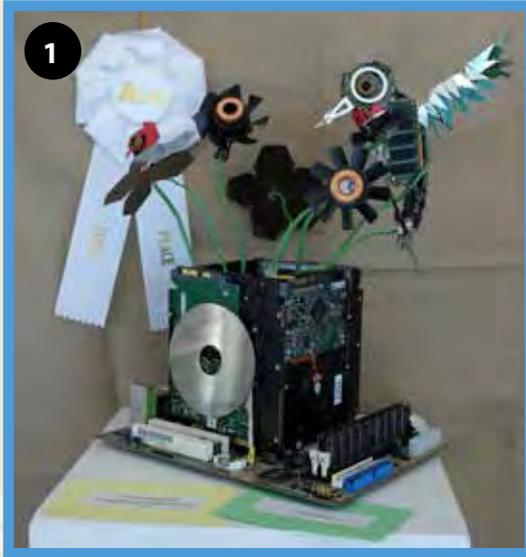
Republic (formerly Seaside Sanitation) • 727-868-2566
republicservices.com

Waste Aid • 813-996-1457 or 727-842-9309
wasteaidsystems.com

Waste Management of Pasco • 813-621-3053 or 800-255-7172 • wm.com



**Seniors graduating in 2017 –
DON'T MISS THIS
SCHOLARSHIP OPPORTUNITY!**



Combining art, recy

1. **First Place (\$500):** *Hummingbird*, Kylie Rice, Ridgewood High School
2. **Second Place (\$300):** *CD Dragon*, Kellie Hanmore, Anclote High School
3. **Third Place (\$200):** *Keep Tabs on the Environment*, Julia St. Amant, River Ridge High School
4. **People's Choice (\$100):** *Keep Tabs on the Environment*, Julia St. Amant, River Ridge High School
5. **Commissioner's Choice (\$100):** *Owl recycle, who's with me*, Amber Coykendall, Ridgewood High School
6. **Covanta's Choice (\$100):** *Future of Technology*, Michelle Rodriguez, Ridgewood High School
7. **Best Artistic Expression (\$100):** *Pollution Knows No Borders*, Jordan Bunker, J.W. Mitchell High School
8. **Best Use of Printed Material (\$100):** *The Woven Recycling Bin*, Genesis Erickson, Bishop McLaughlin Catholic High School
9. **Most Innovative (\$100):** *Nature's Song*, Abigail Garcia, Bishop McLaughlin Catholic High School
10. **Art of Recycling Committee Award (\$100):** *Children of the Earth*, Brandon Lopez, Fivay High School
11. **Best Use of Aluminum (\$100):** *Run for Recycling*, Yuhao Sun, Genesis Preparatory School



Interpreting art

There are many definitions and genres of art. The common beauty. However, since everyone defines beauty and art differently, it's important to think about the different types of images or graphics that others do not? Can you detect the message? What message is the artist sending? Keep a journal of your thoughts and



CYCLING

ycling and creativity

- 12. **Best Use of Materials (\$100):** *Garbage to Garden*, Kiersten Houck, Genesis Preparatory School
- 13. **Best Use of Plastic (\$100):** *Just Bear It*, Al Maddox, Sunlake High School
- 14. **Pasco Arts Council Merit (\$100):** *Keep our Earth Pretty*, Nicole Chacon, Sunlake High School
- 15. **Best Environmental Concept (\$100):** *Death to the Bees*, Kendalynn Hill, Sunlake High School

The Pasco Art of Recycling contest and exhibit is a cooperative project of Pasco County Schools, Pasco County Recycling and Education, Keep Pasco Beautiful and the Pasco Arts Council.

It was implemented to help increase awareness of the arts and to encourage the practice of recycling.

2016 Sponsors are:

- **County Recycling**
- **Commissioner Mike Moore**
- **Pasco Arts Council**
- **Sierra Family Foundation**
- **Republic Services Inc.**
- **Covanta Pasco**
- **Keep Pasco Beautiful Inc.**
- **Progressive Waste Solutions**
- **Simpson Farms**
- **Waste Aid Systems**

A common thread in all of the definitions is that art has an aesthetic principle, or visual appeal. However, differently, that definition is highly subjective. Explore the art depicted in this exhibit and the meaning art has for you personally. Do you see things inside the artwork? What is the artist's mood and the mood of the artwork? How does the art make you feel and share them with your class.



9



10



11



13



12



14



15

Cellphone Recycling Program

Cellphone use in the United States has increased rapidly over the last decade. The average American user owns two or more cellphones, and users upgrade their phone, on average, every 18 months. That's a lot of phones!

Cellphones contain a variety of precious metals and plastics. Recycling cellphones conserves valuable materials, prevents pollution and reduces greenhouse gas emissions that occur during manufacturing. Recycling 1 million cellphones recovers 35,000 pounds of copper, 772 pounds of silver, 75 pounds of gold and 33 pounds of palladium. The equivalent energy could power more than 194,000 homes for a year.

Proceeds from the Pasco County Cellphone Recycling Program are contributed to the Pasco County Education Foundation. Cellphones can be deposited in marked collection containers at public schools, libraries and county buildings.

For more information, call 813-929-2755 or 727-484-3059, ext. 6896 or visit pascocountyutilities.com.



Household Battery Recycling Contest

Many homeowners don't realize that they can and should recycle the batteries they use. Batteries contain toxic substances, such as cadmium, lead and mercury, that can release harmful chemicals into the environment if not properly recycled. Pasco County Utilities runs a battery recycling operation with collection buckets in government buildings and libraries.

As an education initiative, the County and Pasco County Schools partner to co-sponsor a Household Battery Recycling Contest each fiscal year from July 1 to June 30. The contest encourages students and school employees to recycle their household batteries.

All participating schools receive certificates of appreciation recognizing their commitment to keeping batteries out the waste stream. The 10 schools that collect the most pounds of batteries receive monetary awards.

For more information about the school district's battery recycling program or contest, contact Pasco County Schools recycling coordinator Tony Bartenope at 727-774-7936. For more information on Pasco County's battery recycling program, contact Household Hazardous Waste at 813-929-2755 or 727-484-3059, ext. 6896 or visit pascocountyfl.net and search for hazardous waste.

2014-2015 Household Battery Recycling Contest winners

West Zephyrhills Elementary School – 2,369 pounds

Richey Elementary School – 1,680 pounds

Schrader Elementary School – 1,071 pounds

Marchman Technical Education Center – 877 pounds

Double Branch Elementary School – 671 pounds

Calusa Elementary School – 463 pounds

John Long Middle School – 455 pounds

Lake Myrtle Elementary School – 452 pounds

Mitty P. Lock Elementary School – 412 pounds

Charles S. Rushe Middle School – 379 pounds



Creating awareness

Recycling programs are important because they not only encourage people to recycle, they also cut down on the pollution in the waste stream. In a small group, research pollution and its effects on the environment. Make a note of the who, what, where, when, why and how points you learn. Next, look in the *Tampa Bay Times* for articles or photographs describing the effects of pollution on the environment and on the quality of life. Write down important points you have read or seen. Now that you have read about pollution, it is your job to help encourage your peers, families, friends and neighbors to participate in recycling programs ... in song. Create a song to highlight the information you have learned and encourage others to participate in the recycling programs. As a group, perform the song for your class.

Pasco County Electronic Equipment Recycling Program

Computers and electronic equipment such as televisions, telephones, video games, radios, computer monitors and CD and DVD players contain both useful recyclable materials and elements that are hazardous and must not be landfilled or incinerated. Recyclable materials include plastics, nonprecious metals (steel, aluminum and copper), wood, glass and precious metals (gold). However, electronic equipment also contains lead, cadmium, chromium and mercury, all of which can adversely affect human health and the environment if not managed properly.

Demanufacturing is the process of dismantling a piece of equipment, recovering the resources (raw materials) and utilizing the raw materials in remanufacturing new products (revenue). When done properly, demanufacturing generates no waste, making landfilling or incineration unnecessary. Pasco County was the first county in Florida, and is one of a handful of counties in the nation, to implement an electronic equipment demanufacturing program.

Millions of computers are arriving at landfills throughout the United States annually, and millions more remain in storage. In 2015, Pasco County recycled 497 tons of electronic waste at a cost of \$241,045.



Computer monitors and TVs make up the bulk of the electronic waste stream and are very problematic because they contain lead. The Florida Department of Environmental Protection (FDEP) estimates that a total of 6,738 pounds of lead enters Florida's solid waste stream annually, and 42 percent of this is attributed to monitors and TVs.

Please help to keep hazardous materials out of our environment by bringing your electronics for recycling to a Pasco County recycling center. For additional information, call Pasco County Utilities at 727-484-3059 or 813-929-2755, ext. 6896.

Our recycling drop-offs are anything but dull. Who wouldn't be inspired to recycle by the bright and colorful decorations, the patriotic flags and the smiling faces? Our helpful attendants can answer recycling questions and make anyone's day a little better.



Pasco County recycling drop-off centers

All Pasco County recycling drop-off locations accept:

- Aluminum and metal food cans
- #1, #2, #3, #4, #5 and #7 plastic bottles, jars and small containers
- Clear, green and brown glass bottles and jars
- Newspaper, mixed paper, office paper, phone books
- Flattened corrugated cardboard

Anclote Gulf Park

2305 Baillies Bluff Road, Holiday, FL 34691
Wednesday – Saturday, 8 a.m. – 5 p.m.

East Pasco Transfer Station

9626 Handcart Road, Dade City, FL 33525
Monday – Saturday, 7 a.m. – 5 p.m.
352-521-0500 (also accepts used cooking oils, scrap metal and electronics)

Embassy Hills Wastewater Treatment Plant

9560 Crabtree Lane, New Port Richey, FL 34654
Wednesday – Saturday, 8 a.m. – 5 p.m. (also accepts used cooking oils)

Senior Services Center

6801 Wisteria Loop, Land O'Lakes, FL 34638
Monday – Friday, 8 a.m. – 5 p.m. (can vary)
813-929-1200

West Pasco Recycling Center

14606 Hays Road, Spring Hill, FL 34610
Monday – Saturday, 7 a.m. – 5 p.m.
727-861-3053 (also accepts used cooking oils, scrap metal and electronics)

No plastic bags

Please do not put plastic grocery or trash bags in the recycling containers. If you store your recyclables in plastic bags, please empty them into the drop-off container.

Plastic bags get tangled in the recycling machinery, which slows down recycling operations and can even damage the equipment.

Plastic bags can be recycled at most grocery stores.



Saving you money: No more blue bags

As of October 2015, Pasco County's Curbside Recycling Program only accepts recyclables loose in a permanent container. No bags of any kind will be accepted.

To recycle, use your container of choice – you can use a bin, a can or a cart – and label it with a free Curb it Pasco! sticker. Call your trash hauler (see Page 7 for phone numbers) or the Recycling Department at 727-856-4539 for your free sticker.

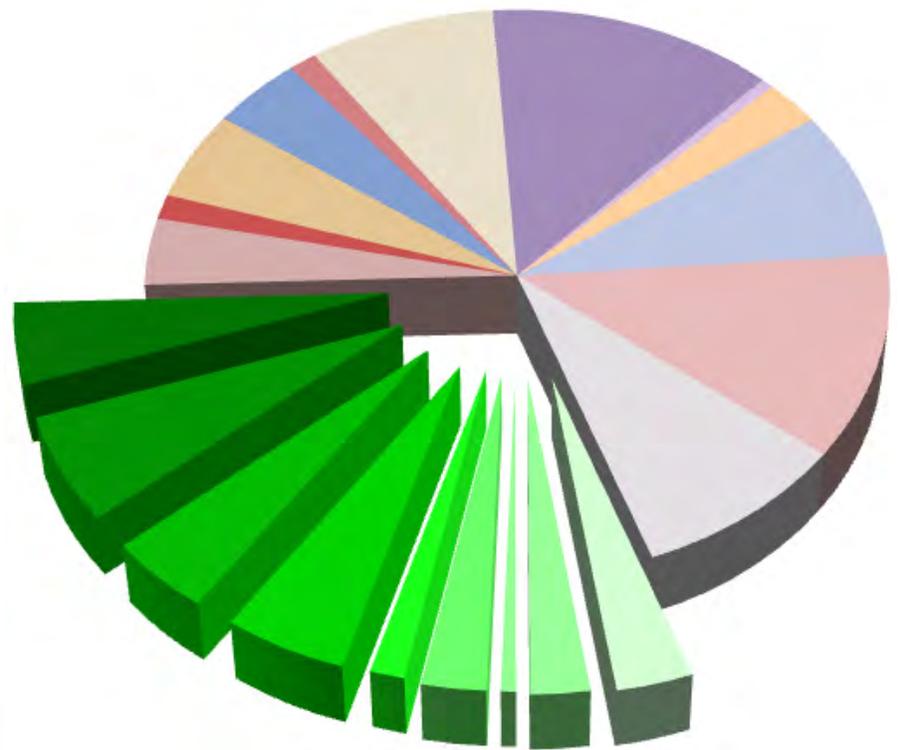
Don't separate or bag items – just put everything loose in the same recycling container. Place your recycling at the curb the night before your scheduled recycling pickup day.

For more information, email rgdobbs@pascocountyfl.net or call 727-856-4539.



DO THIS

NOT THAT



- | | | |
|------------------------------|-------------------------|------------------------------|
| ■ Glass Containers | ■ Corrugated Containers | ■ Non-Rigid Plastic Film |
| ■ Metal Cans | ■ Newspaper | ■ Other Non-Recyclable Paper |
| ■ Other Narrow Neck Plastics | ■ Textiles | ■ Aseptic Containers |
| ■ PET Containers | ■ Scrap Metals | ■ Special Wastes |
| ■ HDPE Containers | ■ C&D Debris & Wood | ■ Other Garbage, Grit, Etc. |
| ■ Other Recyclable Paper | ■ All Other Plastics | ■ Food Waste |
| ■ Office Paper | ■ Styrofoam | ■ Yard Waste |

What's left in your trash

At the start of Pasco's Choose and Use Your Own Container recycling program in June 2013, curbside residential recycling tonnage increased by more than 10 percent. This is a significant gain. However, there is still a long way to go.

The pie chart above shows a composition by weight of trash collected in Pasco County.

The green slices are recyclable materials that end up in the trash can instead of the recycling bin. Remember, glass containers, aluminum and metal food cans and plastics coded #1,

#2, #3, #4, #5 and #7 can be put in curbside recycling, while paper and cardboard can be recycled through the Green Fiber drop-offs located throughout the county.

In 2014, Pasco County collected approximately 323,000 tons of trash and recycled approximately 4,500 tons.

If everybody recycled everything they could, more than 96,900 tons of recycling could be rescued from the trash can. We have so much further we can go. Please do your part.



Single stream recycling

Single stream recycling is a system in which all recyclables are collected in one container, making it possible to recycle more. Look through the pages of the *Tampa Bay Times* to find items that can be recycled. You can look at photographs, comics and advertisements. You can use the information in this publication to help you classify the items. Make a chart, listing each classification. Group items by type of waste (i.e., plastic, glass containers, metal, etc.).

Extension activity: Now that you have your lists, it is time to be creative: Write and illustrate a short story for each type of waste from the viewpoint of an item. If possible, add some impact numbers to your story. Share your stories with classmates, friends and family.

Put the F.O.G. into the C.O.R.E.



Fats, Oils, and Grease (F.O.G.) are byproducts of food preparation, meat cutting and cooking. F.O.G. can be found in meat fats, oils, shortening, butter, margarine, sauces and dairy products.

When F.O.G. items are poured down drains or garbage disposals, they build up in our

pipes and sewers. Eventually, they can back up into sinks, tubs and toilets. These backups pose serious health and environmental problems and can be very costly to fix.

Pasco County participates in a statewide program called the Cooking Oil Recycling Effort (C.O.R.E.). In 2015, the Pasco County C.O.R.E. program recycled 2,610 gallons of used cooking oils.

The C.O.R.E program accepts cooking oils such as vegetable, corn, peanut, olive and soybean oil and fats and grease such as lard, butter, shortening and bacon grease.

Simply pour your used cooking fats, oil and grease while still warm into a container that you can freeze. The fats, oils and grease can be mixed in a single container. Store the container in the freezer to keep the grease solid, and pull it out whenever you have F.O.G. to dispose of. When the container gets full, drop it off for recycling at one of the county's four cooking oil recycling locations.

Non-cooking oils such as motor oil, fuels, antifreeze and chemicals are not accepted by the C.O.R.E. program and should never be mixed with cooking oils.

For more information about C.O.R.E. in Pasco County, call 727-484-3059 or 813-929-2755, ext. 6896.

Helpful hints to minimize F.O.G. in our environment

- Never pour cooking oils, fats or grease down the drain or into garbage disposals.
- Remove excess food material from utensils, knives and cutting boards and discard in the trash.
- Pots and pans with heavy grease buildup and items with food residue should be wiped with a paper towel before being placed in the dishwasher.
- Minimize the use of excess cooking oils and grease when cooking or frying.

Recycle your used cooking oil for free:

East Pasco Transfer Station

9626 Handcart Road, Dade City, FL 33525
Monday – Saturday, 7 a.m. to 5 p.m.

Embassy Hills Wastewater Treatment Plant

9560 Crabtree Lane, New Port Richey, FL 34654
Wednesday – Saturday, 8 a.m. to 5 p.m.

Pasco County Facilities

7220 Osteen Road, New Port Richey, FL 34653
24/7 drop-off

West Pasco Recycling Center

14606 Hays Road, Spring Hill, FL 34610
Monday – Saturday, 7 a.m. to 5 p.m.

Zephyrhills City Maintenance Yard

39421 South Ave., Zephyrhills, FL 33542
Monday – Friday, 8 a.m. to 4 p.m.



Pasco County household used sharps exchange program

Sharps are medical instruments such as needles, IV tubing with needles, scalpel blades, razor blades, lancets, glass tubes, syringes and diabetic testing supplies.

Safe disposal of sharps is important. Sharps can harm people, pets and wildlife and can damage public sewers and pump stations. Placing hypodermic needles and other sharps down the toilet or in household trash also puts disposal workers at risk.

You can help by disposing of your sharps properly. Visit one of the sponsor exchange sites listed at pascocountyfl.net and ask for an approved sharps container (search for sharps). Follow the directions on the container. There is no cost to participate in the program.

For additional information, visit pascocountyutilities.com or call 727-484-3059 or 813-929-2755, ext. 6896.



Never Down The Drain

- › Fertilizer and lawn chemicals
- › Fluorescent tubes and bulbs
- › Household and lead-acid batteries
- › Household chemicals and cleansers
- › Mercury-containing devices
- › Motor oil and automotive fluids
- › Paint, paint thinners and removers
- › Pesticides
- › Pool chemicals
- › Solvents

According to the EPA, leftover household products that contain corrosive, toxic, ignitable or reactive ingredients are considered household hazardous waste (HHW).

Products such as paints, motor oil, batteries and pesticides contain potentially hazardous ingredients that require special care when you dispose of them.

Never pour HHW down the drain, into storm sewers, into waterways or on the ground or put them in your regular trash. Improper disposal of HHW can pollute the environment and pose a threat to human health.

Pasco County provides two hazardous waste collection center locations for conveniently and safely managing HHW. Pasco County residents can drop off most items at no charge. Commercial entities will be charged for disposal.

For a small charge, you also can drop off propane tanks, car and truck tires, refrigerators, air conditioners and yard waste. Visit pascocountyfl.net or call Pasco County Solid Waste at 727-857-2780 for more information.

HHW drop-off locations



West Pasco Recycling Center

14606 Hays Road, Spring Hill, FL 34610
• Accepts HHW Tuesday, Thursday and Saturday, 8 a.m. – 4 p.m.

East Pasco Transfer Station

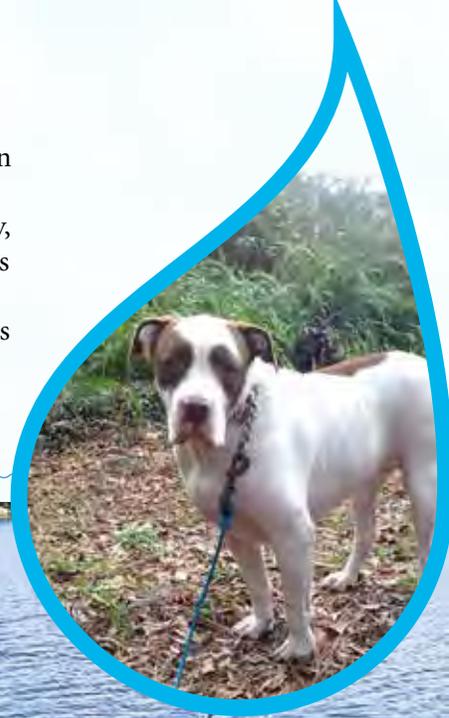
9626 Handcart Road, Dade City, FL 33525
• Accepts HHW Wednesday and the second Saturday of each month, 8 a.m. – 2 p.m.

Keep our water clean

Pet owners should always pick up after their pets and dispose of pet waste in the trash or in a designated pet waste container. Pet waste should never be left on the ground or put into storm drains, roads or water bodies.

When it rains, pet waste can flow into storm drains and into roads. Eventually, the waste ends up in our water bodies, causing water pollution. The waste causes excess nutrients, which creates algae bloom and decreases oxygen in the water. This condition is harmful to fish and other aquatic life. Pet waste not only affects water quality but public health as well. Pick up after your pets!

For more information, contact Pasco County's Stormwater Management Division at 727-834-3611 or pascocountyfl.net/stormwater.



Flushing wipes will clog your pipes

The Pasco County Sanitary Sewer Collection System is a network of sewer lines, manholes, pumping stations and other structures used to collect wastewater and transport it to a treatment plant.

In Pasco County, the infrastructure is battling the problem of "ragging," which occurs when baby wipes, feminine hygiene products, diapers, dental floss, paper towels and other items not designed for flushing clog sewer pumps.

Sewer agencies around the country are dealing with the growing problem of flushable wipes. Toilet paper manufacturing companies market the wipes as flushable, but these products are not safe for sewage systems. Instead of disintegrating like toilet paper, they stay intact, clinging to the interior walls of pipelines and getting stuck on snags inside the pipes. They also clog pumps which transport sewage to treatment plants and can eventually destroy the pumps. De-ragging pumps and unclogging pipes is labor intensive and increases the cost of maintaining your sewer system.

Just because you *can* flush a product does not mean you *should*. Never flush items such as paper towels, diapers, wipes, feminine hygiene products or cotton balls.

For more information, visit pascocountyfl.net or call 727-484-3059 or 813-929-2755, ext. 6896.



What is reclaimed water?

Did you know that using water a second time before returning it to the natural water cycle is just like recycling? In fact, use of reclaimed water has been among the most successful strategies helping to protect the future of Florida's water resources.

Reclaimed water is wastewater that has been recycled for another use. Recycling involves taking something that would be thrown away and making it useful again. During the wastewater treatment process, utilities ensure that the water is clean and safe for uses such as:

- Lawn and landscape irrigation
- Crop and orchard irrigation
- Decorative ponds and fountains
- Golf courses, parks and athletic fields
- Cooling at power plants
- Restoring natural aquatic systems

Water awareness poster contest

The Florida Governmental Utility Authority (FGUA) and Pasco County Utilities hold an annual poster contest for elementary school students to promote water awareness. In 2015, more than 2,000 Pasco County students participated. For more information, visit watercontest.org.



Staff from Pasco County Utilities and FGUA presented awards to winning students at Wesley Chapel Elementary School for the sixth annual Water Awareness Poster Contest.

L-R: Frank Galdo (PCU), Gabriel Stewart (Winter's Choice Award), Madeleine Ward (First Place – 4th grade), Dominic Lewis (Third Place – 4th grade), Laurie Bazick (Fourth grade teacher & winner of teachers' raffle prize), Matthew Rihs (FGUA)



Keep calm and stop littering



Drive down any road in Pasco County and you will see litter rear its ugly head. You're not part of the problem, right? You don't throw trash out of your car window, do you? According to the Florida Department of Transportation, about half of all litter is unintentional. It's the trash that escapes the pickup truck bed or the wrapper that slips out the car window.

We've all experienced or witnessed this, but now you know that 50 percent of litter is caused by inattentiveness. It's your world, so change it! Carry a litter bag in your car and properly secure or cover loads in truck beds. Cover your trash cans when you place them at the curb.

If you are a litter warrior and want to do more, then help to clean up your community.

Here's part of the solution – form an Adopt a Road group.

The Adopt a Road program is a partnership between Keep Pasco Beautiful and Pasco County. Volunteers commit to removing litter at least four times per year along a designated 1- or 2-mile section of roadway. Supplies, disposal and signage are provided. This is a great team-building opportunity for corporations and community organizations. For more information on how to get involved, call 727-856-7252 or email kking@pascocountyfl.net.

Keep Pasco Beautiful KeepPascoBeautiful.com [Twitter.com/KeepPascoBu2ful](https://twitter.com/KeepPascoBu2ful)
[Facebook.com/KeepPascoBeautiful](https://www.facebook.com/KeepPascoBeautiful)

One Adopt-A-Road group gets it done

Pasco County Schools' Conservation and Recycling Operations Department (CRO) doesn't just talk the talk; they walk the walk ...literally. CRO officially adopted a mile of Moon Lake Road between SR 52 and Coronado Way.

"It's a great way to show our students and community that we are all on the same team and that each and every one of us can make a difference," said Tony Bartenope, Pasco County Schools recycling coordinator.

This year the personnel from CRO, along with other volunteers, collected more than 12 bags of trash and three tires from their assigned road section.



Other ways to help



If you are unable to commit to adopting a road but still want to help, join others picking up trash at the annual Great American Cleanup (third Saturday in April) or the Coastal Cleanup (third Saturday in September). Cleanup hours count toward student community service hours.

Great American Cleanup 2015

497 volunteers picked up **17.1 tons** of trash

Coastal Cleanup 2015

1,184 volunteers picked up **21.89 tons** of trash



Planning for the future

We must begin recycling today if we are to reduce the rate at which our landfills are filling up. Working together with other students, come up with a game plan to get your school and family to recycle. Look at the ads in the *Tampa Bay Times*. Think about the dynamics of the ads. Think about ways to draw people's attention to an ad and its message. Next, design an ad for the *Tampa Bay Times* and tampabay.com that encourages recycling by people of all ages. How is the ad in the print edition going to be different than the Web version of the ad? Share your ideas and ad with your classmates.

Pasco County Schools recycling report

For more than 21 years, Pasco County Schools has initiated numerous sustainable and cost-saving environmental programs with a commitment to help others in achieving the conservation and recycling goals of the district by educating students, employees, administrators and community partners on practices that conserve energy, reduce costs and nurture the environment.

**For school year 2014-15,
Pasco County Schools recycled:**

1,832 tons of paper and cardboard, which **saved** almost **31,168 trees**

33 tons of plastic bottles, which **saved** roughly **550 barrels of oil**

197 tons of metal, which **saved** about **2,500,080 kilowatt** hours of energy

9.5 tons of batteries, which won't be causing harm to the environment

I know what you're thinking. These numbers are pretty impressive – and they are! But we can do even better.

Reducing, reusing and recycling cuts the amount of energy used to produce new items and the amount of pollution generated as a result. It also conserves valuable natural resources that would otherwise be used to produce new items from raw materials.

If we all do a little, it will mean a lot.

If you'd like more information about the district's recycling programs, visit pasco.k12.fl.us/recycle or call 727-774-7936.



Close the loop

Ask for and buy recycled and upcycled products

Recyclables become new products. Recycling something is only half the formula. You must buy products made from recycled materials to create the demand for more recycling.

Products need markets in order to sell. A market is defined as activities that direct the

flow of goods and services from producers to consumers. Your demand for products made from recycled material creates the market for a product. The more you ask for it, the more products will be produced and the more we can recycle. It's up to you.



Thinking critically

It is time to use your critical thinking skills. After all, that is a main focus of learning about yourself and what makes you a strong individual. Using the electronic edition of the *Tampa Bay Times*, review the articles and ads for a one-week time period. Save all articles that focus on conservation, waste and the environment. Write down the main points for each article. Be sure to comment on whether the article is focusing on positive or negative choices. Choose one of the points represented in one of the articles to write a research paper. You can focus your research paper on any aspect of the article. After your paper is written, create an oral presentation for your class. Explain whether the information you found is positive, negative, helpful or harmful. Be sure to use specific examples from the article and your research in your paper and presentation.