

GREENSPOT

KIDS

EDUCATOR'S
TOOLKIT



THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

GreenKids.Columbus.gov

CONTENTS

Classroom Implementation Guide
Columbus Green Walks School Tour
Worksheets: Master Copies
Community Resource Guide
Program Evaluation

PRODUCED BY

City of Columbus
Mayor's Office of Environmental Stewardship
90 W. Broad Street
Columbus, Ohio 43215
614-645-7671

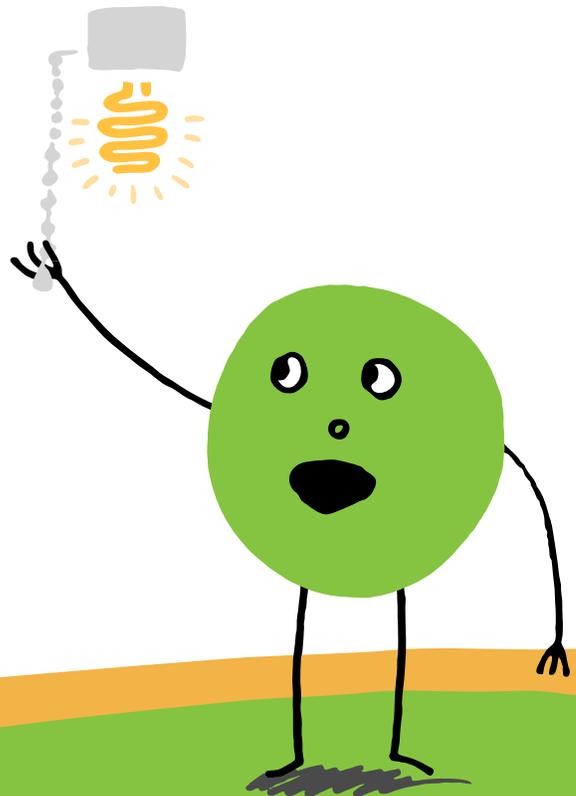
THANKS TO PARTNERS:

- Ohio Environmental Education Fund
- Columbus City Schools
- Mayor Coleman's Green Team
- Columbus Department of Public Utilities
- Columbus Department of Public Health
- Columbus Department of Recreation and Parks
- Ologie Inc.
- Columbus Metropolitan Library
- The Ohio State University
- Leave No Child Inside Central Ohio Collaborative
- Franklin Soil & Water
- Solid Waste Authority of Central Ohio
- MORPC
- Ohio Department of Transportation



GREENSPOT

KIDS CLASSROOM IMPLEMENTATION GUIDE



THE CITY OF
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MICHAEL B. COLEMAN, MAYOR

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CONTENTS

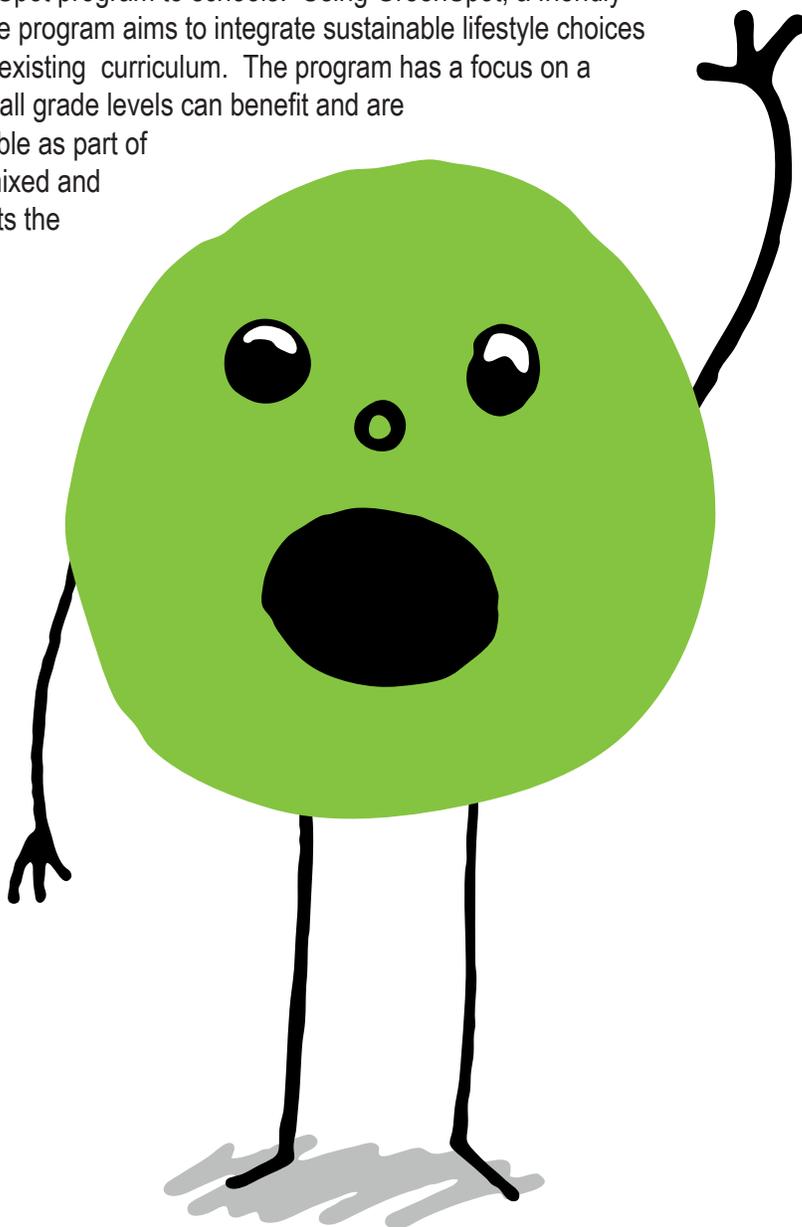
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INTRODUCING GREENSPOT

GreenSpot is a program of Mayor Michael B. Coleman's Get Green Columbus initiative. GreenSpot launched in 2008 in response to a growing curiosity local residents and businesses expressed about what 'going green' really entails. Since that time over 3500 residents and businesses have become a member of the GreenSpot program.

GreenSpot is a web-based program available online at www.ColumbusGreenSpot.org. The user can join the program as a household, a business or a community group as each has a separate, targeted application. The application prompts the user to make a series of commitments that will have a positive impact on the environment. Each member receives a window decal as recognition for the steps they are taking to promote a sustainable future.

With support from Columbus City Schools, the City of Columbus received a grant from the Ohio Environmental Education Fund (OEEF) to expand the GreenSpot program to schools. Using GreenSpot, a friendly mascot to deliver the GreenSpot message, the program aims to integrate sustainable lifestyle choices into everyday classroom life while supporting existing curriculum. The program has a focus on a first grade audience, although, classrooms of all grade levels can benefit and are welcome to participate. The resources available as part of GreenSpot Kids were designed to be easily mixed and matched by the teacher in a way that best suits the unique needs of their students. The following pages explain the new GreenSpot resources and provide recommendations on how to implement the program in your school's classrooms.



JOINING GREENSPOT

There are two ways in which schools are encouraged to join GreenSpot.

SCHOOL OR CLASSROOM

The first is for the school (or classroom) to become a member. Doing so will convey that caring for the environment is considered a priority and part of the school's culture, setting a positive example to all who pass through the school's doors.

In order to register, please visit www.ColumbusGreenSpot.org and select the Join tab (1). For a printable preview of the application click 'Office, Educational Institutions and Nonprofits Application' (2). Schools are asked to register by submitting their application online using the "Businesses and Organizations" category (3). You will see that the school must make selections from a list of options in each of five categories: Inform & Engage; Reduce, Reuse & Recycle; Conserve Energy, Conserve & Protect Water; and Travel Green. If time and care are taken during this process, you may find that going through the membership process is valuable tool serving as a self-audit to gauge your current progress and to guide your efforts into the future.

If you would prefer for your classroom to join the program in exchange for, or in addition to your school membership, please select the Community Group category (4) for a simplified application. In order to complete this registration you will be asked to specify the three things your classroom will do within the next year to protect our air, soil and water.

HOME

Additionally, teachers are encouraged to give students an assignment to go home and log onto GreenKids.Columbus.Gov to register their home as a GreenSpot with their parents. For students without access to the internet or for those who prefer not to submit their information to the GreenSpot program, a printable version of this form is available for distribution. Each child who submits an application will receive a welcome letter from the Mayor and window decal in the mail.

This activity will have multiple benefits as the student learns about his or her personal impacts on other living creatures and parents also receive this message which helps to reinforce lessons learned at home.



TOOLKIT

Now that your school is a GreenSpot member and students have had a chance to join at home, there are a series of tools available that can be mixed and matched in order to bring the message of sustainability into your classroom year round. A suggested implementation is also available in the following pages.

WEBSITE

Fill gaps in your class schedule with the enriching activities available on the GreenSpot Kids website GreenKids.Columbus.gov. Here kids can test their knowledge with an interactive quiz, play a game, read the book GreenSpot and the Dots and more. There are resources for teachers too including links to websites with lesson plans, electronic copies of GreenSpot worksheets and more.



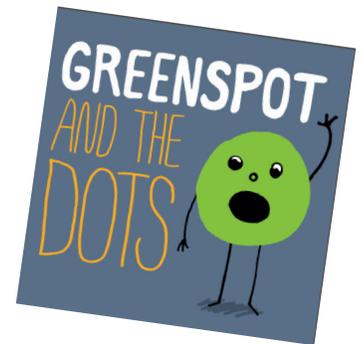
POSTERS

A poster featuring GreenSpot, the program's friendly environmental ambassador, serves as a reminder to recycle encouraging children to make sustainable behaviors a way of life. This poster is available for download at GreenKids.Columbus.gov.

A separate laminated, reusable poster allows classrooms to graph progress in adopting sustainable behaviors. Each child's name can be written on the poster using a dry erase marker. Students can then check off a square after their name each time they have earned recognition for practicing a sustainable behavior. A general list of behaviors to reinforce have been printed on the chart, but teachers can add their own that are specific to the school or classroom. Posters must be requested online at GreenKids.Columbus.gov.

CHILDREN'S BOOK

A locally specific children's book has been developed as a means to integrate sustainability into reading curriculum. The book features GreenSpot, a character inspired by the drawings of central Ohio students, who helps to transform the City of Columbus by showing his friends how to live a little greener. The book is written for the average reading level of a first grade student with subtext included to tie the storyline to science curriculum. Teachers can request a classroom set of these books for free along with another copy of the book to be kept in the school library. All Columbus Public Libraries have also added this book to their collections in order to ensure the book is available into the future. Additionally, the book is available for print online at GreenKids.Columbus.gov.



WALKING MAP

Walking is a source of physical activity and when used for transportation to the library, the store, or other errands, it reduces trips made by cars which pollute the air. The Columbus Green Walks map provides a treasure hunt adventure for children and adults. Based in Whetstone Park, the map provides clues and a route for the user to follow to a series of destinations. At each destination, the user calls a toll free, local number to receive interpretive audio information at each site. Sites selected for the Columbus Green Walk map are all natural or environmentally significant features. Maps have been distributed to Columbus City Schools, Columbus Public Libraries, and Whetstone Community Center. Additionally, maps are available by request online at GreenKids.Columbus.gov.



TOOLKIT, CONTINUED

If your class can't make it to Whetstone Park, a worksheet is available to create a customized Green Walk on your school's property. For example, a stop at power lines allows an opportunity to discuss how electricity is generated and transported to area buildings. A look at a curbside storm drain provides the opportunity to talk about where water goes when it rains and how to prevent pollution from making its way to our streams. A bus stop provides an opportunity to talk about how modes of transportation impact the air we breathe. Geology and native tree species shared in common are other items presented on the document.

GUEST PRESENTATIONS

Professionals from the City of Columbus can be scheduled to visit your classroom for a fun 45 minute presentation. Staff will work with each teacher to ensure the presentation is appropriate for students.

Staff will discuss presentation options with each teacher upon request of GreenSpot Kids materials online at GreenKids.Columbus.gov.

LOCAL RESOURCE GUIDE

A locally specific resource guide has been compiled for teachers looking to further implement environmental education beyond the GreenSpot Kids program in Columbus and surrounding areas. The guide provides information including the following:

- Presentations & field trips
- Lesson plans
- Grants
- Supplies & services
- Further reading (for kids)
- Events

AWARDS

Each year Mayor Michael B. Coleman presents the GreenSpotLight Awards to local businesses. New in 2013, the Mayor will present an award to an exceptional GreenSpot school. A reporting document may be requested from your school once a year for the purpose of determining a winner. In order to be eligible to win, schools must be a GreenSpot member located in the City of Columbus (register online at www.ColumbusGreenSpot.org) and have completed the classroom pre-test/post-test evaluation. Factors determining the award winner may include the amount of GreenSpot members per school, activities undertaken to change behavior, facilities and operations of the school administration, faculty and students. Schools can increase their chance of winning by having students participate in online activities at GreenKids.Columbus.gov. The classroom in the winning school with the most GreenSpot members will also receive water bottles, rain gauges or other items for each student as a reward for their accomplishment.



Schools are also encouraged to create their own award. Art classes can create a trophy using recycled materials. Judged by the school principal or Green Team, the trophy can be awarded to the greenest classroom once per month in order to maintain enthusiasm for the school's green effort and reward the efforts of individual classrooms.

SUGGESTED IMPLEMENTATION

GreenSpot was designed such that teachers have the flexibility to mix and match the resources available to design a customized program for their unique classroom. However, suggested implementation guidelines have been developed for teachers who prefer to follow the program as recommended. Ideally, the steps below will be spread out across the span of a school year to remain a consistent part of classroom life.

STEP 1: MEMBERSHIP

School registers as a GreenSpot location– this is a great task for a Green Team or Environmental Club, if your school has one. Involving students in the application process helps them feel responsible for follow-through and empowered to make a difference. As an alternative, you may prefer to register your classroom as a GreenSpot. After registering, you will receive a window decal in the mail to display your commitment, post this decal in a visible location with the help of your students.

STEP 2: EVALUATE

In return for the free materials provided through GreenSpot Kids, we hope to gain data on the effectiveness of the program in your classroom. Please use the pre-test/post-test forms to evaluate your class's understanding of sustainability and submit the data via email to lrstrader@columbus.gov or by mail to Mayor's Office of Environmental Stewardship, C/O Leslie Strader, 90 W. Broad St., Columbus, Ohio 43215.

STEP 3: KICK OFF

From choosing to recycle to packing your lunch using reusable containers, making sustainable lifestyle choices are an everyday occurrence. For this reason, GreenSpot was designed with the intention to have a presence in the classroom everyday. To introduce this new presence in the room, kick off the GreenSpot program by leading an outdoor activity using the Green Walk School Tour. Using clues, and audio interpretation, the activity will lead small groups of students around school property to learn about significant environmental features (such as: air quality, water quality, energy, recycling). The activity will help students to acknowledge the role the environment plays in their lives and, vice versa, the role they play in impacting the environment. Students will then suggest ways the classroom can help the environment.

STEP 4: HOMEWORK

Assign students the task of educating their parents about going green at home by visiting GreenKids.Columbus.gov. For students without access to the internet or for those who prefer not to submit their information to the GreenSpot program, a printable version of this form is available for distribution. Parents and children will sit down together to register their home as a GreenSpot member by selecting a series of behaviors they believe they can commit to at home. Each child who submits an application will receive a welcome letter from the Mayor and window decal in the mail.

STEP 5: PROGRESS (WEEKLY)

Each week, track your classroom progress with the help of students using the laminated Accomplishment Tracking Chart and dry erase markers.

STEP 6: READING

The GreenSpot children's book is a fun, positive and light hearted story with a message reinforcing sustainable lifestyle choices. Integrate the book or others suggested in the Resource Guide into an existing reading

SUGGESTED IMPLEMENTATION, CONTINUED

assignment. For example, children can take home the book to read at night with their parents, read it in class, or you can read it to them. Use the worksheet provided as follow up to further enhance reading and writing skills. Each teacher may request a classroom set of the book GreenSpot and the Dots as well as another copy to be cataloged in the school library.

STEP 7: COMPUTER

Fill gaps in the classroom schedule with the enrichment activities available on the GreenSpot Kids website. Students can take turns or visit the computer lab as a group to explore the activities online including quizzes and games. Participating in online activities can help your school win the GreenSpot Light Award!

STEP 8: EXCURSION

Reward student's effort by scheduling a fun and educational field trip or in class presentation. Field trips and classroom presentations can help students gain new perspective. For example, students may be wondering what happens to trash after it is set out for collection. A visit to the Franklin County Landfill provides an eye opening experience for children and adults as they realize the cumulative impact of our actions on the environment. Other field trip and classroom presentation options are listed in the Resource Guide.

STEP 9: CELEBRATE ALONG THE WAY!

Join in the celebration as the City of Columbus recognizes significant environmental events. Information on these events are available in the Resource Guide.

STEP 10: LESSONS

Recommended lesson plans highlighting environmental education are provided in the Local Resource Guide.

STEP 11: RECOGNITION

Go above and beyond the recommended GreenSpot programming and stand out to win a GreenSpotLight Award. In order to be eligible to win, schools must be a GreenSpot member located in the City of Columbus (register online at www.ColumbusGreenSpot.org) and have completed the classroom pre-test/post-test evaluation. Factors determining the award winner may include the amount of GreenSpot members per school, activities undertaken to change behavior, facilities and operations of the school administration, faculty and students. Schools can increase their chance of winning by having students participate in online activities at GreenKids.Columbus.gov. The classroom in the winning school with the most GreenSpot members will also receive water bottles, rain gauges or other items for each student as a reward for their accomplishment.

STEP 12: EVALUATE

After implementing the GreenSpot program for approximately 8 weeks, once again, please submit a post-test evaluation form. Forms can be submitted via email to lrstrader@columbus.gov or by mail to Mayor's Office of Environmental Stewardship, C/O Leslie Strader, 90 W. Broad St., Columbus, Ohio 43215.

STEP 13: CONTINUE ON

With the resources provided, it is possible to continue on with your sustainability programming beyond the recommendations set forth in the GreenSpot Kids program. For example, organize a volunteer litter clean-up at school or plant a community garden. The possibilities are endless. Find what fits with your school, have fun and get green!

GREENSPOT

KIDS

COLUMBUS GREEN WALKS SCHOOL TOUR



THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

GreenKids.Columbus.gov

ABOUT GREENSPOT KIDS & COLUMBUS GREEN WALKS

GreenSpot Kids was developed by the Mayor's Office of Environmental Stewardship with support from the Ohio Environmental Education Fund. The resources available through the program are free to teachers and were designed to be easily mixed and matched in a way that best suits the unique needs of each class.

The Green Walks component of the GreenSpot Kids program was created in partnership with the Columbus Public Health's Healthy Places Program. The school tour activity is designed to give students an enriching experience supportive of science curriculum that can be easily enjoyed on school grounds. Parents with children of all ages are invited to use this resource as well. Many of these same lessons and activities are great for families to do together. Simply follow the instructions below to get started.

GreenSpot Kids is an approved partner of Columbus City Schools.

For more resources from GreenSpot Kids visit GreenKids.Columbus.gov

SCHOOL TOUR INSTRUCTIONS

Note to Teachers:

This school tour is a great activity for gym teachers and regular classroom teachers. The school tour and activity sheets that follow are appropriate for grades 1 and up. The school tour is best done in small groups with the help of an adult guide.

Step 1:

Read the clue to the students. Clues will direct you to each of 7 common school features. (You may want to take the walk on your own first to ensure you know where you will be taking students.) If your school does not have one of the listed features, simply skip that feature and move onto the next one.

Step 2:

Let students shout answers to the clue then walk, run or skip to that location.

Step 3:

Using a speaker phone, call 614-645-8110 and enter the extension listed under each subheading. You will hear a description of each feature explaining how it impacts the environment. (For your convenience, the audio script also has been provided in case you prefer to read it aloud to the group.)

Step 4:

After listening to the audio, simply hang up. (You will call again at each of the seven features.)

Step 5:

Further engage students with the suggested follow-up question or activity.

CLUE 1: FIND THE PLACE YOU CATCH A RIDE HOME.

ANSWER:

Bus stop/Carpool lane and/or Bike rack

CALL EXTENSION NUMBER:

120

AUDIO SCRIPT:

A main source of air pollution is from cars. If we share a ride with our friends, take the bus, walk or ride a bike, we can help keep the air clean. Making these changes also saves energy used to power cars.



FOLLOW UP ACTIVITY:

Other than school, where do you go that you could start taking the bus, riding your bike, sharing a ride with a friend or walking instead of riding in a car? (Ideally, students will brainstorm places like sports practice, library, the park, grocery store, etc.)

CLUE 2: FIND THE ROOM THAT HOLDS THOUSANDS OF BOOKS.

ANSWER:

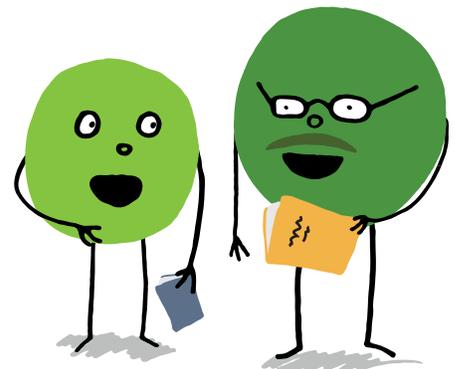
Library

CALL EXTENSION NUMBER:

121

AUDIO SCRIPT:

Did you know that libraries are some of the best recyclers? Libraries allow people from all around the community to share books, movies and music instead of having to buy their own copies. There are 22 public libraries in Columbus and each one collects books that will be interesting to the people who live nearby. All of the library branches combined have nearly three million books for you to enjoy. Now, that's a lot of reading!



FOLLOW UP ACTIVITY:

What is your favorite book in the school library? Guess how many times students have read it at your school? How many books would that save from being printed?

CLUE 3: LOOK UP TO SPOT AN ELECTRIC HIGHWAY.

ANSWER:

Power lines

CALL EXTENSION NUMBER:

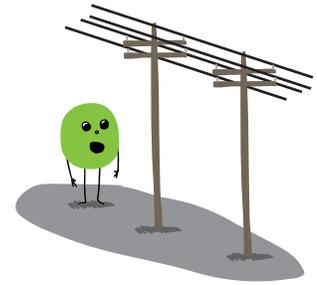
122

AUDIO SCRIPT:

In Ohio, electricity is mainly generated by burning coal at power plants. The electricity then travels far, through power lines that lead to every building in the area. When you flip on a light switch in your house, power flows through those lines, to your house, and to the wires connected to the switch and the light bulb. Generating electricity can be hard on the environment because it uses up natural resources like coal and it pollutes the air. Luckily though, you can save energy and help the earth easily by turning on lights only when you are using them.

FOLLOW UP ACTIVITY:

Coal is only one way power is made. Can you name another one that is better for the earth? (Ideally, students will list solar and wind power.)



CLUE 4: IT'S ALL AROUND YOU... JUST LOOK UP.

ANSWER:

Atmosphere

CALL EXTENSION NUMBER:

123

AUDIO SCRIPT:

What do you see when you look up? Can you tell by looking at the sky if the air is clean? Not usually. But clean air is important to everything that lives in our world. There are many things we can do every day to prevent pollution and help keep our air clean. We can turn off lights when we're not using them or we can walk or ride our bike instead of going in the car. Planting a tree also can help clean the air. Each small thing we do adds up and together, we can make a difference!

FOLLOW UP ACTIVITY:

Look up in the sky. If there are clouds, what do they look like?



CLUE 5: FIND THE PLACE WHERE THE RAIN DISAPPEARS UNDERGROUND.

ANSWER:

Storm drain

CALL EXTENSION NUMBER:

124

AUDIO SCRIPT:

When rain falls onto the ground, it goes down the storm drain. Under the ground, pipes then take the rain water somewhere else, usually to the nearest river. But before rain runs into a storm drain, it flows over roof tops, roads and parking lots. As the water runs over these surfaces, it picks up pollution like oil and litter. We can prevent pollution from getting into the nearest river by putting our trash into the trash can or recycling bin.



FOLLOW UP ACTIVITY:

Do you know the name of the stream closest to your school or house? If not, you can find it on a map. All the streams in Columbus eventually connect to the Scioto River. The Scioto River then connects to the Ohio River and then into the Mississippi River where it finally is released into the Gulf of Mexico. Now, that's a long way to travel!

CLUE 6: FIND THE BIG GREEN BOX WHERE PAPER, PLASTIC AND METAL ARE COLLECTED FOR A NEW PURPOSE.

ANSWER:

Recycling dumpster

CALL EXTENSION NUMBER:

125

AUDIO SCRIPT:

Recycling conserves our natural resources like trees, rocks and oil. When we recycle items like paper, plastic and metal, they are taken to a facility to be sorted and sold to companies that make brand new products from them.

FOLLOW UP ACTIVITY:

www.RecycleColumbus.org is the place where you can learn all about how to recycle at home. Big blue recycling carts are being distributed to eligible households starting in spring of 2012 to make recycling easier for you at home. What items will you put in the blue recycling bin?



CLUE 7: FIND THE PLACE WHERE YOUR SCHOOL PROUDLY DISPLAYS ITS GREEN ACHIEVEMENTS.

ANSWER:

GreenSpot membership window decal (www.ColumbusGreenSpot.org)

CALL EXTENSION NUMBER:

126

AUDIO SCRIPT:

There are more than 3,500 GreenSpot locations throughout Columbus, including homes, businesses, schools and other organizations. All GreenSpot members make a pledge to care for the environment.

FOLLOW UP ACTIVITY:

What is your favorite way to care for the environment?

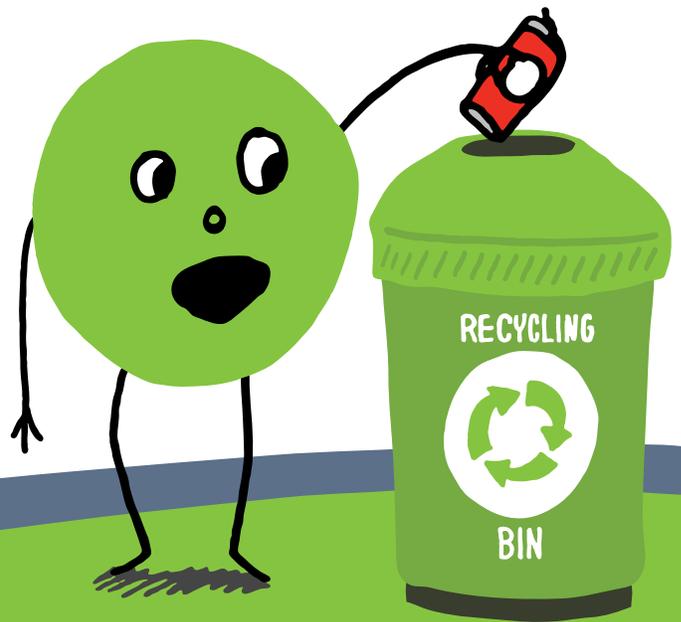


THANKS FOR TAKING A GREEN WALK TOUR!

We hope you enjoyed the Green Walk tour of your school site. If your students would like to take another tour, the Columbus Green Walk map and audio tour of Whetstone Park, as well as many other walks featuring Columbus art, are also available online at GreenKids.Columbus.gov

GREENSPOT

KIDS WORKSHEETS: MASTER COPIES



THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

GreenKids.Columbus.gov

NAME: _____

GREENSPOT: MAKE A WALKING MAP FOR YOUR SCHOOL!

Walking or riding the bus to school is one thing that keeps Green Spot, green. Use the space below to draw routes where you could walk to places around your school. Try to draw routes to as many of the things on this list below as you can! Try to pick routes to walk where you feel safe, where there are crosswalks, and where there are sidewalks. If you can't find a route where you feel safe, draw how you would like the street to look so that it is safe for walking.

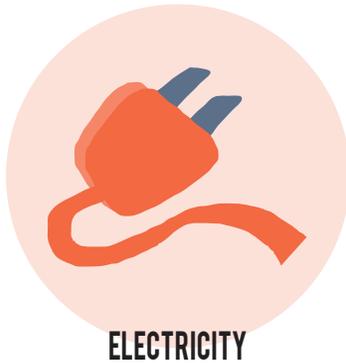
PARK	FRIENDS' HOUSES	BUSSTOP	ATMOSPHERE
GROCERY STORE	PLACES TO EAT	CARPPOOL LANE	STORM DRAIN
LIBRARY	PLACES TO SHOP	BIKE RACK	RECYCLING DUMPSTER
YOUR HOUSE	PLACES YOU LIKE	POWER LINES	GREENSPOT MEMBERSHIP DECAL



GREENSPOT WORKSHEET

NAME: _____

The things we do everyday cause changes in the environment which can impact the health of people, plants and animals. Draw a line connecting each natural resource to the way it is used and again to a simple way to help the earth.



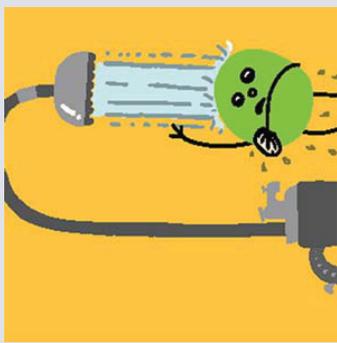
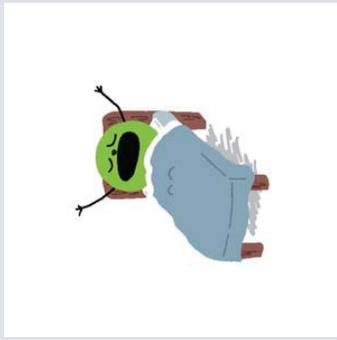
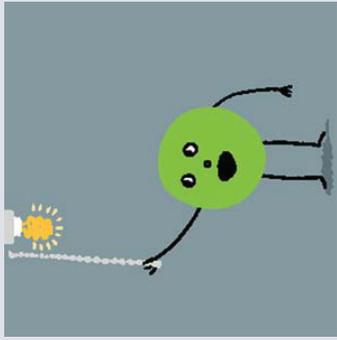
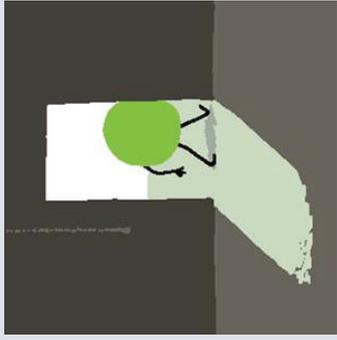
GREENSPOT: CREATE YOUR OWN STORY

NAME: _____

Use the pictures below to tell your own story of what GreenSpot could do to help make your neighborhood green.

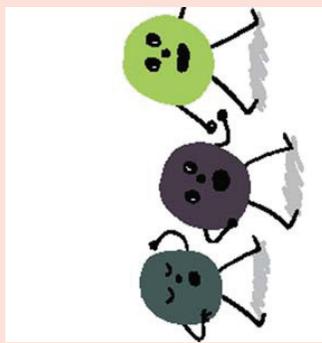
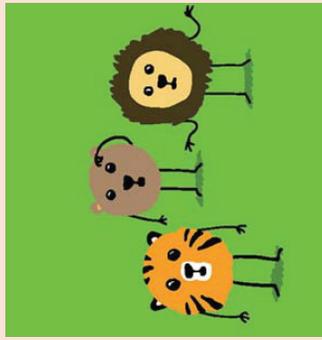
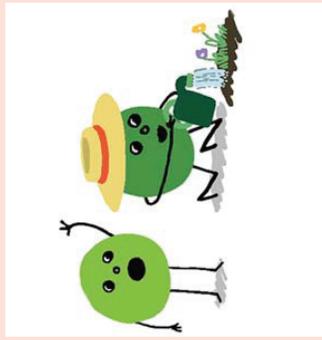
1

Use one of these pictures to begin your story



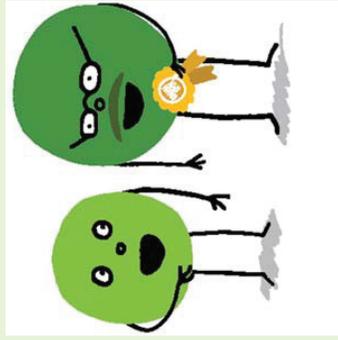
2

Use one of these pictures to continue your story



3

Use one of these pictures to end your story





LEARN

JOIN

SHARE

GreenSpot is designed for people in our city as a place to learn about living and working greener.

Join online at www.ColumbusGreenSpot.org

OR

Submit the application below to:

City Hall
ATTN: Environmental Steward Office
90 W. Broad Street
Columbus, Ohio 43215
greenspot@columbus.gov

APPLICATION / HOUSEHOLDS

Name:
Phone:
Street Address:
City:
Zip Code:
Email:

Tell us how you plan to make your home a GreenSpot by making **two commitments in each of the three categories below:**

1. Here's how my family will conserve energy - **Choose (2)**

- I will replace my regular incandescent light bulbs with high-efficiency compact fluorescent ones.
- I will drive 10 fewer miles per week, take the bus or carpool at least once a week.
- I will completely unplug appliances after I turn them off.
- I will purchase foods, goods, and services that are grown or produced close to home.
- I will insulate my water heater, and turn it down when I leave for trips.
- I will turn my thermostat up in the summer, and down in the winter or I will install a programmable thermostat.
- Other way I will conserve energy: _____

Continued



LEARN

JOIN

SHARE

2. Here's how we will conserve & protect water - Choose (2)

- I will water my yard only once a week, keeping in mind that 1 inch of rain is enough to keep most lawns healthy.
- I will install a rain barrel in my yard to collect rainwater, and use it to water my plants.
- I will run my dishwasher and washing machine only when they're full.
- I will install water-saving heads on my sinks and showers.
- I will install a low-flush toilet, or put a bottle of water or a displacement bag in my tank so I use less water with each flush.
- I will plant a tree on my property.
- I will install a rain garden on my property.
- I will select compost-based mulches for landscaping.
- I will reduce the use of fertilizers, herbicides and pesticides by spot treating problem areas and hand pulling weeds.
- I will use native plants in my landscaping.
- I will remove pet waste from my yard in a timely manner.
- I will sweep debris from sidewalks and driveways and dispose of it in the trash.
- I will wash my car over grass or use a commercial car wash.
- Other way I will conserve & protect water: _____

Here's how we will reduce, recycle and reuse- Choose (2)

- I will carry reusable bags when I shop.
- I will choose products that use less packaging and less harmful material.
- I will request to be taken off junk mailing lists, stop catalog orders, and pay my bills online.
- I will avoid one-use items such as paper plates.
- I will buy small amounts of items that have a short shelf life and bulk amounts of items that don't go bad quickly.
- I will donate unused or unwanted items instead of throwing them away-and explore thrift stores instead of always buying something new.
- I will recycle paper, steel, glass, and plastic by using my local curbside subscription program or SWACO drop-off locations.
- I will separate my yard waste (like grass clippings and leaves) from other trash and leave it by the curb on my assigned day.
- I will turn yard waste and kitchen scraps into compost.
- Other way I will conserve & protect water: _____

GREENSPOT

KIDS COMMUNITY RESOURCE GUIDE



THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

GreenKids.Columbus.gov

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The following classroom resources available through partner organizations are recommended for use in conjunction with the GreenSpot Kids program.



PRESENTATIONS & FIELD TRIPS

Many organizations throughout central Ohio with environmental expertise are available to come to your classroom to provide educational presentations or have your class tour their facility as part of a field trip. A sampling of these organizations is listed below:

CITY OF COLUMBUS, DEPARTMENT OF PUBLIC UTILITIES, WASTE WATER TREATMENT PLANT:

Teach students about what happens to water after it flows down the drain at the Jackson Pike Waste Water Treatment Plant. Call 645-3138 x 1200 or 645-3248 x 2219.

CITY OF COLUMBUS, DEPARTMENT OF RECREATION AND PARKS, OUTDOOR EDUCATION CENTER:

Nature trails, caves and the Scioto River form the backdrop for your field trip. Staff lead your choice of eight separate programs on topics such as animals, trees, fossils, water quality and more. Fees apply. Call 645-3380 or visit <http://parks.columbus.gov>.

CITY OF COLUMBUS, KEEP COLUMBUS BEAUTIFUL: Choose from a variety of in-class presentations and activities focusing on community pride, litter, recycling and more. Visit www.keepcolumbusbeautiful.org or call 645-2421 for more information

COLUMBUS ZOO AND AQUARIUM: Offering in-class, virtual and field trip options with an emphasis on animal wildlife. Fees apply, but limited scholarships are available. Visit www.ColumbusZoo.org to view options.

COSI: Visit COSI downtown to enjoy exhibits that teach concepts related to all aspects of sustainability including waste and recycling at Trashformations, energy at the Innovation Showcase, water at Lily Pad and more! COSI on Wheels and outreach programming is available as well. Fees apply. Visit www.cosi.org or call 228-2674.

FRANKLIN PARK CONSERVATORY & BOTANICAL GARDENS: Programs inspired by horticulture with topic areas including nature, art, the environment and food. On-site field trips and school outreach programs are offered. Fees apply. Call 645-5892 or visit www.FPConservatory.org.

FRANKLIN SOIL AND WATER CONSERVATION DISTRICT: In-class programming is available on the topics of our soil and water natural resources, conservation and human impact on the environment. Additionally, Franklin Soil and Water offers educator trainings and activity kits for loan. Visit www.franklinswcd.org for more information on the resources available.

GRANGE INSURANCE AUDUBON CENTER: Choose from a variety of half-day or full-day field trips led educators focusing on conservation as well as environmental and life science topics. Fees apply. Call 545-5486 or visit <http://grangeinsuranceauduboncenter.org>

METRO PARKS: Field trips and in-class presentations are available free on a variety of topics including animals, plants, earth science, history and more. Visit www.MetroParks.net or call the Metro Parks Information line at 891-0700.

MID-OHIO REGIONAL PLANNING COMMISSION: Learn about air pollution forecasting, how pollution is formed and the simple ways you can protect the air you breathe. Visit www.morpc.org or call 228-2663.

PRESENTATIONS & FIELD TRIPS, CONTINUED

OHIO WILDLIFE CENTER: Schedule animal ambassadors to visit your school with the Wildlife Encounters program. Call 793-WILD or visit www.OhioWildlifeCenter.org

RUMPKE: Take a virtual tour of the facility where recycling is sorted at www.RumpkeCleanAndGreen.com.

SOLID WASTE AUTHORITY OF CENTRAL OHIO: Take a field trip to see where all trash in Franklin County winds up if it isn't recycled– the landfill. Bus reimbursement available. Visit www.swaco.org or call 871-6740.

OHIO WILDLIFE CENTER: Schedule animal ambassadors to visit your school with the Wildlife Encounters program. Call 793-WILD or visit www.OhioWildlifeCenter.org

LESSON PLANS

AIR NOW: Air Now was developed by the U.S. EPA to provide easy access to national air quality information. The website offers a variety of free teacher resources, including a toolkit with easy-to-use and engaging lesson plans and activities to teach students about the connections between air quality, health, weather, and other related science topics, as well as actions students can take to protect their health and reduce air pollution. Access the information online at www.AirNow.gov.

NATIONAL ENERGY EDUCATION DEVELOPMENT PROJECT (NEED): NEED offers materials on energy use, energy efficiency, and new energy technologies and makes an ongoing effort to keep curriculum materials correlated to state standards and to the National Science Education Standards. Visit www.need.org for more information.

OHIO ENERGY PROJECT: Refer to the Ohio Energy Project website for upcoming professional development opportunities for primary teachers at www.ohioenergy.org on the topic of global climate change.

PROJECT WET: The development of a water ethic can begin at an early age. Children benefit from parents, educators and mentors who recognize not only the scientific but also the social and cultural aspects of water. The core of the program is the Project WET Curriculum and Activity Guide for kindergarten through twelfth grades. A collection of hands-on, easy to use and fun activities incorporate a variety of formats, such as large and small group learning, whole-body activities, laboratory investigations, discussion of local and global topics and involvement in community service projects. Supplementary resources are available which complement and enrich many of the activities. In order to obtain a Curriculum and Activity Guide teachers must attend an Educator Workshop. Contact the Ohio Department of Natural Resources for more information at 265-6610.

PROJECT WILD: Project WILD is a supplementary education program emphasizing awareness, appreciation, and understanding of wildlife and natural resources. Attractive and easy to use, Project WILD is an ideal way to supplement your curriculum and fire the imagination of your students.

LESSON PLANS, CONTINUED

Project WILD teaches young people how to think about wildlife, not what to think. Students in Pre-K through twelfth grade learn basic concepts about wild animals, their needs and importance, and their relationships to people and the environment. The hands-on, diverse activities help develop problem-solving and decision making skills in determining responsible human actions. In order to obtain a Curriculum and Activity Guide teachers must attend an Educator Workshop. Contact the Ohio Department of Natural Resources by phone 1-800-WILDLIFE, by email outdoor.education@dnr.state.oh.us or find more information online at www.OhioProjectWild.com.

PROJECT LEARNING TREE: Project Learning Tree is a comprehensive environmental education program that helps educators with balanced non-biased learning experiences for PreK through 12th grades that encompass the total environment - land, air, water, plants and animals (including humans). In order to obtain Project Learning Tree materials teachers must attend an Educator Workshop. Contact the Ohio Department of Natural Resources at 265-6657.

WINDOWS ON WASTE: Windows on Waste is an interdisciplinary, environmental studies resource for elementary teachers and other environmental educators. It endeavors to meet the needs of competency-based education and constructivist approaches to teaching and learning. The lessons are grounded in general environmental studies concepts as applied to solid waste management issues, with particular emphasis upon recycling and litter prevention. The lessons also address many important educational concerns in Ohio.

Windows on Waste is made available to educators in Ohio through in-service or partnership programs sponsored by the Ohio Department of Natural Resources, Division of Recycling and Litter Prevention and its local community affiliates. Call 265-6333 for more information.

GRANTS

AEP TEACHER VISION GRANTS: Teacher vision grants offer amounts up to \$500 for projects that have an academic focus and a goal to improve student achievement. AEP has a special interest in science, mathematics, technology, electrical safety, the balanced study of energy and the environment, and energy efficiency. Learn more online at www.AEP.com/go/teachergrants.

GREEN SHANNY FOUNDATION: Supporting environmental projects with grants up to \$1,500 in each of three categories: 1) Projects that educate today's youth on the importance of environmental issues and/or develop their potential as environmental leaders. 2) Projects that initiate action to work toward a more sustainable future, green energy or alternative transportation. 3) Projects that advocate on behalf of the environment, green energy or alternative transportation and/or attempt to influence public policy regarding these issues. More information is available at GreenShannyFoundation.org.

GREENWORKS! Grants up to \$1000 are available through this program of Project Learning Tree for schools and affiliates. GreenWorks! blends service activities with the academic curriculum and addresses real community needs as students "learn by doing." GreenWorks! action projects make a difference in young people's sense of responsibility toward their communities, and in their understanding of their relationship to the environment. Some examples of past grant projects include habitat restoration, watershed improvement, outdoor classrooms, and energy conservation. Visit www.plt.org for more information.

GRANTS, CONTINUED

OHIO DEPARTMENT OF NATURAL RESOURCES – WILD SCHOOL SITES: The Division of Wildlife offers WILD School Sites grants to local schools, government agencies, non-profit organizations and other school-oriented facilities to start an outdoor classroom. Forty grants of \$500 each are available every year. The grants are designed to provide funding for materials, equipment and activities that are otherwise unaffordable to the school or organization. These grants are not intended to be used as an ongoing source of funding for outdoor classroom projects. They are designed to be start-up grants for new sites or expansions of current sites. Grant applications are accepted January 1 through May 31 each calendar year, or until funding is exhausted. Visit www.WildOhio.com for more information.

OHIO ENVIRONMENTAL EDUCATION FUND: Created by the General Assembly in 1990 to enhance Ohio citizens' awareness and understanding of environmental issues, OEEF is administered by the Ohio EPA and provides approximately \$1 million annually in grants to support environmental education efforts within the state of Ohio. General grants are available for \$5,000-\$50,000 and mini-grants for projects costing between \$500 and \$5000. There are two grant cycles annually, with application deadlines on January 15 and July 15. Visit www.epa.ohio.gov/oeef for more information.

OHIO EPA CLEAN DIESEL SCHOOL BUS RETROFIT GRANT: This program offers grants up to \$300,000 to retrofit diesel school buses with pollution control equipment and idle reduction equipment, to reduce student and driver exposure to the harmful pollutants in diesel exhaust and to conserve fuel. Application deadlines are every March 1 and September 1. Public school districts and county developmental disability programs in Ohio are eligible to apply. More information is available at www.epa.ohio.gov/oeef/schoolbus.aspx.

SOLID WASTE AUTHORITY OF CENTRAL OHIO: Local governments, school districts, non-profits, and charities can apply for SWACO's grant program annually in the spring. Grants are designed to assist projects that further SWACO's mission of reducing waste, increasing recycling, and growing reuse efforts. A 25% cash or in-kind match is required. Visit www.swaco.org for more information.

SAFE ROUTES TO SCHOOL: \$1000 mini-grants may fund activities ranging from the nuts and bolts that help start or sustain a program to new ideas that explore the range of benefits of safe walking and bicycling. The National Center invites student and adult leaders to consider their school's needs and interests and to propose solutions that are also part of a broader safe walking/bicycling to school effort. Visit www.saferoutesinfo.org.

SUPPLIES & SERVICES

AIR QUALITY ALERTS: Every day of the year, the Mid-Ohio Regional Planning Commission is forecasting air quality (ozone and particle pollution) in central Ohio. These alerts help inform school decisions regarding outdoor activities on days when pollution levels reach an unhealthy level. A free tool, Air Update, allows your school to embed the air quality forecast onto the school's website. Schools can register administrative personnel to receive email notifications when an Air Quality Alert is issued. Learn more online at <http://airquality.morpc.org>.

COMMUNITY GARDENING: Growing to Green at Franklin Park Conservatory provides design assistance and program support to schools interested in creating a school yard-learning garden. Call 645-5892 or visit www.FPConservatory.org.

ENVIRONMENTAL EDUCATION COUNCIL OF OHIO (EECO): EECO provides educator certification in environmental education, an annual educator conference and a guide to best practices. Visit www.eeco-online.org.

KEEP COLUMBUS BEAUTIFUL: Plan a litter clean up or spring planting day service project for your school. Keep Columbus Beautiful can help by providing gloves, trash bags, shovels and a variety of other supplies to help you get started. Visit www.keepcolumbusbeautiful.org or call 645-2421 for more information.

NEWSLETTERS: Newsletters from the following organizations provide the most up to date information on a variety of sustainability related topics:

- Get Green Columbus from the Mayor's Office of Environmental Stewardship. Visit www.getgreencolumbus.org to subscribe.
- SWIFT from Franklin Soil and Water Conservation District. Visit www.franklinswcd.org to subscribe.
- Teacher e-news from COSI. Visit www.cosi.org to subscribe.
- Educator's Newsletter from the Columbus Zoo & Aquarium. Visit www.colszoo.org to subscribe.
- Wild Ohio from the Ohio Department of Natural Resources. Visit <http://www.ohiodnr.com/wildlife>

REPORT LITTERING: Litter as small as a cigarette butt can be reported online or over the phone through the Environmental Crimes Task Force of Central Ohio. Simply enter the incident online at www.itsacrime.org noting details such as the time, location, license plate number and vehicle model.

STORM DRAIN MARKER PROGRAM: Your class can help protect water quality by applying vinyl markers on curbs near storm drain inlets. Storm drain markers remind people that dumping into the storm drain contributes to pollution and endangers wildlife. The project is part of the "We All Live Downstream" pollution prevention public education program coordinated by the City of Columbus, Department of Public Utilities. Labels are applied easily with glue and kits are available at no charge by calling 645-2926.

WALKING SCHOOL BUS/BICYCLE TRAINS: The federal Safe Routes to Schools program simultaneously promotes health, safety and alternative modes of transportation that better for the environment like walking and biking. Together with parents, your school can organize a walking school bus or bicycle train to realize the multiple benefits of alternative transportation. Visit www.saferoutesinfo.org for a guide to developing a program at your school. Additionally, contact Columbus Public Health to see if your school qualifies for assistance in starting a Safe Routes to School program in partnership with the Ohio Department of Transportation.

WASTE NOT CENTER: Donated materials that otherwise would be discarded find new life in the classroom. Teachers pay a small annual membership fee in order to obtain an unlimited quantity of materials. The Center accomplishes the dual objectives of enabling teachers to obtain materials for their work that would otherwise be unaffordable and reducing the burden on local solid waste disposal systems. www.wastenotcenter.org or call 228-2663.

FURTHER READING (FOR KIDS)

Cherry, Lynne. (1990). *The Great Kapok Tree: A Tale of the Amazon Rain Forest*. New York: Harcourt. About to cut trees in the rainforest, a man dreams of the ways each animal depends on the Kapok Tree.

Child, Lauren. (2002). *What Planet Are You from Clarice Bean?*. New York: Orchard Books. A fun story from the Clarice Bean series where Clarice learns about helping the environment.

Geisel, Theodor Seuss, and Dr. Seuss. (1971). *The Lorax*. New York: Random House Books for Young Readers. How could we have a list of books on sustainability without the most famous environmental picture book! The Lorax is a timeless classic about the horrible effects of reckless development.

Glaser, Linda. (2000). *Our Big Home: An Earth Poem*. Brookfield, CT: Millbrook Press. Pictures filled with a joyful optimism accompany a poem that touches on several of the elements of the earth we all share- wind, sun, water, soil, and more.

Jackson, Ellen. (2005). *Earth Mother*. New York: Walker Books for Young Readers. Soft illustrations follow the Earth Mother's gentle walk as she tends her earth, listening to the problems of her creatures.

Jenkins, Steve. (2006). *Almost Gone: The World's Rarest Animals*. New York: HarperTrophy. A set of beautiful paper collages surveys a variety of animals ranging from endangered, to extinct, to replenishing their population.

Lalor, Pauline, and Sally Morgan. (2000). *World Food*. UK: Franklin Watts Ltd. A quick trip into the various environmental aspects of something we can't live without- food! Includes lots of pictures and an attractive, modern layout.

London, Jonathan. (2005). *Giving Thanks*. Cambridge: Candlewick. Caring for the environment can begin with the simple recognition of all that nature provides.

Lorbiecki, Marybeth. (2007). *Paul Bunyan's Sweetheart*. Missouri: Sleeping Bear Press. In this original tall-tale, Paul Bunyan tries to woo the sweet Lucetta by providing conventional solutions to her challenges only to find that all he needs to do is take better care of the earth.

McDonald, Megan. (2004). *Judy Moody Saves the World!*. Cambridge: Candlewick. A silly story in the Judy Moody series follows third grader Judy as she applies what her class learns about the environment to her family's habits.

Morichon, David. (1998). *Pollution? No Problem*. Brookfield, CT: Millbrook Press. Albert tries to find ways to deal with the pollution his invention is producing in this simple story.

Nelson, Sara Elizabeth. (2006). *Let's Save Water!* (Pebble Books). New York: Pebble Books. What could be better than learning to read while gaining practical knowledge about caring for the earth? While this easy reader contains some longer words, they're good ones to know- polluting, wasting, and danger.

FURTHER READING (FOR KIDS), CONTINUED

Rose, Deborah Lee. (2001). *The People Who Hugged the Trees: An Environmental Folk Tale*. Colorado: Roberts Rinehart Pub. Today tree hugging usually refers to cheesy and useless environmental pursuits. However, 300 years several hundred villagers risked their lives in India to protect the trees they needed to survive. You'll never think of tree hugging the same way again!

Schimmel, Schim. (2001). *The Family of Earth*. Chanhassen, MN: North Word Press. Poetic text shares the poignant message that animals and earth must share earth's resources accompanied by adorable animals set amongst images of the earth in space.

Sheather, Allan, and Kim Michelle Toft. (1998). *One Less Fish*. Watertown, MA: Charlesbirdge. Written in rhyme, younger children count backwards from twelve to zero while older children explore the reasons behind why the brightly depicted fish are disappearing in more detailed text.

Taback, Simms. (1998). *Joseph Had a Little Overcoat*. New York: Viking. In an engaging story, worthy of the Caldecott Medal it received, Joseph finds ways to reuse his overcoat as it becomes more and more worn.

Compiled by Erin Reilly-Sanders

Cole, Henry. (2007). *On Meadowview Street*. New York: harper Collins. Caroline moves into a new neighborhood and with help from her parents turns their backyard into a meadow on Meadowview Street.

Fleming, Denise. (1996). *Where Once There was a Wood*. New York: Holt. Examines the many forms of wildlife that can be displaced if their environment is destroyed by development.

Harper, Joel. (2006). *All the Way to the Ocean*. California, Freedom Three Publishing. An inspirational story about 2 best friends and their discovery of the cause and effect relationship between our cities' trash filled storm drains and the world's oceans, lakes and rivers.

Locker, Thomas. (1993). *Where the River Begins*. Penguin Group. Two young boys and their grandfather go on a camping trip to find the source of the river that flows by their home.

Mayer, Mercer. (1993). *Just a Gum Wrapper*. Connecticut: Reader's Digest Kids. In this Little Critters book the critters learn that we need to take care of the earth because it takes care of us. They give many examples of how they try to do their part.

Compiled by Linda Pettit

EVENTS

AMERICA RECYCLES DAY: Occurring annually on November 15th America Recycles Day aims to educate and motivate people to recycle. Get involved online at www.AmericaRecyclesDay.org or call Keep Columbus Beautiful at 645-2421.

CAR FREE DAY: Typically celebrated locally in September, Car Free Day challenges people to travel without their car for a day to benefit the environment. Temporary public parks are created out of parking spaces to demonstrate what could be done with our space if there were fewer cars on the road. Get your own Car Free Spot on the map or find out more about getting involved by visiting www.carfreedaycolumbus.org a service of the Mid-Ohio Regional Planning Commission.

CENTRAL OHIO CHILDREN'S WATER FESTIVAL: In celebration of National Drinking Water Week, the Children's Water Festival is a one-day field trip opportunity for 5th grade classes from across central Ohio to learn all about our water resources each May.

Information is mailed to all central Ohio schools each September. Contact 645-5970 with question on how your class can participate.

EARTH DAY: Celebrated internationally on April 22 every year. Locally, Green Columbus conducts one of the largest celebrations in the world. Their event includes a myriad of volunteer opportunities and a celebration, which typically occurs on or near April 22. Visit www.EarthDayColumbus.org or www.GreenCbus.org for more information.

MONTHLY SCIENCE DAYS: Free with COSI admission, Science Days focus on a specific topic and include guest presenters from area organizations, special activities, and demonstrations. Check the calendar of events at www.cosi.org or call 228-2674 for details.

WALK TO SCHOOL MONTH: October is internationally known as Walk to School Month to promote safer and improved streets, healthier habits, and environmental conservation by reducing traffic congestion and pollution. The Mid-Ohio Regional Planning Commission (MORPC) assists in the coordination of Walk to School efforts in central Ohio including bimonthly education forums with regular updates on ODOT funding programs and best practices. To get involved visit www.morpc.org/walktoschool or call 228-2663.

GREENSPOT KIDS PROGRAM EVALUATION

In order to assess and improve the GreenSpot Kids program, we ask that you complete the following evaluation forms and submit them:

By e-mail to: lrstrader@columbus

*Or by mail to: The Mayor's Office
of Environmental Stewardship,
C/O Leslie Strader,
90 W. Broad Street,
Columbus, Ohio 43215*



THE CITY OF
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MICHAEL B. COLEMAN, MAYOR

GreenKids.Columbus.gov

Green Kids Evaluation (Pre-test)

1. Based on your observation please indicate the overall level of environmental literacy in the class (1 is poor and 5 is excellent):

1 2 3 4 5

2. Based on your observation please indicate how frequently you witness students engaging in positive sustainable behavior choices such as recycling, conserving water, etc. (1 is infrequently and 5 is frequently):

1 2 3 4 5

3. Based on your observation and testing please indicate the overall level of science achievement in the class (1 is poor and 5 is excellent):

1 2 3 4 5

Comments:

Please submit this form via email to lrstrader@columbus.gov
Thank you for taking a moment to help us evaluate the Green Kids program!

Green Kids Evaluation (Post-test)

1. Based on your observation please indicate the overall level of environmental literacy in the class (1 is poor and 5 is excellent):

1 2 3 4 5

2. Based on your observation please indicate how frequently you witness students engaging in positive sustainable behavior choices such as recycling, conserving water, etc.

(1 is infrequently and 5 is frequently):

1 2 3 4 5

3. Based on your observation and testing please indicate the overall level of science achievement in the class (1 is poor and 5 is excellent):

1 2 3 4 5

4. Which resources did you use to enhance learning about the environment in your classroom?

- GreenSpot and the Dots children's book
- GreenKids.columbus.gov website
- GreenWalks audio tour
- Accomplishment chart poster
- In-Class presentation
- Registered our classroom as a GreenSpot location at www.ColumbusGreenSpot.org
- Students registered their homes with a parent as a GreenSpot location at www.ColumbusGreenSpot.org
- Other (please describe):

5. Please provide any other feedback or observations from your experience implementing the Green Kids program in your classroom:

Please submit this form via email to lrstrader@columbus.gov
Thank you for taking a moment to help us evaluate the Green Kids program!