

John Poole Middle School:  
A Green School that strives  
to get greener.





# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.  
Click on the Earth to bring you back to this page.

## 1a. Curriculum & Instruction

Grades: [Six](#), [Seven](#), [Eight](#)

## 1b. [Professional Development](#)

## 1c. [Celebrations](#)

## 2. [Best Management Practices](#)

## 3. [Community Partnerships](#)



# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 1a. Curriculum & Instruction Sixth Grade

- [Outdoor Education](#)
- [Student Service Learning](#)
- [Earth Day Activities](#)
- [Environmental Lessons](#)





# Sixth Grade: Outdoor Education

Every year in October, the 6<sup>th</sup> grade attends outdoor education at Montgomery County's center for environmental education, the Lathrop E. Smith Center.

Students participate in a variety of environmental activities, including stream studies, nut collection, orienteering, predator/prey simulation, trail maintenance and invasive plant removal.

Students collect macroinvertebrates and conduct a series of water tests to determine the health of the stream and the larger watershed.





# Sixth Grade: Student Service Learning (SSL)



School Grounds Clean-up



Trash picked up by sixth graders

Sixth grade students at JPMS earn 10 hours of SSL in several ways. During Outdoor Education, students earn SSL hours by performing tasks such as maintaining trails and seed collecting.

Another way students earn hours is by periodically going outside with their science classes to clean litter from the school grounds. This not only teaches them how to be active community members, but also helps to improve the environment.

A third way that students earn SSL hours is through their Earth Day environmental landscaping.







# Sixth Grade: Earth Day Clean-up and Planting

For the past three years, the sixth grade has been involved in Earth Day activities for SSL hours that involve environmental landscaping with native plants around the grounds of JPMS. This is done in partnership with Mr. Seely's landscaping company, LAND, that provides the equipment, mulch, soil, and plants. The sixth grade students, through science classes, happily provide the "elbow grease" to make JPMS a greener environment.





# Sixth Grade: Earth Day Classroom Preparation



Before they begin working outside, students learn, through a powerpoint presentation, the importance of mulching.

## Why Use Mulch?

- In the forest, the ground is covered by a layer of decaying organic matter.
- Within this layer & soil is a specialized organism called mycorrhizae fungi.
- Mycorrhizae forms an association with & greatly enhances the function of plant roots.
- In the urban environment, the ground often lacks sufficient organic matter, organisms and porosity.



Most landscape trees evolved in the forest environment.

In wooded areas, you should notice a shallow layer of moist organic material, tiny organisms and a porous soil structure.

## Step 1

Look around your assigned tree  
 Remove any weeds in the circle around the tree  
 The weeds need to be removed in one whole piece, keeping their roots intact.  
 Use the hand shovel to help loosen the dirt  
 Count the number of whole weeds your group removes  
 When done, have an adult check your circle and get a weed card

## Step 2

- Get a wheelbarrow and a shovel
- Fill the wheelbarrow about half way
- Put the mulch around your tree, being careful not to let mulch touch the tree bark
- Spread the mulch so that it is even all around
- Mulch should be at least 2 inches deep in all areas
- Get your tree checked and get a mulch card from a teacher/parent

## Properly mulched tree



## Don't do this!



It should **not** be volcano shaped.





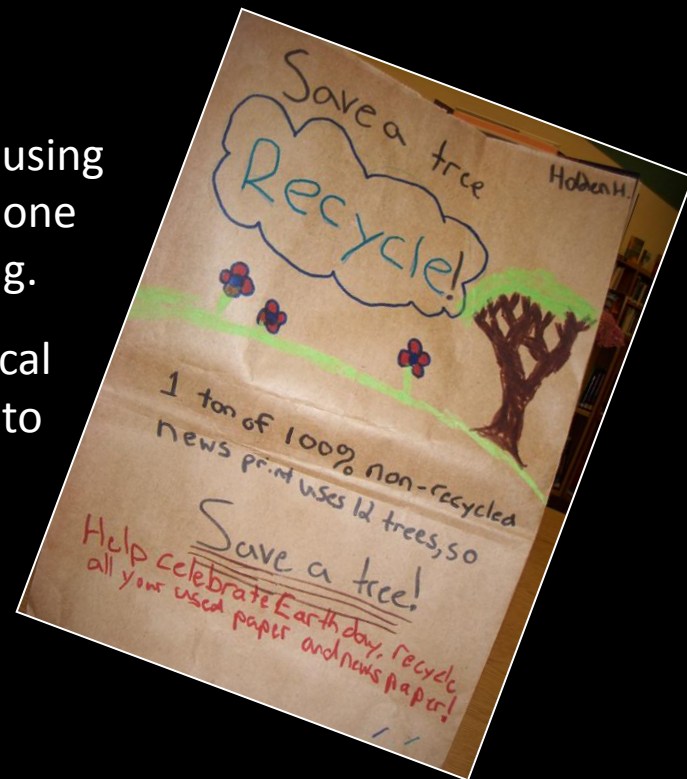


# Sixth Grade Earth Day: Community Outreach

Another Earth Day activity in which our sixth graders participate is an educational outreach program targeting our community.

Students decorate brown bags using recycled materials. They write one fact about recycling on each bag.

The bags are then taken to a local grocery store to be distributed to customers.







# 6th Grade Environmental Lessons

## Paper Recycling Lab



Lab objective: determine if paper is a renewable resource



### Procedure



1. Tear off a small piece of newspaper. Place it on a microscope slide and examine it under a microscope. Record your observations.
2. Tear a sheet of newspaper into pieces about the size of postage stamps. Place the pieces in the mixing bowl. Add enough water to cover the newspaper. Cover the bowl and let the mixture stand overnight.
3. The next day, add more water to cover the paper if necessary. Use the eggbeater to mix the wet paper until it is smooth. This thick liquid is called paper pulp.
4. Place the screen in the bottom of the pan. Pour the pulp onto the screen, spreading it out evenly. Then lift the screen above the pan, allowing most of the water to drip into the pan.
5. Place the screen and pulp on several layers of newspaper to absorb the rest of the water. Lay a sheet of plastic wrap over the pulp. Place a heavy book on top of the plastic wrap to press more water out of the pulp.
6. After 30 minutes, remove the book. Carefully turn over the screen, plastic wrap, and pulp. Remove the screen and plastic wrap. Let the pulp sit on the newspaper for one or two more days to dry. Replace the newspaper layers if necessary.
7. When the pulp is dry, observe it closely. Record your observations.



# 6th Grade Environmental Lessons

## STEM Integration

Transdisciplinary lessons integrating science, technology, engineering and mathematics (STEM) objectives are taught during Outdoor Education to help students think about how geography influences patterns of settlement.

Students use the handheld GPS to find several possible settlement locations. They analyze the different environments to select the best settlement sites, taking into consideration the economic resources, natural defenses, and both natural and economic disadvantages of each location.

During a second lesson, students use newspaper and tape to build a structure appropriate for the geography of the location they selected. Each original structure incorporates the physical features specific to its site and is built to scale as calculated by the students. Through this series of lessons, students demonstrate their understanding of how to use STEM skills to solve a real-world problem.





# 6th Grade Environmental Lessons Global Warming

Sixth grade students study global warming as part of the science curriculum *Going Green* unit.

During repeated trips to the Media Center, students research the greenhouse effect, weather patterns, climate change, migration, and related health effects. Finally, students create brochures that present their findings and proposed solutions.



It is horrifying that we have to fight our own government to save the environment. ~Ansel Adams

Montgomery County Public Schools

## Mother Nature's Messenger

Volume 2, Issue 2

1/5/010

### Global Warming Facts and Solutions

To start off, global warming, the talk of the town, is a growing concern because the consumption of fossil fuels releases carbon dioxide, a byproduct of burning items like oil, coal, or gas. If the rise in temperature continues, the lower latitudes will be warmed in 30 years or less.

Now with the basics. Everyone knows that temperature increase is a problem. And everyone knows that we, humans, are burning fossil fuels which is polluting the world.

Now for something you don't know. Oil company CEOs have way too much money to all of sudden stop. They will make it seem like they're doing something eco-friendly but they aren't. They are just using the eco-friendly gag to make that cash. They probably won't

stop until coal, gas, and oil go obsolete.

At the Ice Age, there was a lot of land to live on. The east Antarctic sheet was to melt everything south of middle Miami, Florida would be flooded. And if the east and west sheet melted, you can say goodbye to Florida.

Everyone says that the earth is warmer. Well, that IS true. One degree Fahrenheit warmer. Actually, 1998 was the warmest year ever recorded. Since then, there has been no temperature increase. That may be true but each year, 3.3 bilion tons of co2 get put into the atmosphere each year.

Well, although global warming has been confirmed, some people refuse to believe it. Some people say it is a catastrophe, others simply say it is a myth. They don't have any evidence to back it up... or

do they? I guess there is only two things you can't change people's minds on: Politics, and Global warming.

Before we took action, (Industrial revolution-2000) co2 emissions were skrocketing until Al Gore pointed it out. Then we scrambled into that Thinking Tank and thought, "How can we prevent global warming?" Everyone came out smarter and environmentally wiser with answers to this problem.

Here are some solutions. We can ride our bikes and that will stop co2 from being produced. We can hang our clothes on a line and that is nature's dryer. We can install fluorescent light bulbs and that will reduce energy taken up to 75%! Let's all get smarter and take action.

#### Special points of interest:

- *Speaking of imports, The US has way more imports than exports mostly coming from china*
- *Around WWII, the US was the center of production because we were in a golden age*

#### How One Person Can Make a Difference

I listed above a few solutions to reduce co2 emissions. Now I will complete the solutions I had listed.

We could buy locally because the ingredients travel an average 1,250 miles to get to our plate. Imagine the import costs!

Studies have proven that fake trees intake more co2 than an acre of trees (90,000:10,000) so you could

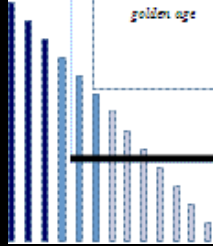
put them around your house to reduce co2.

Use push mowers to mow your lawn because they are more compact, they have less co2 output than riding mowers and they use less fuel.

Lastly, alternative energy sources will be used more than power plants in the next few decades. But why not start now? Switch

your home to solar or wind power so you have more green in your wallet or purse.

I say, One person CAN make a difference. Why not start now?






# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 1a. Curriculum & Instruction Seventh Grade

- [Environmental Science Elective](#)
- [Seventh Grade Science  
Environmental Lessons](#)





# Seventh Grade Environmental Science Elective (ESE)

The MCPS curriculum focuses on life science in Grade 7, providing students with opportunities to understand the classifications, processes and structures of living things. At JPMS, we designed an elective class that would contextualize those understandings in the world around us. It is unique in MCPS.

Environmental Science is a one-semester class open to all seventh graders. Classroom lessons are supplemented with hands-on learning activities and field trips. Because of weather and seasonal changes, class content is not identical for both semesters; it is aligned with the world around us.

Enrollment has grown each year since we first offered this class in 2010. Currently, almost half the students in Grade 7 elect Environmental Science.



# Seventh Grade Environmental Science Elective (ESE)

Here is an excerpt from the course syllabus:

Welcome to 7th grade Environmental Science.

Are you ready to explore questions about your most curious environmental issues? Are you ready to perform outdoor investigations that will help you discover answers to questions like: What are the local, regional and global environmental concerns? What kind of impact can you make to strengthen our ecosystem? What plants and animals live in our ecosystem?

Throughout the semester you will use inquiry skills and a variety of simulations to discover the answers to these questions and many more.



Students tour the local waste water treatment plant.





# Seventh Grade ESE

## Photo Shoot of Our School Grounds

**Student Analysis:** This picture best represents the JPMS ecosystem because it shows the different plants living in the ecosystem.

The picture shows the invasive vine strangling the native tree. The picture also shows how things fall and decompose then the soil uses the nutrients and new things grow.



These trees are close together and provide a nice home for squirrels, birds and other rodents. The squirrels can run from tree to tree, the birds can build nests in the branches and the other rodents can hide from hawks in the fallen trees and under the leaves. The squirrels can find plenty of acorns, the birds can find plenty of bugs and the other rodents can eat the small plants growing in the ecosystem.



# Seventh Grade ESE

## Photo Shoot of Our School Grounds



**Student Analysis:** This picture represents where the fish, bugs, and birds live and eat. The birds eat the fish, the fish eat the bugs, and the bugs eat the cattails and other bugs, but the SUN gives energy to the cattails. So the whole thing starts with the SUN.



**Student Analysis:** This picture represents the JPMS ecosystem because the lake supports all life forms in the ecosystem. Every living thing needs water. Also the lake is a habitat to fish.

All plants need water because water lets them do photosynthesis and photosynthesis makes food for the plants. All animals need the lake because water is an essential nutrient to all living things. Fish need the lake because a fish cannot live without water.





# Seventh Grade ESE

## Stream Studies & Composting

Students set up a month long investigation comparing decomposition in bagged and composted wastes.



Students complete stream studies to determine the health of a local stream.





# Seventh Grade ESE Field trip to Clagett Farm



**Student Note:** Dear Phillip,  
Thank you for being our guide and teacher for the day. You were very factual and taught me a lot. I really enjoyed our hayride from place to place because I could look around and see all the great things you guys at CBF do. I also really enjoyed playing the camouflage game. It was amazing how close people could get to me (Michael and Cole in the bags to be exact) and I had no idea. The last but not least thing I really enjoyed was at the end when we were all talking about thing we can do. It really inspired me to want to do something also, so now I am SO very excited for our project because I loved your rain garden idea and your watershed lunch idea. Thank you so much.



Students applied their knowledge of our watershed on a trip to the Chesapeake Bay Foundation's (CBF's) Clagett Farm Learning Center.

Thanks Again,  
Bella  
John Poole Middle School





# Seventh Grade ESE SSL Through CBF

Students researched projects that would have a positive impact on our ecosystem and that could be implemented in the spring for SSL hours.

## Student Analysis: Rain Barrels

In the Chesapeake Bay much of the rain water, that hits the Chesapeake Bay Watershed runs off the land and collects bacteria, chemicals, and nutrients. Storm water also causes flooding, stream bank erosion and reduced ground water.





# Seventh Grade ESE SSL Through CBF

**Student Analysis:** Today, runoff from rain storms is running into the bay. This runoff contains nitrogen and phosphorus which are types of nutrients. You may think nutrients are good right? For plants, yes. The bay may have been getting too much of a good thing for the last few years.

When too much nitrogen and phosphorus gets into the bay it promotes algae growth. It isn't just the bay. It's the whole water shed. This algae blocks the sun and kills other plants and fish and many other organisms.

I propose we make a rain garden.

## Student Action Plan:

### *BUILD IT*

- Put down edging for border.  
(wood and nails)*
- Dig a hole and fill it with medium.  
(mulch and soil)*
- Plant plants.*
- Watch our rain garden grow.*



### *BUDGET*

- \*BLACK EYED SUSAN - \$5.00  
2 to 2 ½ ft. – 1 qt*
- \*BEE BALM- \$5.00  
2 to 5 ft.- 1 qt*
- \*BLUE MIST FLOWER - \$10.00  
2 to 3 – 1 gal.*
- \*MULCH – about \$25.00*





# Seventh Grade ESE Environmental Grant Proposal

**Students worked together to identify materials that would support their action projects and future research on the school grounds.**

<i>Item</i>	<i>Quantity</i>	<i>price</i>	<i>total</i>
<i>Treefinder ID books</i>	20	\$4.95	\$95.00
<i>bluebird boxes</i>	8	\$25.00	\$200.00
<i>black-eyed susan*</i>	3	\$9.95	\$29.85
<i>aster*</i>	3	\$9.95	\$29.85
<i>coreopsis*</i>	4	\$20.00	\$80.00
<i>russian sage</i>	2	\$11.95	\$23.90
<i>native grasses*</i>			
<i>Panicum</i>	6	\$15.00	\$90.00
<i>topsoil*</i>	10	\$5.00	\$50.00
<i>Buckets for outdoor seat</i>	35	\$3.00	\$105.00
<i>water quality test kit</i>	4	\$35.00	<u>\$140</u>
<i>Total grant request</i>			<i>\$843.60</i>

*\*matching plants donated from LAND\$279.70*



# Seventh Grade ESE

## Bay Grasses in Classes

### Horseshoe Crabs

This program is designed to give students hands-on activities that teach about a current aquatic natural resource management issue.

During the 2010 – 2011 school year, students raised horseshoe crabs and then released them in the spring at Sandy Point State Park.

Students are learning about the importance of bay grasses by constructing bay grass growth chambers in the classroom. Collaborating with our local high school, students will transplant the grasses this spring.







# Seventh Grade Science

## Trout in the Classroom

Trout in the Classroom (TIC) is an environmental education program in which students

- raise trout from eggs to fry.
- monitor tank water quality.
- engage in stream habitat study.
- learn to appreciate water resources.
- begin to foster a conservation ethic.
- grow to understand ecosystems.



During the year the program is tailored to fit the students' needs. TIC has interdisciplinary applications in science, social studies, mathematics, language arts, fine arts, and physical education. Since Environmental Science is a semester rotation, our program was run through the Grade 7 science classes and supported by grant money from Trout Unlimited.



<http://www.pptu.org/TIC.shtml>



# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 1a. Curriculum & Instruction Eighth Grade

- [Solar Decathlon](#)
- [Green Home Designs](#)





# Eighth Grade Science Solar Decathlon

For two years, our 8th grade students have attended the Solar Decathlon in Washington, D.C. The Solar Decathlon is a competition that challenges university students to design and construct energy efficient solar powered homes.

While touring the homes in the Solar Decathlon, our students applied what they learned through completing quarterly projects. These projects required them to design a component or system for a house that considered the climate and environment for a particular location and incorporated green energy in the design.

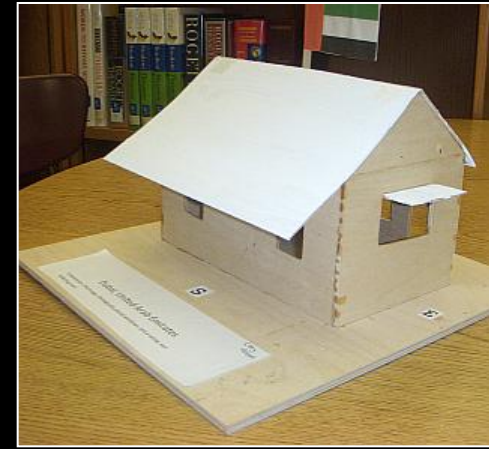
Our Science resource teacher, Mrs. Callaghan, obtained a \$750 grant from the National Education Association (NEA) that paid a portion of our students' transportation costs.





# Eighth Grade Science Green Home Designs

Student examples demonstrate their challenge to design homes that are economical and energy efficient for people all over the world in an effort to decrease our global emissions.







# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 1b. Professional Development

- [Outdoor Education](#)
- [The Bay to Your Backyard](#)
- [Bay Grasses in Classes](#)
- [National Institute of Science and Technology Summer Institute](#)



# Professional Development Outdoor Education

The Outdoor Education Program is instructed by our teachers with support from on-site teacher specialists. Professional development is provided for staff in order to “...build the capacity of MCPS educators to teach environmental education using the outdoors as a classroom.”

( <http://www.montgomeryschoolsmd.org/curriculum/outdoored/> )

Our staff, including special educators and counselors , have taken classes to prepare themselves. Currently, Rebecca Rice and Pam Spadin are taking the course *How to Teach Outdoor Education*. Sarah Nachlas and Rebecca Rice have completed the class *Tree Identification and Patterns of Settlement*. Peg Arnold, Linda Petak, and Rebecca Rice have passed the *Confidence Course* class. In addition, Pam Spadin has completed the *Stream/Pond Study Workshop* and Sharon Earle has completed *Teaching Techniques for Outdoor Ed*.







# Professional Development The Bay in Your Backyard

Four of our teachers attended this five-day class. Rebecca Rice, Pam Spadin, Diane McManus and Peg Arnold stayed on the Chesapeake Bay Foundation's Port Isobel Island.

Each day they learned about factors that affect the Bay's health by touring Tangier Island, exploring Port Isobel's marshes, and kayaking around Port Isobel.

Additionally, they toured the Blue Plains treatment facility and conducted a stream study of Seneca Creek.





# Professional Development Bay Grasses in Classes

Shari Yesnick attended this two-day training at which she was provided with curriculum materials and introduced to online resources to educate her classes on the importance of bay grasses. In addition, she received materials necessary to construct bay grass growth chambers in her classroom, including aquarium equipment, soil, sand and seeds harvested by Maryland Department of Natural Resources.

Mrs. Yesnick uses the equipment to grow grasses with the environmental science class. In the spring students from JPMS will transplant the submerged aquatic vegetation (SAV) with a group of Poolesville HS students who are completing the same project.







# Professional Development National Institute for Science and Technology Summer Institute

For three weeks in the summer of 2009, two of our teachers learned from the scientists at the National Institute for Science and Technology (NIST).

Every day the teachers conducted labs and hands-on activities that applied current technology and research to middle school science. In this picture Diane McManus and Shari Yesnick watch cement undergo an exothermic reaction.





# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 1c. Celebrations

- [Red Kayak: One School/One Book](#)
- [“Global Gamble”](#)
- [Green School Youth Summit](#)
- [Drive for Supplies](#)
- [Recycling Posters](#)
- [Awards for Saving Energy](#)



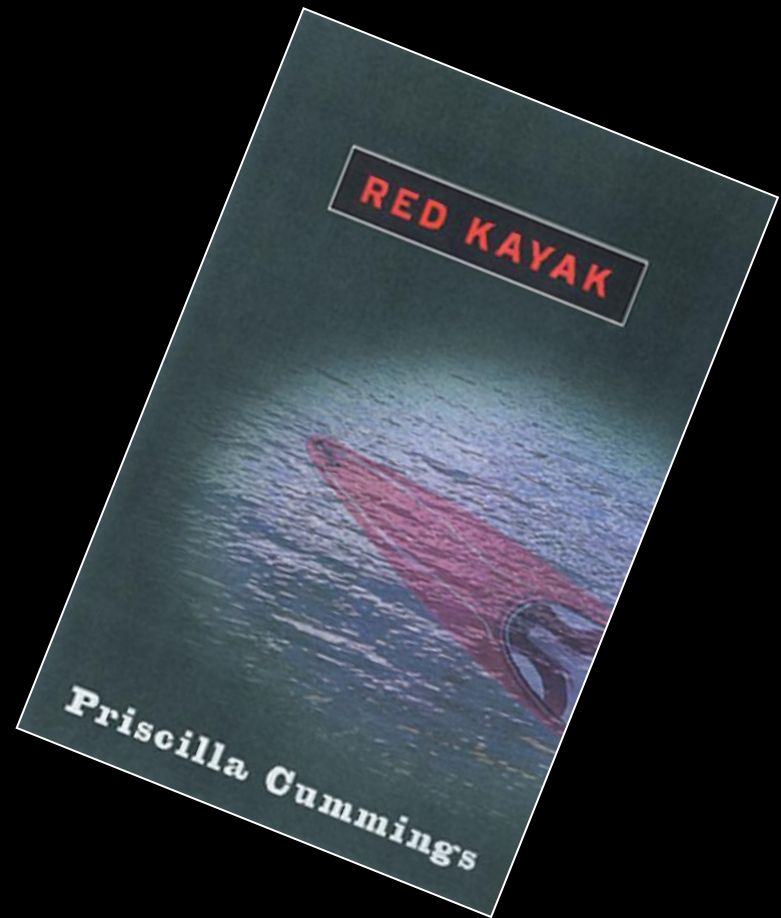


# Celebrations

## Red Kayak: One School/One Book

During the summer of 2008, all JPMS students, families and staff participated in a One School/One Book Reading Program. The selected book, Red Kayak, is set near the Chesapeake Bay.

When students returned in the fall, they engaged in curricular activities related to the book. In the story, a grieving mother finds solace in a butterfly garden.





# Celebrations

## Red Kayak: One School/One Book

In Art class, students learned about the plants that attract butterflies and created dioramas.



In Social Studies classrooms, students watched a video about the Chesapeake Bay, and then developed a list of the bay's key human and physical features. They used a map of Maryland to locate and label ten places around the Bay.

prx.org

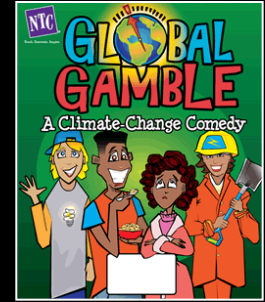
In Science classes, teachers connected the book to their curricula. Sixth graders learned about the Chesapeake Bay habitat; seventh graders made the connection between the circulatory system and hypothermia; and eighth graders learned about weather systems, specifically low pressure systems and storms.







# Celebrations “Global Gamble” Whole School Assembly



“Global Gamble,” a traveling troupe that does interactive skits with students from the audience, came to visit our school. They used a fun experience to focus on energy efficiency and the importance of global warming and climate change.



Students will learn:

- How are energy and resources related
- How does energy get wasted
- How does energy waste affect the world
- How to use energy wisely





# Celebrations Drive for Supplies

At the end of each school year, our eighth graders earn SSL hours by participating in the Drive for Supplies program sponsored by the county.

While the whole school is involved, the eighth graders coordinate the actual collection and sorting of the school supplies.



## *Drive for Supplies*

*Drive for Supplies* is a project that encourages students to donate used, but usable school supplies at the end of the school year when they clean out their lockers, book bags, and desks. At the same time, it is an opportunity to educate students about recycling.

The *Drive for Supplies* project serves many functions. The project collects used but still usable school supplies (pens, pencils, crayons, note paper, glue, rulers, notebooks, etc.) that are donated to disadvantaged children; promotes community action; saves the Montgomery County Public Schools (MCPS) money by reducing disposal costs; and reduces waste in our community landfills.



Dr. Jerry D. Weast, superintendent of schools, has endorsed the participation of the *Drive for Supplies* project in all MCPS schools.

## *History*

*Drive for Supplies*, a creative recycling project developed by \*Learn Shop, Inc., in conjunction with MCPS, encourages students to donate their unneeded, but usable, school supplies. Last year, 14,480 pounds of materials were collected and 38 nonprofit organizations, 31 MCPS schools, and 223 families benefited.

*\*Learn Shop, Inc., is a Montgomery County-based organization dedicated to improving economically disadvantaged school communities throughout the Baltimore and Washington metropolitan areas.*

**Clean out your locker!**



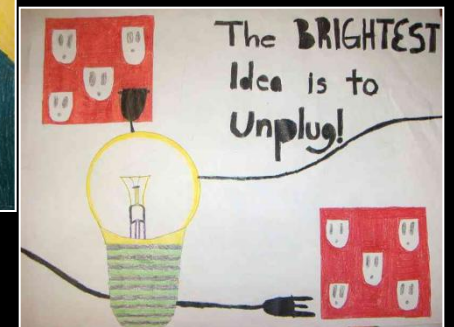
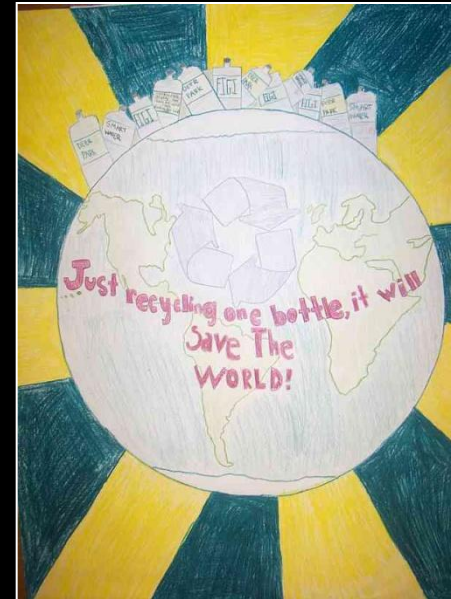
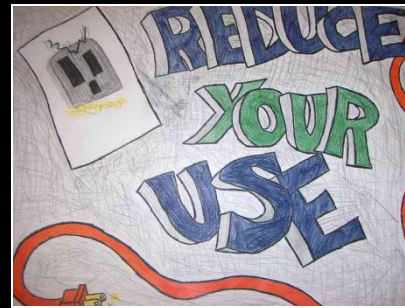




# Celebrations Recycling Posters

In art class our students created posters to inform the school about the importance of recycling. Using mainly colored pencils, students took information from classroom discussions and teacher instruction about the benefits of recycling to create their posters.

The completed posters are displayed throughout the school.





# Celebrations MCPS Recognition

**Congratulations**  
 FY2009 Top-Notch Recyclers at 36%+  
**John Poole Middle School**

John Poole Middle School  
42.3 %

Monthly Recycling %

Month	Recycling %
S	30
O	32
N	35
D	38
J	40
F	41
M	41
A	41
M	41
J	41
J	41
A	42.3

SERT's Magic Triangle  
 Success  
 Building Service 111

MCPS maintains a School Energy and Recycling Team (SERT) that supports conservation efforts in county schools. JPMS has consistently won accolades and cash awards for excellence in both energy management and recycling from SERT.

**CONGRATULATIONS**  
 Recognition of Outstanding Participation in  
 Peak Load Management (PLM)

Summer of 2010 PLM Award To:  
**John Poole Middle School**

Voucher Number: **10AMPL959**      Award Amount: **\$1000**

Issue Date: January 21, 2011      Expiration Date: March 31, 2011

Please submit this voucher to the Division of Controller  
 Pony To: Room 156, CESC  
 Award funds will be transferred into your school IAF account upon receipt.  
 Account #: 01.32104.000.10.504120

Delivery Date: 2/3/2011      Received by: [Signature]

**Congratulations**  
 to  
**John Poole Middle School**

For increasing their 2010 Recycling Rate by 10% or more.

This certificate recognizes schools that increased their recycling rate by 10% or more during the 2010 academic year. The Montgomery County Public Schools School Energy and Recycling Team (SERT) program appreciates schools that demonstrate their commitment to the environment by recycling responsibly, promoting recycling awareness, and participating in various recycling initiatives throughout the school year.

*Hilary H. Kirshman*  
 Hilary H. Kirshman,  
 SERT Program Manager

December 15, 2010

SERT's Magic Triangle  
 Success  
 Building Service 111

In the past four years, we have received over \$10,000 in recognition of our green practices:

- 2 Peak Load Energy Management Awards
- 4 SERT Action Plan Awards
- 6 Quarterly Performance Awards
- 3 Annual Recycling Awards



# Celebrations

## Green School Youth Summit

We are registered for the Maryland Association of Environmental and Outdoor Education (MAEOE) Green Schools Youth Summit. Fifteen students from each grade will be invited to attend as an end-of-the-year celebration.





# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 2. Best Management Practices

- [Recycling](#)
- [Pond restoration](#)
- [Saving Energy](#)
- [Green Communications](#)





# Best Management Practices Recycling

Students from all grade levels volunteer to stay after school to earn SSL hours as members of our Recycling Team.

These students collect mixed paper from bins in classrooms and offices around the school. Then they take the accumulated material to an area where building service workers can empty it into our large recycling dumpster. Each week waste management crews empty the dumpster.

When the recycled materials are sorted, our school contamination level is very low, meaning there is not much garbage mixed in with the recycled materials.



# Best Management Practices

## Recycling 24/7

Our school installed a three-bin recycling center for bottles, cans, mixed paper and regular trash. Its located in front of the school where anyone can access it and students getting out of cars in the drop-off circle can easily deposit their trash.



Every day in the cafeteria, students deposit their bottles and cans in the recycling bin.







# Best Management Practices Recycling Fundraiser



JPMS has committed to the Positive Behavior Interventions and Supports (PBIS) program.



## Recycle with PBIS!

Have you replaced printer cartridges recently? Upgraded your cell phone? If the answer is yes, please donate your no-longer-needed small electronic devices to support our Positive Behavior Incentives and Supports program (PBIS).

Just place your old and/or broken gadgets in the bin in the JPMS lobby. Larger items can be dropped off in the office. They will be recycled in an environmentally responsible way and 100% of the proceeds will go to support the PRIDE store and other opportunities for student recognition.

These are the kinds of items we can recycle:

Cell Phones	Laptop Computers	Inkjet Cartridges	Digital Cameras
Digital Video Cameras	Handheld Game Systems	MP3 Players	GPS Devices
Radar Detectors	Electronic Book Readers		

Thanks so much for helping PBIS and protecting our environment!

Across the school community, we teach Purpose, Respect, Integrity, Dedication and Effort – Timberwolf PRIDE – as our core values.

An important aspect of PBIS is acknowledging students who consistently demonstrate our core values. One way in which we fund these expenses is by recycling printer cartridges and small electronics. Last year this project earned \$390.00 for PBIS.



# Best Management Practices Pond Restoration

This collaboration brought the PTSA, LAND and the town of Poolesville together with our students and staff to transform the pond adjacent to our school grounds into a place for outdoor education activities. The idea was well received as evidenced by the generous donations of materials and time.



Plants that were donated included a holly, 8 forsythia bushes, 4 dogwood and 2 redbud trees, 6 Joe Pye weed and 3 butterfly bushes. Both the butterfly bushes and Joe Pye weed provide sources of nectar for butterflies, bees and hummingbirds. The dogwood and redbud, which are among the native plants we received, and the holly provide seeds, berries and nesting sites for birds.

Students in the Environmental Science class got some real, hands-on experience helping with the new plantings. All of the plants enhance the year round aesthetic value of the pond and surrounding area, especially during the growing season, and students have new opportunities to interact with the wildlife, plants and flowers.







# Best Management Practices Saving Energy

Auditing our energy use regularly helps us identify areas for improvement. Upgrades in our daily routines include the following:

- Reorganizing staff rooms so that there is only one coffee maker, refrigerator and microwave in a common area of each hall.
- Posting signage throughout the building to remind everyone to turn off unneeded lights.
- Moderating classroom lighting by manipulating the blinds.
- Placing well-marked paper recycling bins in every classroom and office.
- Reminding staff and students to turn off computer monitors when they shut down the CPUs.



Save Energy  
Please turn the light  
OFF when you leave  
the room!  
← light switch

Be bright!  
Turn off the light!



# Best Management Practices Green Communications

At JPMS, we work to minimize the paper we send home with students. Now, most communications with parents are handled electronically.

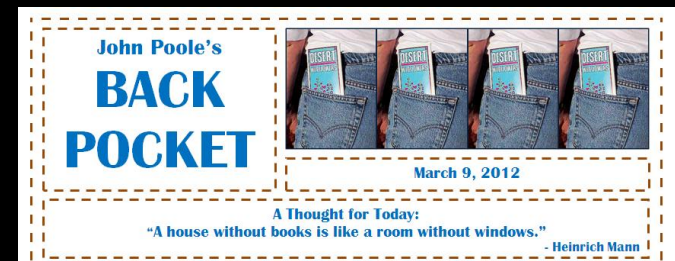
Connect-Ed is a program that allows us to send e-mails or make phone calls to all our parents and staff. This replaces the flyers and notices that used to fill backpacks routinely.

Even our weekly newsletter, the *Back Pocket*, is uploaded each week to our school website and the link is sent to parents and staff through Connect-Ed. This way, only one copy of the *Back Pocket* is printed each week for display in the school foyer.

## A message from JOHN POOLE MIDDLE SCHOOL

Hi!  
This week's Back Pocket is online at our website. You can go directly to it by following this link:  
<http://montgomeryschoolsmd.org/uploadedFiles/schools/poolems/newsletter/03-16-12BackPocket.pdf> Have a great weekend - we're delighted with the wonderful cooperation we've gotten from our kids on the MSA - just 3 more days to go! Happy St. Patrick's Day! - Mrs. Boucher

This e-mail has been sent to you by JOHN POOLE MIDDLE SCHOOL. To maximize their communication with you, you may be receiving this e-mail in addition to a phone call with the same message. If you wish to discontinue this service, please inform JOHN POOLE MIDDLE SCHOOL IN PERSON, by US MAIL, or by TELEPHONE at (301) 973-7979.



Click on the image to  
check out our newsletter.





# Table of Contents

Here's what this section looks like –  
Click on a link to jump ahead if you wish.

## 3. Community Partnerships

- [Poolesville High School](#)
- [Bluebird Houses](#)
- [Testing Water Quality](#)
- [Career Day](#)
- [Recycling Shoes](#)
- [Butterfly Release Program](#)



# Community Partnerships

## Poolesville High School

Our local high school houses the only Global Ecology program in MCPS. It is a competitive entry magnet program that draws students from around the county. JPMS seeks opportunities to collaborate with the Global Ecology students and teachers.

Annually, Global Ecology students visit John Poole to share their senior projects by presenting lessons on their work to sixth and seventh grade science classes.

High school students earn SSL hours by tutoring their younger colleagues in the JPMS after school Homework Club.

When a new science wing was added to the high school, JPMS students toured the upgraded facilities.

PHS regularly offers Project Wild training, and JPMS staff are always invited to participate. In recent years, Theresa Bliss, Patrick Stevens, and Rebecca Rice have taken advantage of this opportunity.







# Community Partnerships

## Bluebird Houses

A guest speaker from the Audubon Society and the groundskeeper from the Four Seasons Golf Course met with students to support this project.

20 bluebird houses were emptied and 4 new boxes were installed. Nests were identified and documented. Our technology teacher, Brian Grotenhuis, will teach his classes how to construct and install 8 additional boxes this spring.



### Student reflection:

We're doing this because we want to help the blue birds by making sure they have shelter and to help their population.





# Community Partnerships Testing Water Quality

Students visited Four Streams Golf Course to learn about the ways they work to keep a healthy ecosystem AND pristine putting greens.

Water samples were collected from five different locations at the golf course. Four Streams sent the water to be analyzed for evidence of runoff and harmful toxins.

During our annual community night, the Science Expo, families had the opportunity to win a golf outing donated by our partners at Four Streams.







# Community Partnerships Career Day

Every year our Counseling Office invites community members to come to school to talk with eighth graders about their various occupations.

Scientists are always among the presenters, and recent participants included both a tropical ecologist and a representative from an NGO that focuses on environmental issues.

Particular favorites from last year's Career Day were two farmers, Shawn Eubanks and Greg Glen, from Rocklands Farm, a local operation. They shared their "Holistic Agriculture" approach, which is defined on their web page as "a farming strategy where the environment, economic and social elements are equally important for agricultural sustainability."





# Community Partnerships Recycling Shoes

For the past four years, seventh grade students have partnered with Soles for Souls to collect shoes to be donated to needy people around the world.

Last year 100 % of our students were involved and together collected 711 pairs of shoes. Their work filled a human need, recycled shoes and saved resources.







# Community Partnerships Butterfly Release

For the past several years, selected students from JPMS have returned to their elementary schools to participate in a second grade culminating activity. The second graders raise butterflies from larvae, and once the life cycle is complete, they release the butterflies in their school yards.

In one word, the Monocacy Elementary School Butterfly Release would be inspirational. I was filled with respect for the 2<sup>nd</sup> graders as they shared their stories, poems and eventually let go the projects they worked so hard on.

- Mackenzie Gross

This partnership developed from a survey of 6<sup>th</sup> graders that indicated their favorite moment in elementary school had been the butterfly release. Our students wanted to be a part of this special experience again and to help younger students get as much out of it as they did.





# John Poole Middle School is proud to be green and dedicated to getting greener!

This presentation was created by the Green School Committee to honor the great work going on at JPMS.

Theresa Bliss

Chuck Boettner

Charlotte Boucher

Peggy Callaghan

Brian Grotenhuis

Joy McIntyre

Diane McManus

Shari Yesnick

6<sup>th</sup> grader Morgan Bliss!

Special thanks to our students, staff and community partners who give us so much to be proud of!