

The Eastchester Public Library seeks a WLS Mini-Grant in the amount of \$1,387 for the project

“How to be a Green Citizen in our Community”.

I. Project purpose: Raise the level of Environmental Literacy among the youngest citizens in our community through an integrated series of environmental education.

II. Activities Plans:

1. Activity Title: **Carbon Footprint: How Many Miles are on my Menu**

- Age group: 4-6 grades. Audience size: 25. Length-2 hours
- Date: One Saturday in May, 2015. Program giver: The Science Barge

In this activity, participants will examine three different households from around the planet and make observations about: (1) the diversity and nutrition in the food, (2) the amount of the food eaten in a week, and (3) the amount of packaging and processing of the food shown. Then the participants will be able to determine the ability to sustain food supply, how healthy is their diet and the carbon footprint of how food is transported. Participants will develop better food choices based on the new insights.

2. Activity Title: **Grow your Own Food**

- Age group: 4-6 grades. Audience size: 25-30 kids. Length: 2 hours
- Date: One Saturday in June, 2015. Program giver: Hilltop Hanover Farm

The program will include lecture and demonstration. Topics of lecture include the definition of “organic” vs. conventional methods with chemicals, and cover the topic on Genetic engineering and what is GMOs. The principles of organic farming/gardening which include the topics of natural plant nutrition, natural pest management, weed management and biodiversity will be explored. The presenter will bring materials to demonstrate the basic sprouting process and tips of growing healthy vegetables. The

participants will discuss how organic farming can reach closer to environmental sustainability.

3. Activity Title: **Hudson River Food Chain and Water Cleanup**

- Age group: 4-6 grades. Audience size: 30 kids. Length: 2 hours
- Date: One Saturday in September, 2015
- Program giver: Center for the Urban River at Beczak

Participants will role play parts of the food chain and discover the interdependencies of plants and animals in the Hudson River watershed. They will see how those relationships change when pollution enters the system. Then we'll move to the second part of the presentation on "Water Cleanup". In this fun, messy activity, students compete in groups to see which team can make the best economic and procedural decisions to best clean "pollution" from a dirty water sample (made with food coloring, vegetable oil and dirt).

4. Activity Title: **Climate Change: Greenhouse Effect Role Play**

- Age group: 4-6 grades. Audience size: 30 kids. Length: 2 hours
- Date: One Saturday in October, 2015. Program giver: The Science Barge

With the backdrop of our greenhouse as a case study, participants will act out greenhouse effect and discover how it contributes to global warming. They will identify common sources of greenhouse gas emissions and define stewardship. Participants will look at the "Model Green Home", to consider ways to curb their own emissions at home.

5. Activity Title: **Energy, Climate Chang, and You**

- Age group: 7-9 grades. Audience size: 30. Length: 2 hour

- Date: One Saturday in November, 2015. Program giver: The Science Barge

The presenter will demonstrate how fuels are burned to boil water to create steam-powered spinning generators. Participants will learn how fossil fuel burning contributions to global climate change and discuss its impact on food production, health, and environment. Then we'll learn more about alternative energy and energy conservation.

III. Project Goals and Community Impact

By implementing the above programming, we will achieve the basic steps and training needed to have higher "Environmental Literacy" among the young citizens in our community. Learn concrete steps to take initiatives in protecting our nature resources.

IV. Culminating activity:

After the completion of all activities, participants will be asked to write a two-page essay to share how the lessons they learned from the project help them take a proactive and progressive approach to preserve our environment in food, energy and cleaning up pollution. Upon submission, they will be given a "green citizen" badge.

V. Total Project Budget : \$1,850

VI. Total Project request: \$1,387 (75% of the total Budget)

VII. Qualification of the Presenters: 1. The Science Barge: The educators have extensive education and experiences in building a more sustainable community among the youth. 2. The Hilltop Hanover Farm: Renowned local hub on offering programs on healthy and sustainable food production. 3. Sarah Lawrence College, Center for the Urban River at Beczak: An alliance which is to advance environmental knowledge and stewardship by providing high quality K-12 education to local community.