



PRESENTS



- Environmental project-based competitions and activities
- Activities take place at the school
- Best student entries are submitted to the USBG to compete against outstanding student entries from other DCPS junior high schools.
- Schools earn points for their participation and achievements in each option.
- Schools surpassing the annual point goal are honored with the Fairchild Challenge Award
- Additional prizes and honors are awarded to outstanding students, teachers and schools.
- If you are a DCPS Junior High School, we invite you to participate in one or all three of this year's challenges.
- **Participation is free!**
  - [How to Get Started](#)
  - [Challenge Options](#)
  - [Calendar of Important Dates](#)
    - [Program Policies](#)
      - [Forms](#)
  - [Meeting the DCPS Standards](#)
    - [Links](#)
    - [Contact Us](#)

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**The Fairchild Challenge fosters interest in the environment by encouraging students to appreciate the beauty and value of nature, develop critical thinking skills, understand the need for biodiversity and conservation, tap community resources, become actively-engaged citizens, and recognize that individuals do indeed make a difference.**



Challenges were designed and initiated by the Fairchild Challenge, Fairchild Tropical Botanic Garden, Coral Gables, FL.

## HOW CAN YOU PARTICIPATE?

Please identify a Fairchild Challenge coordinator at your school and submit one registration form (see attached forms) **immediately**. **The annual Challenge school registration form must be filled out and sent to the USBG before a school can participate.** All staff should be notified that your school is registered.

There are three Challenge options available this year for DCPS junior high schools.<sup>1</sup> Schools may choose to enter any or all of these Challenge options. Following the specific policies and requirements, teachers submit the best entries with a completed entry form. Panels of experts at the USBG then evaluate the work.

### CONTACT US

USBG staff members are available to present the Challenge program details to your classes, faculty meetings, ecology clubs, etc. Please contact Lee Coykendall, Fairchild Challenge Coordinator at the U.S. Botanic Garden by e-mail: [lcoykend@ao.gov](mailto:lcoykend@ao.gov), telephone: (202) 441-0231 for further information.

### WHAT IS YOUR GOAL?

All DCPS junior high schools that earn over 400 points will be presented with the 2007 USBG Fairchild Challenge Award and \$200 at our awards ceremony to be held the evening of **Thursday, May 17th**. Additionally, participating students and teachers receive Challenge T-shirts, and the 3 top-scoring schools are awarded \$500 to \$1,000 to support their environmental programs. The Conservatory has been reserved for this special USBG evening event. **Mark your calendars today for May 17, 2007 from 7:00 – 8:30p.m.**

### TIPS FOR TEACHERS

Encourage fellow teachers to take on the Challenge. Teachers, encourage as many students as possible to participate in the various Challenge options.

Each school screens its students' submissions to select the entries for evaluation by panel experts. Peer evaluation is important. We encourage you to involve students as well as other teachers in the screening process.

Don't wait until the last day to submit your entries. We like early birds and gladly accept Challenge entries any time before the deadlines.

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<sup>1</sup> We needed to limit the number of eligible schools in our pilot year. However, we expect to increase this number in September. If you are interested in participating in the Challenge but not eligible in our pilot year, please contact us **today**.

## Options at a Glance: Junior High Schools

- Middle schools earning more than 400 points receive the Fairchild Challenge Award and \$200.
- The 3 top-scoring schools receive \$500 to \$1,000.

US Botanic Garden's Fairchild Challenges for 2006-07 <sup>2</sup>	Max points	Points Per Entry	Max entries per school	Due at USBG by 4:30 pm
<u>SCI-FI COMIC BOOK: A WORLD WITHOUT PLANTS</u>	250	50	5	April 18, 2007
<u>GREEN TREASURES: TRADITIONAL USES OF PLANTS</u>	250	50	5	April 18, 2007
<u>ORIGINAL POEM/RAP INSPIRED BY THE ENVIRONMENT</u>	200	100	2	Poems and Rap pieces due April 18, 2007. Performances to be held on May 5, 2007.

Prizes will be awarded on May 17, 2007 at the Awards Ceremony at the United States Botanic Garden.

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<sup>2</sup> Challenges were designed and initiated by the Fairchild Challenge, Fairchild Tropical Botanic Garden, Coral Gables, FL.

## CALENDAR OF IMPORTANT DATES

### APRIL 2007

Sunda y	Monda y	Tuesda y	Wednesd ay	Thursd ay	Frida y	Saturd ay
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18 <small style="color: red;">ENTRIES FOR OPTIONS 1, 2 AND 3 DUE AT USBG</small>	19	20	21
22	23	24	25	26	27	28
29	30					

### MAY 2007

Sunda y	Monda y	Tuesda y	Wednesd ay	Thursd ay	Frida y	Saturd ay
		1	2	3	4	5 <small style="color: red;">RAP AND POETRY FINALISTS PERFORM AT USBG</small>
6	7	8	9	10	11	12
13	14	15	16	17 <small style="color: red;">AWARDS CEREMONY 7:00 -8:30 pm</small>	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- The annual Challenge school registration form must be filled out and sent to the USBG before a school can participate. Please send or fax your registration form immediately.

## PROGRAM POLICIES

### Specific requirements: Challenge options for junior high schools

U.S. Botanic Garden's Fairchild Challenges for 2006/2007

#### OPTION ONE: [Sci-fi Comic Book: A World Without Plants](#)

- Create a comic-strip book describing a world without plants.
- Comic book cannot exceed front and back of an 8 ½ X 11 sized paper. You may choose to fold the paper or not. Frames must be at least two inches in depth.
- Research the importance of plants and imagine what our world would be like without plant life. What would be different? Would anything be the same?
- Describe the situation in your writing. Be sure to:
- Paint a vivid picture with your words.
- Write from a personal perspective giving your own observations.
- Leave the reader with the impression that he or she really knows what an Earth without plants would be like based on your description.
- Books will be judged on:
  - Creativity
  - Relevance to theme
  - Accuracy
  - Writing skills
  - Research
  - Personal observations

School submits: Option One entry form; up to 5 comic books

**Due at USBG: April 18, 2007**

# Specific requirements: Challenge options for junior high schools

U.S. Botanic Garden's Fairchild Challenges for 2006/2007

## OPTION TWO: [Green Treasures: Traditional Uses of Plants](#)

- Intergenerational interviews provide a wealth of information about little-known uses of plants. Interview an older relative or neighbor about interesting ways that people use or have used plants.
- Conduct further research on an interesting, useful plant identified by your interviewee.
- Include the name that your senior used for the plant, the English common name, and the scientific name.
- Each student summary must include:
  - A 1- to 2-page summary. From ½ to 1 page must be dedicated to the interview in general, and from ½ to 1 page to the specific research information on the useful plant selected from the interview. Identify your interviewee and quote him/her.
  - A picture or drawing of the interviewee and plant must be included on a separate page.
  - Any other photos, illustrations, bibliography, etc. should also be included on a separate, single page.
- Entries will be judged on:
  - the details of the interview
  - information obtained on the specific plant
  - how information was derived
  - relevance to theme
  - presence of a photo or illustration of the interviewee
  - writing
  - grasp of ethnobotany

School submits: Option Two entry form; up to 5 summaries

Due at USBG: April 18, 2007

# Specific requirements: Challenge options for junior high schools

## U.S. Botanic Garden's Fairchild Challenges for 2006/2007

### OPTION THREE: ORIGINAL POEM/RAP INSPIRED BY THE ENVIRONMENT

- Create opportunities to sensitize your community to environmental issues by writing an original poem/rap. Perform piece at USBG on **May 5, 2007**.
- Performer(s) need not be the composer(s), but the composer(s) must be present.
- Time limit: 2 minutes.
- Language deemed inappropriate for a family audience will be disqualified.
- Pieces will be judged on:
  - relevance to theme
  - accuracy of information
  - impact
  - creativity
  - quality of performance.

School submits: Option Three entry form; 2 pieces with the name(s) of performer(s) and composer(s). On the entry form please specify any musical instruments or audio equipment you plan to use, for approval by USBG staff.

**Due at USBG: Written pieces due on April 18, 2007.**

All pieces to be performed on **May 5, 2007** at the USBG. Top performers will then be asked to perform at Awards Ceremony to be held on **May 17, 2007** from 7:00-8:30 p.m.

# FORMS

## Annual school registration form, middle schools

**Note: Only 1 annual registration form is needed per school.**

The teacher submitting this form must notify the principal, assistant principals, and faculty that their school is registered for the Fairchild Challenge 2006–07.

**Please submit this form no later than February 7, 2007.**

Complete name of school:

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School's mailing address:

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City, zip:

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School's approximate total enrollment for 2006–07:

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Teacher's name & discipline(s):

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Teacher's phones: daytime

evening

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Fax:

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**Teacher's e-mail (required):**

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How did you find out about the Fairchild Challenge?

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**Other participating teachers (names, disciplines, e-mail):**

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Staff signature & date:

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To participate, please complete and return this form no later than **February 7, 2007** to:

United States Botanic Garden  
Fairchild Challenge  
245 First Street, S.W.  
Washington, D.C. 20024



United States Botanic Garden's Fairchild Challenge 2006-07

ENTRY FORM FOR JUNIOR HIGH SCHOOLS

Option One: Sci-fi Comic Book: A World Without Plants

Please **neatly print** all requested information on this form and submit with Option One entry/entries.

For Individuals

Create a comic-strip book describing a world without plants.

Comic book cannot exceed front and back of an 8 ½ X 11 sized paper. You may choose to fold the paper or not. Frames must be at least two inches in depth.

Research the importance of plants and imagine what our world would be like without plant life. What would be different? Would anything be the same?

Describe the situation in your writing. Be sure to paint a vivid picture with your words. Write from a personal perspective giving your own observations. Leave the reader with the impression that he or she really knows what an Earth without plants would be like based on your description.

Books will be judged on creativity, relevance to theme, accuracy, writing skills, research, and personal observations.

School submits: Option One entry form; up to five entries per school

**Due at the USBG: 4:30 pm., Wednesday, April 18, 2007**

Maximum possible points: 250 (50/entry).

School: \_\_\_\_\_

Number of Comic Books included (up to five): \_\_\_\_\_

Each comic book must have the student's name, grade and school clearly marked. Please neatly print each student's name and grade below:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Estimated total number of students at your school who attempted this option: \_\_\_\_\_

This option was presented to students as (check all that apply):

( ) class work ( ) homework ( ) extracurricular ( ) required assignment ( ) optional assignment

Teacher's name: \_\_\_\_\_ discipline(s): \_\_\_\_\_

Daytime ph.#: \_\_\_\_\_ email: \_\_\_\_\_

I have read, understood and abided by all rules and program policies of the United States Botanic Garden's Fairchild Challenge.

Staff signature and date: \_\_\_\_\_

**By 4:30 pm, Wednesday, April 18, 2007, complete and return this entry form with entries to:**

United States Botanic Garden

Fairchild Challenge

245 First Street, S.W.

Washington, D.C. 20024

Tel: 202.441.0231

United States Botanic Garden's Fairchild Challenge 2006-07

ENTRY FORM FOR JUNIOR HIGH SCHOOLS

Option Two: GREEN TREASURES:

TRADITIONAL USES OF PLANTS

Please **neatly print** all requested information on this form and submit with Option Two entry/entries. For Individuals:

Intergenerational interviews provide a wealth of information about little-known uses of plants. Interview an older relative or neighbor about interesting ways that people use or have used plants. Conduct further research on an interesting, useful plant identified by your interviewee. Include the name that your senior used for the plant, the English common name, and the scientific name. Each student summary must include:

A 1- to 2-page summary. From ½ to 1 page must be dedicated to the interview in general, and from ½ to 1 page to the specific research information on the useful plant selected from the interview. Identify your interviewee and quote him/her.

A picture or drawing of the interviewee and plant must be included on a separate page. Any other photos, illustrations, bibliography, etc. should also be included on a separate, single page.

Entries will be judged on the details of the interview, information obtained on the specific plant, how information was derived, relevance to theme, and presence of a photo or illustration of the interviewee, writing, and grasp of ethnobotany.

School submits: Option Two entry form; up to five summaries

Due at USBG: 4:30 p.m., Wednesday, April 18, 2007

Maximum possible points: 250 (50/entry)

School: \_\_\_\_\_

Number of Summaries included (up to five): \_\_\_\_\_

Each summary must have the student's name, grade and school clearly marked. Please neatly print each student's name and grade below:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Estimated total number of students at your school who attempted this option: \_\_\_\_\_

This option was presented to students as (check all that apply):

( ) class work ( ) homework ( ) extracurricular ( ) required assignment ( ) optional assignment

Teacher's name: \_\_\_\_\_ discipline(s): \_\_\_\_\_

Daytime ph.#: \_\_\_\_\_ email: \_\_\_\_\_

I have read, understood and abided by all rules and program policies of the United States Botanic Garden's Fairchild Challenge.

Staff signature and date: \_\_\_\_\_

By 4:30 pm, Wednesday, April 18, 2007, complete and return this entry form with entries to:

United States Botanic Garden

Fairchild Challenge

245 First Street, S.W.

Washington, D.C. 20024

Tel.: 202.441.0231

United States Botanic Garden's Fairchild Challenge 2006-07  
ENTRY FORM FOR JUNIOR HIGH SCHOOLS  
Option Three: ORIGINAL POEM/RAP INSPIRED BY THE ENVIRONMENT

Please neatly print all requested information on this form and submit with Option Three entry/entries.

For Individuals

Create opportunities to sensitize your community to environmental issues by writing an original poem/rap. Pieces selected will be performed at USBG on **Saturday, May 5, 2007**.

Performer(s) need not be the composer(s), but the composer(s) must be present.

Time limit: 2 minutes.

Language deemed inappropriate for a family audience will be disqualified.

Pieces will be judged on relevance to theme, accuracy of information, impact, creativity, and quality of performance.

School submits: Option Three entry form; up to two entries

**Written material due at USBG: 4:30 p.m., Wednesday, April 18, 2007 with a list of any musical instruments or audio equipment you plan to use for approval by USBG staff.**

Maximum possible points: 200 (100/entry)

School: \_\_\_\_\_

Number of entries included (up to two): \_\_\_\_\_

Each entry must have the student's name, address and telephone number, grade and school clearly marked.

Composer: \_\_\_\_\_

Performer, if different than composer: \_\_\_\_\_

Equipment \_\_\_\_\_

Composer: \_\_\_\_\_

Performer, if different than composer: \_\_\_\_\_

Equipment \_\_\_\_\_

Estimated total number of students at your school who attempted this option: \_\_\_\_\_

This option was presented to students as (check all that apply):

( ) class work ( ) homework ( ) extracurricular ( ) required assignment ( ) optional assignment

Teacher's name: \_\_\_\_\_ discipline(s): \_\_\_\_\_

Daytime ph.#: \_\_\_\_\_ email: \_\_\_\_\_

I have read, understood and abided by all rules and program policies of the United States Botanic Garden's Fairchild Challenge.

Staff signature and date \_\_\_\_\_

**By 4:30 pm, Wednesday, April 18, 2007, complete and return this entry form with entries to:**

United States Botanic Garden  
Fairchild Challenge  
245 First Street, S.W.  
Washington, D.C. 20024  
(202) 441-0231

**UNITED STATES BOTANIC GARDEN'S FAIRCHILD CHALLENGE  
OPTIONS  
ALIGNED WITH THE DCPS STANDARDS**

Challenge	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	9 <sup>th</sup> Grade
<p><b>OPTION ONE:</b>  <b>Sci-fi Comic Book: A World Without Plants</b></p> <p>Create a comic-strip book describing a world without plants.</p> <p>Comic book cannot exceed front and back of an 8 ½ X 11 sized paper. You may choose to fold the paper or not. Frames must be at least two inches in depth.</p> <p>Research the importance of plants and imagine what our world would be like without plant life. What would be different? Would anything be the same?</p> <p>Describe the situation in your writing. Be sure to paint a vivid picture with your words. Write from a personal perspective giving your own observations. Leave the reader with the impression that he or she really knows what an Earth without plants would be like based on your description.</p> <p>Books will be judged on creativity, relevance to theme,</p>	<p><b>Grade 7: Science:</b>  <b>7.7.8.</b> Recognize that the environment may contain dangerous levels of substances that are harmful to human beings. Therefore, the good health of individuals requires monitoring the soil, air, and water as well as taking steps to keep them safe.  <b>7.8.2.</b> Describe how two types of organisms may interact in a competitive or cooperative relationship, such as producer/consumer, predator/prey, parasite/hosts, or as symbionts.  <b>7.6.5.</b> Using specific examples, explain that the extinction of a species is a result of mismatch of adaptation and the environment.  <b>7.8 Broad Concept</b> Organisms in ecosystems exchange energy and nutrients among themselves and with the physical environment: (5) Describe how organisms that eat plants break down the plant structure to produce the materials and energy that they need to survive, and in turn, other organisms consume</p>	<p><b>Grade 8: Science</b>  <b>B.5. Broad Concept (1-7)</b> Evolution and biodiversity are the result of genetic changes that occur in constantly changing environments: (2) Explain how a large diversity of species increases the chance that at least some living things will survive in the face of large or even catastrophic changes in the environment.  <b>B.6.</b> Plants are essential to animal life on Earth.</p> <ul style="list-style-type: none"> <li>• Recognize that plants have a greater problem with “unpredictable environments” because they cannot seek shelter as many animals can.</li> <li>• Explain the photosynthesis process: Plants make food in their leaves and chlorophyll found in the leaves can make food the plant can use from carbon dioxide,</li> </ul>	<p><b>Environmental Science</b>  <b>E.2.</b> The environment is a system of interdependent components affected by natural phenomena and human activity.  <b>E.3.</b> Stability in an ecosystem is a balance between competing effects.  <b>E.4.</b> The amount of life any environment can support is limited by the available energy, water, oxygen, and minerals, and by the ability of ecosystems to recycle organic materials from the remains of dead organisms.  <b>E.7.</b> Energy and matter have multiple forms and can be changed from one form to another: (4) Describe how the energy derived from the sun is used by green plants to produce chemical energy in the form of sugars and this energy is transferred along a food chain from producers (plants) to consumers to decomposers.  <b>E.8.</b> (1-5, 7) Environmental quality is linked to natural and human-induced hazards, and the ability of science and technology to meet</p>

<p>accuracy, writing skills, research, and personal observations.</p> <p><b>OPTION ONE:</b>  <b>Sci-fi Comic Book: A World Without Plants</b></p> <p>Create a comic-strip book describing a world without plants.</p> <p>Comic book cannot exceed front and back of an 8 ½ X 11 sized paper. You may choose to fold the paper or not. Frames must be at least two inches in depth.</p> <p>Research the importance of plants and imagine what our world would be like without plant life. What would be different? Would anything be the same?</p> <p>Describe the situation in your writing. Be sure to paint a vivid picture with your words. Write from a personal perspective giving your own observations. Leave the reader with the impression that he or she really knows what an Earth without plants</p>	<p>them, (7) Describe how , as any population of organisms grows, it is held in check by one or more environmental constraints</p> <p><b>7.8.3.</b> Illustrate and explain how plants use the energy from light to make simple sugars, and more complex molecules, from carbon dioxide and water through a process called photosynthesis. Understand this produces food that can be used immediately or stored for later use.</p> <p><b>7.8.4.</b> Create a food web to explain how energy and matter are transferred between producers and primary consumers and secondary consumers.</p> <p><b>Grade 7: Language Arts:</b></p> <p><b>7. IT-A.6</b> .Describe the facts and evidence used to support an argument.</p> <p><b>7. EL.2</b> .Identify all parts of speech and types and structures of sentences.</p> <p><b>Grade 7: Language Arts cont'd:</b></p> <p><b>7.IT-E.3</b> .Apply knowledge of organizational structures of text to aid comprehension, including chronological order, comparison and contrast, cause and effect, logical order, and classification schemes.</p> <p><b>7. LT-S.11.</b>Identify and analyze how an author’s use of words creates tone and mood.</p> <p><b>7. IT-DP.4.</b> Respond appropriately to a</p>	<p>water, nutrients, and energy from sunlight.</p> <ul style="list-style-type: none"> <li>• Explain that during the process of photosynthesis, plants release oxygen into the air.</li> </ul> <p><b>B.8.</b> Stability in an ecosystem is a balance between competing effects.</p> <p><b>Grade 8: Language Arts</b></p> <p><b>8. W-I.1.</b> Write stories or scripts that include, • well-developed characters and setting, • dialogue, • clear conflict and resolution, and sufficient descriptive detail.</p> <p><b>8. IT-E.2.</b> Explain how an author uses word choice and organization of text to achieve his purposes.</p> <p><b>8. W-R.6.</b> Revise writing for word choice using a variety of references, appropriate organization, consistent point of view, and transitions among paragraphs, passages, and ideas.</p> <p><b>8. IT-DP.4.</b> Evaluate the adequacy of details and facts to achieve a specific purpose.</p> <p><b>8.IT-A.6.</b> Distinguish facts from opinions in selections such as editorials, newspaper articles, essays, reviews, and critiques,</p> <p><b>Grade 8: Language Arts cont'd</b>  providing supporting</p>	<p>local, national and global challenges.</p> <p><b>Grade 9: Language Arts</b></p> <p><b>9. W-E.5.</b> Write persuasive (problem/solution) essay that includes a thesis or purpose of the paper; uses a logical organizational pattern; includes persuasive evidence or explanation for the validity of the assertions; uses different levels of formality, style, and tone when composing for different audiences; and contains effective introductory and concluding paragraphs that guide and inform the reader’s understanding of key ideas and evidence.</p> <p><b>9. LD-V.8.</b> Determine the meanings of multiple-meaning words by using context.</p> <p><b>9. LD-V.9.</b> Determine meanings, pronunciations, contextually appropriate synonyms, antonyms, replacement words or phrases, etymologies, and correct spellings of words using dictionaries, thesauri, and histories of language and books of quotations.</p> <p><b>Grade 9: Language Arts cont'd</b></p> <p><b>9. IT-E.5.</b> Support conclusions drawn from ideas and concepts in informational and technical passages.</p> <p><b>9. R.1</b> Formulate</p>
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<p>would be like based on your description.</p> <p>Books will be judged on creativity, relevance to theme, accuracy, writing skills, research, and personal observations.</p>	<p>set of instructions and complete a task.</p> <p><b>7. R.1</b> Apply steps for obtaining information from a variety of sources, organizing information, documenting sources, and presenting research in individual and group projects.</p> <p><b>7. W-E.2.</b> Write summaries of passages that group related ideas and place them in logical order, contain main ideas and significant details of the passage and reflect the underlying meaning of the source.</p> <p><b>7. W-E.3.</b> Write content based research reports that frame a key question about an issue or situation, group ideas and place them in logical order, include details and explanations from more than one authoritative source and use quotations, footnotes or endnotes, and a standard format for works cited.</p> <p><b>7. W.-R.5.</b> Revise writing to improve organization and word choice after checking the logic of the ideas and the precision of the vocabulary.</p> <p><b>7. M.2</b> Create multimedia presentations using word-processing skills and principles of design (e.g. margins, tabs, spacing, columns, page orientation, graphics).</p> <p><b>Visual Arts-Grades 7 ,8 and 9-12</b> <b>Structures and</b></p>	<p>evidence from the text.</p> <p><b>8. LT-F.4.</b> Determine how central character's qualities influence the resolution of the conflict.</p> <p><b>8. LT-F.6.</b> Analyze the influence of setting on the problem and resolution.</p> <p><b>8. R.1.</b> Apply steps for obtaining information from a variety of sources, organizing information, documenting sources and presenting research in individual and group projects.</p> <p><b>8. W-I.1.</b> Write stories or scripts that include well-developed characters and setting, dialogue, clear conflict and resolution and sufficient descriptive detail.</p> <p><b>8. W-E.3.</b> Write content-based research reports that pose relevant questions and have a clear controlling idea; support main idea(s) with details, facts and explanations from multiple authoritative sources and organize them effectively; organize and record information on charts, maps and graphs as appropriate; use quotations, footnotes or endnotes and a standard format for works cited.</p> <p><b>8. W-R.6.</b> revise writing for word choice using a variety of references, appropriate organization,</p>	<p>open-ended research questions and apply steps for obtaining and evaluating information from a variety of sources, organizing information and presenting research.</p> <p><b>9. W-I.1.</b> Write well-organized stories that include an explicit theme and sensory details and concrete language to develop plot characters.</p> <p><b>Visual Arts-Grades 7 ,8 and 9-12</b> <b>Structures and Functions</b> <b>Content Standard 2 Reflecting and Assessing</b> <b>Content Standard 5 Making Connections</b> <b>Content Standard 6</b></p>
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	<b>Functions Content Standard 2</b> <b>Reflecting and Assessing Content Standard 5</b> <b>Making Connections Content Standard 6</b>	consistent point of view, and transitions among paragraphs , passages and ideas. <b>Visual Arts-Grades 7 ,8 and 9-12</b> <b>Structures and Functions Content Standard 2</b> <b>Reflecting and Assessing Content Standard 5</b> <b>Making Connections Content Standard 6</b>	
<p><i>OPTION TWO: GREEN TREASURES:</i></p> <p><i>TRADITIONAL USES OF PLANTS</i></p> <p><b>Inter-generational interviews provide a wealth of information about little-known uses of plants. Interview an older relative or neighbor about interesting ways that people use or have used plants.</b></p> <p><b>Conduct further research on an interesting, useful plant identified by your interviewee. Include the name that your senior used for the plant, the English common name, and the scientific name.</b></p> <p><b>Each student summary must include:</b></p> <p><b>A 1- to 2-page summary. From ½ to 1 page must be dedicated to the interview in general, and from ½ to 1 page to the specific research information on the useful plant selected from the interview. Identify your interviewee and quote him/her.</b></p>	<p><b>Grade 7: Science</b></p> <p><b>7.3.</b> Broad Concept: Similarities are used to classify organisms since they may be used to infer the degree of relatedness among organisms.</p> <p><b>7.3 At 2.</b> Recognize and describe that biological classifications are based on how organisms are related; Organisms are classified into a hierarchy of groups and subgroups, with species as the most fundamental unit.</p> <p><b>Grade 7: Language Arts</b></p> <p><b>7. EL.2.</b> Identify all parts of speech and types and structures of sentences.</p> <p><b>7. LD-0.2.</b> Ask probing questions to elicit information, including questions about the evidence that supports the speaker’s claims and conclusions.</p> <p><b>7. LD-0.5.</b> Determine the speaker’s attitude of point of view toward the subject.</p> <p><b>7. IT-DP.4.</b> Respond appropriately to a set of instructions and complete a task.</p> <p><b>7.R.1</b> Apply steps for obtaining information from a variety of sources, organizing information,</p>	<p><b>Grade 8: Science</b></p> <p><b>B.6.</b> Broad Concept: Plants are essential to animal life on Earth.</p> <ul style="list-style-type: none"> <li>Describe the structure and function of roots, leaves, flowers, and stems of plants.</li> <li>Identify the roles of plants in the ecosystem: Plants make food and oxygen, provide habitats for animals, make and preserve soil, and provide thousands of useful products for people (e.g., energy, medicines, paper, and resins).</li> </ul> <p><b>Grade 8: Language Arts</b></p> <p><b>8. R.1.</b> Apply steps for obtaining information from a variety of sources, organizing information, documenting sources and presenting research in individual and group projects</p> <p><b>8. W-E.3.</b> Write content-based research reports that pose relevant questions and have</p>	<p><b>Grade 9: Language Arts</b></p> <p><b>9. LD-V.8.</b> Determine the meanings of multiple-meaning words by using context.</p> <p><b>9. LD-V.9.</b> Determine meanings, pronunciations, contextually appropriate synonyms, antonyms, replacement words or phrases, etymologies, and correct spellings of words using dictionaries, thesauri, and histories of language and books of quotations.</p> <p><b>9.R.1</b> Formulate open-ended research questions and apply steps for obtaining and evaluating information from a variety of sources, organizing information and presenting research</p> <p><b>9. W-R.6.</b> Revise writing to improve the topic/idea development , organization, language/style, word choice, and tone in light of the audience, purpose and formality of the context</p>



<p><b>A picture or drawing of the interviewee and plant must be included on a separate page. Any other photos, illustrations, bibliography, etc. should also be included on a separate, single page.</b></p> <p>Entries will be judged on the details of the interview, information obtained on the specific plant, how information was derived, relevance to theme, and presence of a photo or illustration of the interviewee, writing, and grasp of ethnobotany.</p>	<p>documenting sources, and presenting research in individual and group projects</p> <p><b>7. W-E.2.</b> Write summaries of passages that group related ideas and place them in logical order, contain main ideas and significant details of the passage and reflect the underlying meaning of the source.</p> <p><b>7. W.-R.5.</b> Revise writing to improve organization and word choice after checking the logic of the ideas and the precision of the vocabulary.</p> <p><b>7. M.2</b> Create multimedia presentations using word-processing skills and principles of design (e.g., margins, tabs, spacing, columns, page orientation, graphics).</p> <p><b>7. EL.1-7.</b> English Language Conventions</p>	<p>a clear controlling idea; support main idea(s) with details, facts and explanations from multiple authoritative sources and organize them effectively; organize and record information on charts, maps and graphs as appropriate; use quotations, footnotes or endnotes and a standard format for works cited.</p> <p><b>8. W-R.6.</b> Revise writing for word choice using a variety of references, appropriate organization, consistent point of view, and transitions among paragraphs ,</p> <p><b>8. LD-0.3.</b> Paraphrase the speaker's purpose and point of view and ask relevant questions concerning a speaker's content, delivery and purpose.</p> <p>passages and ideas.</p> <p><b>8.EL.1</b> English Language Conventions</p>	
<p><b>Challenge</b></p>	<p><b>7<sup>th</sup> Grade</b></p>	<p><b>8<sup>th</sup> Grade</b></p>	<p><b>9<sup>th</sup> Grade</b></p>
<p><b>OPTION THREE: ORIGINAL POEM/RAP INSPIRED BY THE ENVIRONMENT</b></p> <p>Create opportunities to sensitize your community to environmental issues by writing an original poem/rap.</p> <p>Performer(s) need not be the composer(s), but the composer(s) must be present.</p> <p>Time limit: 2 minutes.</p> <p>Language deemed inappropriate for a family audience will be disqualified.</p>	<p><b>Grade 7: Science</b></p> <p><b>7.7.8.</b> Recognize that the environment may contain dangerous levels of substances that are harmful to human beings. Therefore, the good health of individuals requires monitoring the soil, air, and water as well as taking steps to keep them safe.</p> <p><b>7.8</b> Broad Concept Organisms in ecosystems exchange energy and nutrients among themselves and with the physical environment: (5) Describe how organisms that eat plants break down the plant structure to</p>	<p><b>Grade 8: Science</b></p> <p><b>B.6.</b> Plants are essential to animal life on Earth.</p> <ul style="list-style-type: none"> <li>Identify the roles of plants in the ecosystem: Plants make food and oxygen, provide habitats for animals, make and preserve soil, and provide thousands of useful products for people (e.g., energy, medicines, paper, and</li> </ul>	<p><b>Environmental Science</b></p> <p><b>E.2.</b> The environment is a system of interdependent components affected by natural phenomena and human activity.</p> <p><b>E.2 at 3</b> Describe how the global environment is affected by national policies and practices relating to the energy use, waste disposal, ecological management, manufacturing and population growth.</p> <p><b>E.3.</b> Stability in an ecosystem is a balance between competing effects.</p> <p><b>E.4.</b> The amount of</p>



<p>Pieces will be judged on relevance to theme, accuracy of information, impact, creativity, and quality of performance.</p> <p>School submits: Option Three entry form; 2 pieces with the name(s) of performer(s) and composer(s). On the entry form please specify any musical instruments or audio equipment you plan to use, for approval by USBG staff.</p> <p><b>OPTION THREE: ORIGINAL POEM/RAP INSPIRED BY THE ENVIRONMENT</b></p> <p>Create opportunities to sensitize your community to environmental issues by writing an original poem/rap.</p> <p>Performer(s) need not be the composer(s), but the composer(s) must be present.</p> <p>Time limit: 2 minutes.</p> <p>Language deemed inappropriate for a</p>	<p>produce the materials and energy that they need to survive, and in turn, other organisms consume them, (7) Describe how , as any population of organisms grows, it is held in check by one or more environmental constraints</p> <p><b>7.8.2.</b>Describe how two types of organisms may interact in a competitive or cooperative relationship, such as producer/consumer, predator/prey, parasite/hosts, or as symbionts</p> <p><b>Grade 7: Language Arts</b></p> <p><b>7. IT-A.6.</b>Describe the facts and evidence used to support an argument.</p> <p><b>7.IT-E.3.</b>Apply knowledge of organizational structures of text to aid comprehension, including chronological order, comparison and contrast, cause and effect, logical order, and classification schemes.</p> <p><b>7. LT-S.11.</b>Identify and analyze how an author’s use of words creates tone and mood.</p> <p><b>7.LT-P.9.</b>Analyze the characteristics and structural elements of a variety of poetic forms (e.g., epic, sonnet, ode, ballad, lyric, narrative poem, free verse, haiku).</p> <p><b>7. EL.2.</b>Identify all parts of speech and types and structures of sentences.</p> <p><b>7.W-E.4.</b>Write persuasive essays that state a clear position or perspective in support of a</p>	<p>resins).</p> <ul style="list-style-type: none"> <li>Explain the photosynthesis process: Plants make food in their leaves and chlorophyll found in the leaves can make food the plant can use from carbon dioxide, water, nutrients, and energy from sunlight.</li> </ul> <p><b>B.8.</b> Stability in an ecosystem is a balance between competing effects.</p> <ul style="list-style-type: none"> <li>Describe how factors in an ecosystem, such as the availability of energy, water, oxygen, and minerals and the ability to recycle the residue of dead organic materials, cause fluctuations in population sizes.</li> <li>Explore and explain how changes in population size have an impact on the ecological balance of a community and how to analyze the effects.</li> <li>Describe how the physical or chemical environment may influence the rate, extent, and nature</li> </ul>	<p>life any environment can support is limited by the available energy, water, oxygen, and minerals, and by the ability of ecosystems to recycle organic materials from the remains of dead organisms</p> <p><b>Grade 9: Language Arts</b></p> <p><b>9. LD-O.6.</b> Deliver focused oral presentations that use details, examples, or anecdotes to explain or clarify information or a point of view, employing proper eye contact, speaking rate, volume, enunciation, inflection, and gestures to communicate ideas effectively.</p> <p><b>9. W-E.5.</b> Write persuasive (problem/solution) essays</p> <p><b>Visual Arts-Grades 7 ,8 and 9-12</b></p> <p><b>Structures and Functions Content Standard 2</b></p> <p><b>Reflecting and Assessing Content Standard 5</b></p> <p><b>Making Connections Content Standard 6</b></p> <p><b>Music Bach to Rap:</b></p> <p><b>Performance Content Standard 1</b></p> <p><b>Improvising/Composing/Arranging Content Standard 2</b></p> <p>Connections Content Standard 2</p> <p><b>General Music:</b></p> <p><b>Performance Content Standard</b></p> <p><b>Improvising/Composing/Arranging Content Standard 2</b></p> <p><b>Connections Content Standard 2</b></p>
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<p>family audience will be disqualified.</p> <p>Pieces will be judged on relevance to theme, accuracy of information, impact, creativity, and quality of performance.</p> <p>School submits: Option Three entry form; 2 pieces with the name(s) of performer(s) and composer(s). On the entry form please specify any musical instruments or audio equipment you plan to use, for approval by USBG staff.</p>	<p>proposition or proposal <b>Grade 7: Language Arts cont'd</b> and provide evidence in support of the proposition.</p> <p><b>Visual Arts-Grades 7 ,8 and 9-12 Structures and Functions Content Standard 2 Reflecting and Assessing Content Standard 5 Making Connections Content Standard 6</b></p> <p><b>Music 7 Performance Content Standard 1</b> (participates in musical activities at school, citywide showcases and in the community; uses microphones and amplification when appropriate)</p> <p><b>Improvising/Composing/Arranging Content Standard 2:</b> Students will improvise, compose and arrange music using specific guidelines. <b>Connections Content Standard 5:</b> Students will make connections between music, the other disciplines and daily life.</p>	<p>of the way organisms develop within ecosystems.</p> <p><b>Grade 8: Language Arts</b> <b>8.LD-O.6.</b>Present persuasive speeches that use appropriate techniques such as descriptions, anecdotes, case studies, analogies, and illustrations to advocate a position. <b>8.W-E.5.</b>Write persuasive (pro/con) essays that include a well-defined thesis that sets forth a clear and knowledgeable position, theory, or generalization:</p> <ul style="list-style-type: none"> <li>• support arguments with well-articulated evidence, examples, and reasoning, differentiating between evidence</li> </ul> <p><b>Grade 8: Language Arts cont'd</b> and opinion; and arrange details, reasons, and examples effectively, anticipating and answering reader concerns and counterarguments. <b>8.LT-P.8.</b>Analyze the effects of sound (alliteration, internal rhyme, rhyme scheme), figurative language (personification, metaphor, simile, hyperbole), and graphics (capital letters, line length, word position) on the meaning of a poem.</p> <p><b>Visual Arts-Grades 7 ,8 and 9-12 Structures and Functions Content</b></p>	
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## RELATED LINKS:

- <http://www.fairchildgarden.org>
- [Planet Plant](#)
- [School Garden Wizard](#)
- [Smithsonian Institution Department of Botany](#)
- [The Coevolution Institute - The Pollinator Partnership](#)
- [foresthstory.org](#)

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