



Fairchild Challenge at Phipps 2015 – 2016 High School Challenges In-Depth

Challenge 1: Writing

"Your Brain on Nature"

For individuals | Maximum points: 150 (75 per essay)

Your Challenge: "Forest bathing" is becoming an international prescription for reducing the stresses of the modern world. This challenge is a combination of internet and experiential research. In a one-page essay, summarize the current findings on benefits of spending time in nature for the brain and general well-being, and then go experience it for yourself. This requires going outside into a natural setting and taking time for quiet observation and reflection without the distraction of personal electronics.

Entry Requirements:

- Your essay should have two components: I) the documented benefits of time spent in nature and 2) your personal reflection on your experience in nature without technology
- Your essay should be one to two pages, double-spaced, using 12-point font.

Additional Information:

• Students are asked to go outside without using personal electronics and observe nature around your school, home or neighborhood.

School Submits: Challenge Entry Form, up to two essays

Due at Phipps: Friday, Oct. 23 by 5 p.m.

Challenge 2: Personal Action

"Be the Change"

For individuals | Maximum points: 200 (100 per testimonial)

Your Challenge: Environmental problems, particularly climate change, can seem overwhelming and way beyond our control. Personal lifestyle choices, however, are within our reach and can help to reduce the greenhouse gases that contribute to climate change. For this challenge, research ways individuals can help mitigate climate change. Then decide upon a specific behavioral change you will commit to in order to reduce your carbon footprint. Recruit at least one other family member to do this with you. Go ahead and make this change over the course of at least one month and keep a record of your actions. After a month of this activity, write a 1-page essay that reviews your success in implementing your plan and the impact of your behavior on yourself, your family and the planet.

Entry Requirements:

- Choose an activity that you can actually commit to on a regular basis. Take action; do this activity for at least a month and keep a log to record your actions.
- Write about your reaction to making this change and how your behaviors before and after this action have an impact on climate change.
- Your testimonial should be one page, double-spaced, using 12-point font.

School Submits: Challenge Entry Form, submit up to two testimonials

Due at Phipps: Friday, Nov. 20 by 5 p.m.

Challenge 3A: Visual Art (Global Challenge)

"Environmental Change"

For individuals or groups | Maximum points: 200 (100 per comic strip)

This Global Challenge is being offered by The Fairchild Challenge, in partnership with all Fairchild Challenge partners. Ten national and international institutions will be invited to participate in the same challenge. Top 10 comic strips from each individual institution, Phipps being one, will share their entries and compete in this global challenge.

Your Challenge: Urban sprawl and human mobility and the increased demand for energy since the beginning of the last century have had a lasting effect on nature. Specifically, plant population ranges are shifting and/or ecosystems are modifying in response to climate change caused by human actions. Choose one plant species, investigate how this species has responded to environmental changes and document the changes the species is making through an 8 panel comic strip.

Entry Requirements:

- Drawing/hand-rendered or computer generated 8 panel comic strip: maximum size: 8.5" x 14"
- Descriptive title, student's name, grade and school clearly printed on the back of each entry
- Comic strip is student-created and original

Additional Information:

- Submit all comic strips to Phipps. No electronic submissions.
- Top comic strips will be featured for online voting, which will be open from Friday, April I, through Friday, April 29, as part of the Global Challenge. The winning schools will receive the Viewers' Choice Award at The Fairchild Challenge Awards Ceremony in Miami, Fl. For a detailed list of evaluation criteria and points awarded for this challenge, visit www.fairchildchallenge.org.
- Winning entries of the Global Challenge will be published in Fairchild's *The Tropical Garden* magazine and be on display at Phipps' Center for Sustainable Landscapes Gallery.

School Submits: Challenge Entry Form, up to two comic strips

Due at Phipps: Friday, Dec. 18 by 5 p.m.

Challenge 3B: Visual Art

"Spring Blooms of Western Pennsylvania"

For individuals or groups | Maximum points: 200 (100 per drawing)

Your Challenge: Spring in western Pennsylvania always brings with it subtle, as well as spectacular, flowers. For this challenge, create a drawing using either colored pencil or ink to depict one of the plants or trees that blooms in our region in springtime. (The species does not have to be native, provided it is now commonly found growing here.) Selected drawings will be exhibited in Phipps Conservatory's Welcome Center gallery space in Spring 2016.

Entry Requirements:

- Creat e an original drawing depicting the flowering stage of a plant or tree that grows in our region of western Pennsylvania and flowers in the spring
- On a separate sheet of paper, include the scientific and common names for the featured plant(s), as well as native region of the plant(s).
- Picture size: 8 ½ " x 11" or 16" x 20"
- Name of school and student artist must be on back of drawings.

Additional Information:

• Drawings will be judged on creativity, artistry, relevance to theme and accuracy of information.

School Submits: Challenge Entry Form, up to two drawings

Due at Phipps: Friday, Dec. 18 by 5 p.m.

Challenge 4: Project Design

"Green Up Your School"

For individuals or groups | Maximum points: 200

Your Challenge: What is biophilia? The word may be new to you but, as a human being, the concept behind it may already be a part of you. Take the principles behind biophilia and make a plan of action to bring the benefits of biophilic design to your school. Create a visual display of how this will be done.

Entry Requirements:

- Write a one-page explanation of biophilia and the advantages of applying biophilic design principles to public spaces.
- Create a plan for how you will bring these principles to your school (pretend money is no object!).
- Create a visual display that shows your plan as it would be ideally implemented. This can be done as a tri-fold board, a poster or a blue print layout.

School Submits: Challenge Entry Form, written explanation, one plan and visual representation

Due at Phipps: Friday, Feb. 5 by 5 p.m.

Challenge 5: Video

"My Climate Future"

For individuals or groups | Maximum points: 200

Your Challenge: Climate change is one of the major issues facing future generations. Empowering youth to have a voice in their future through the My Climate Future video is the idea behind Challenge #5. We want to hear your voice and how you feel about climate change and what your ideas are for the future. For this challenge, students will create a video to inform the viewer about the reality of climate change, while inspiring them to take personal action in response to this knowledge.

Entry Requirements:

- Create a video that: 1) briefly explains what is meant by "climate change," 2) includes your personal reaction to the current knowledge, and 3) provides a specific way or ways to take action to mitigate the potential problems associated with climate change.
- Video can be from 1 to 3 minutes maximum
- Video should be submitted on DVD, flash drive or uploaded and accessible on YouTube.

Additional Information:

- Group work is encouraged.
- Evaluation criteria: Submissions will be judged on accuracy of content, creativity/originality, technical quality and overall impact.

School Submits: Challenge Entry Form, one video per school

Due at Phipps: Friday, March 25 by 5 p.m.

Challenge 6: Environmental Action

Home, School or Community

Your Challenge: Even small and simple environmental initiatives can affect great change. For this challenge, you are asked to initiate, implement and sustain an activity or activities that promote environmental awareness and conservation within ONE of the three following targets areas: home, school, or community.

Entry Requirements:

- Create a tri-fold display or written report that documents your school's efforts to promote environmental awareness and conservation in one out of three areas: within students' homes, throughout the school or across the community.
- Please attach a list of the students and/or classes involved in the project.
- Limit report to a maximum of 5 double-sided or 10 single-sided 8.5" x 11" pages.

Additional Information:

For this challenge, one or multiple environmental action projects done throughout the school year are encouraged. Ideally, this challenge should become an all-school effort, engaging as much of the student body as possible. While creative and original ideas for projects are welcomed, we have also provided some optional examples below.

Suggested Projects

Home

- Perform a home energy audit and make changes based on your findings
- Set a recycling goal for your household
- Educate and encourage your family to become responsible purchasers and consumers
- Encourage your family to have one sustainable (ie., meat-free, locally grown)
 meal each week
- Create a western PA-friendly habitat in your backyard that invites wildlife and minimizes environmental impact

School

- Host an environmental documentary at school and donate proceeds to an environmental organization
- Have a school grounds clean up, being sure to recycle and/or dispose of materials properly
- Devise a plan to reduce waste at your school, involving recycling as appropriate.
- Perform an energy audit at your school and present a plan for improvement to your school board.
- Create a mentoring program where older students can educate younger students about environmental issues
- Post environmental tips and reminders on posters in visible locations at school
- Encourage your kitchen and maintenance staff to use environmentally friendly products
- Host an educational Earth Day event at school
- "Green" your prom by incorporating sustainable practices into your event

 Conduct a biodiversity inventory of your school grounds, including plants, birds, butterflies, and others

Community

- Volunteer with a local environmental organization
- Participate in an environmental organization's work project on Earth Day
- Assist with environmental education or initiatives at a local community center
- Host a fundraiser and donate money to an environmental cause
- Write letters about your environmental concerns to local politicians
- Participate in a citizen science project

School Submits: Challenge Entry Form, one trifold or one report

Due at Phipps: Tuesday, May 3 by 5 p.m.