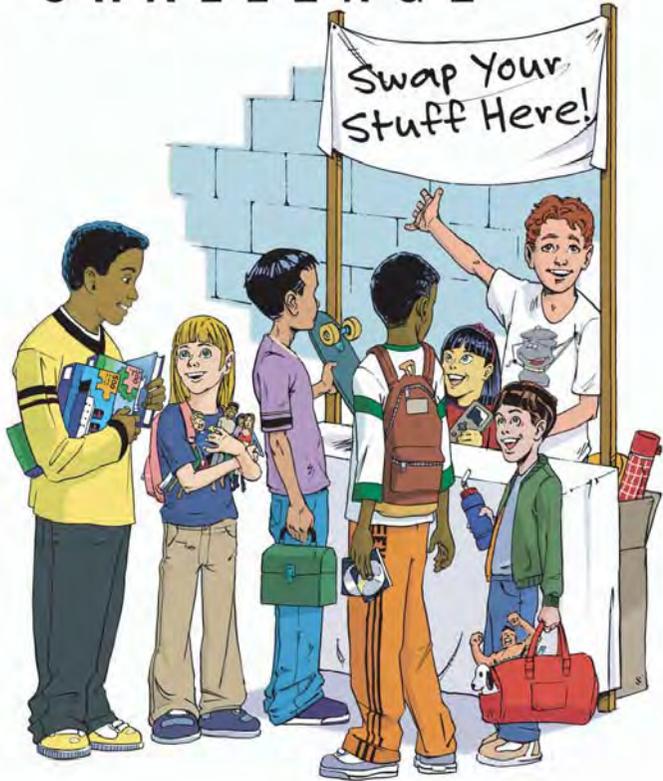


TrashMasters!™
REDUCE & REUSE
CHALLENGE



Intermediate Division
Brooklyn Borough
Winner

MS 51
William Alexander

2012 GOLDEN APPLE AWARDS

This certificate is awarded with the sincere appreciation and esteem of a grateful Department and City in recognition of your school's efforts to help make New York City shine.



City of New York
Department of Sanitation
Bureau of Waste Prevention, Reuse and Recycling
nyc.gov/wasteless



2012 Golden Apple Awards Contest Entry Judging Info

(This sheet prepared for judges' use by DSNY BWPRR)



ID Info: 12012
School: MS 51 William Alexander
Grade Division: IS
Borough: K

Golden Shovel Award contestant
(for borough Master School Composter)

2012 Project Entries received for:

School Population: total # 1000
Core Group: **Total Participating:**

TrashMasters! Super Recyclers

Received:

TrashMasters! Reduce & Reuse Challenge

Received: 5/1/2012

Cafeteria Environmental Experiment and Contest

To celebrate Earth Day, the MS 51 Parent Association's Green Committee began a Cafeteria Environmental Experiment and Contest for the month of April. Prior to the experiment, the cafeteria had one trash bin for all materials, including Styrofoam trays. As part of the experiment, the Green Committee installed a source separation recycling station, measured the waste stream before and afterwards, and conducted a student contest to determine the waste weight reduction as a result of the source separation.

TrashMasters! Team Up to Clean Up

Received:

Prior Year Entries:

first entry

School Contact Information:

Phone: 718-369-7603
Address: 350 5 AVENUE
Brooklyn 11215

Block&Lot: 3009810111
DOE Location: K051
DOE Bldg: K051

REQUIRED for Super Recyclers only:

Custodian: CARMINE SOMMA
Custodian's Phone: 718-768-1119
Custodian's Email: ck051@schools.nyc.gov

Sustainability Coord:

Contest Coordinator: Lenore Berner
Coord Phone (if different):
Coordinator Email: lberner2@schools.nyc.gov

Principal: Lenore Berner
Principal Email: lberner2@schools.nyc.gov

Comments (may not be relevant to judging)

Principal is serving as Contest Coord. Entry submitted by: Jane Tomkiewicz, parent, MS51 Parent Association Green Committee; janetom1234@gmail.com 347-387-2366

Info Confirmed:

6/27/2012

MS51 Cafeteria Environmental Experiment and Contest



Why this?

MS51 has a very good history of recycling paper in the classrooms but recycling was not practiced in the Cafeteria. The Parent Association's Green Committee wanted to raise awareness about the amount of material not being recycled each day that instead was carted to landfills (using costly fossil fuels) where they contributed to methane gas production. To celebrate Earth Day, the PA supported the Green Committee Chair to lead a Cafeteria Environmental Experiment and Contest for the month of April.

What did you do?

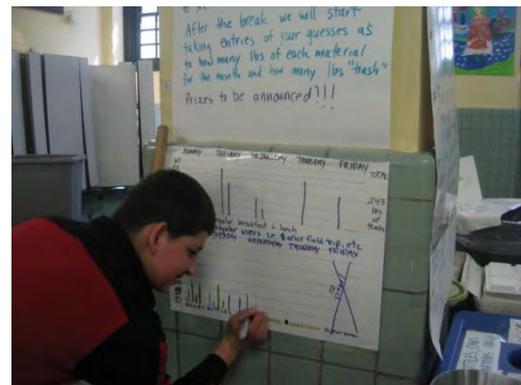
By introducing a Recycling Station in the Cafeteria we were able to source separate and clearly demonstrate that we could reduce our non-recyclable trash by as much as two thirds. We had containers for:

- 1) cans, bottles, cartons & foils as picked up by NYC sanitation;
- 2) #1, #5 & #6 plastics as accepted by the Park Slope Food Coop;
- 3) fermenting all food waste – including breads, meats, vegetables, fruits, prepared foods – as accepted by the composting service VOKASHI;
- 4) sugar cane pulp trays – also accepted by the composting service VOKASHI;
- 5) non-soiled paper; and
- 6) all other non-recyclable trash and plastics



Experiment and Contest

A week prior to the Project, the Chair of the PA Green Committee with student assistance weighed the commingled trash from the kitchen and the cafeteria after lunch for five days and charted the weights on a public scoreboard. The Recycling Station was established the first week of April and the Food Service used sugar cane pulp trays. For two weeks, the Chair and students weighed and charted the source separated containers (as listed above).



Using the data collected in weeks one and two, for the final week the Contest was to predict the final weights of each material and the total savings of material from the non-recyclable trash.



Project Planning

The project was planned and implemented by the Chair of the PA Green Committee. The Chair met with the Principal, the Sustainability Coordinator, the Food Service Manager and the Custodians to discuss and approve the scope of the project. Arrangements were made for additional collections bins and an area designated for the Recycling Station in the Cafeteria. The Chair managed the sourcing of sugar cane pulp trays and the fermenting bran

and buckets to process the food waste. The Chair also sourced the materials for the signage and arranged for cafeteria monitors to be on hand at breakfast and lunch to oversee the separation of materials. Finally, the Chair needed to make sure students who used the cafeteria knew about the project via signage and announcements, and that the students who didn't use the cafeteria knew about the project and felt encouraged to visit and participate in the Contest.

Student involvement

A core group of 65 students learned how to sort all their lunch materials. Another group of students, under the guidance of the MS51 Social Worker, made daily announcements about the history of NYC trash, recycling projects at MS51 and the Recycling Station. All students were invited to visit the cafeteria and to participate in the Contest. The student President took a survey of her mayors. The mayors were instructed to circulate the survey about recycling practices in school to their classmates. All students attended an Earth Day Sustainability Assembly which featured guest speakers from DOT and VOKASHI kitchen waste solution and presentation of the student Green Team's musical. All students took a sustainability pledge and families are being surveyed for their practices.

Promotion

In addition to the involvement and promotion among the students, the PA Green Committee connected to local businesses and public events to help promote the April programs. Newsletters were sent to families and a representative from GrowNYC addressed the Parents Association Meeting. Posters were hung describing the project, how the data would be collected, and the entry forms for the Contest. The Principal sent a letter to teachers and all staff.

The student Green Team created a special "recycling rap" and a school wide Sustainability assembly was held for all students. The school librarian created an environmental bibliography, and a survey was sent to families and a pledge for students. Finally, the Experiment and Contest will be exhibited at MS51's Science Fair in June.



MS51 Cafeteria Environmental Experiment and Contest

Collaboration

The Cafeteria Experiment and Contest was made possible thanks to donations from a number of local groups and organizations. School Food donated the first case of sugar cane pulp trays, and an MS51 family donated 3 cases. We also reached out to local schools to find out more about the tray program – and borrowed some from PS 10 when our supply was low. The buckets and fermenting bran were donated by VOKASHI president, Vandra Thorburn, who also collected the fermented food waste and compostable trays to process at local community gardens and composting sites. She demonstrated the fermenting process to students both in the Cafeteria and at the Earth Day sustainability assembly.



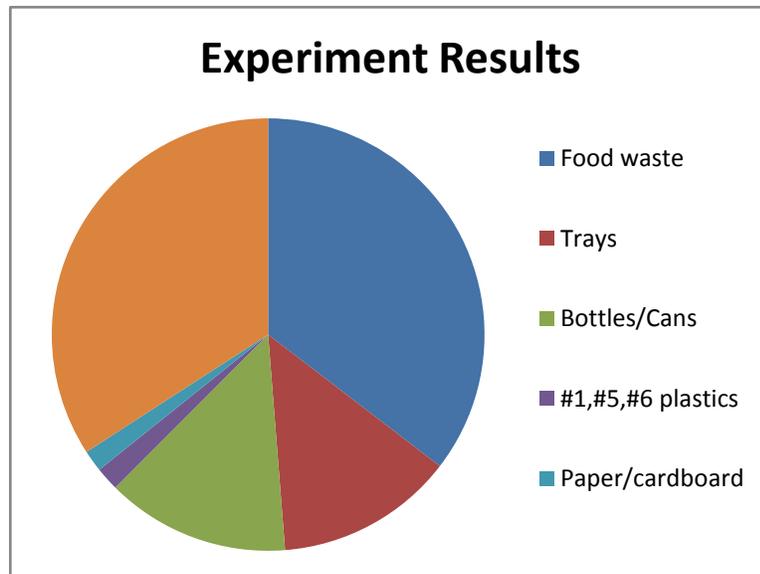
The MS51 Experiment consulted with the Head Gardener and Environmental Educator at Old Stone House in Park Slope to consider managing compostable waste on school grounds. Local organizations that supported the project through donations of goods and services include the 5th Ave BID, Film Biz Recycling, BUILD IT GREEN – which donated 50 aerobic steps to the MS51 P.E. Department. Brooklyn Industries, Naruto Ramen, Housing Works, 3 Pommies Bakeries, Guvnor’s Vintage Store, Park Slope Coffee and Tea, Stop and Fifth Store all provided gift certificates for prizes.

Educational Components



Not only did the students learn about new recycling opportunities, but the School Food Service Manager was introduced to the method of fermenting food waste. She was impressed that food waste could be collected without smells, pests or pathogens.

Just the physical presence of the Recycling Station and the array of bins, students immediately understood that the materials were separated by category and that they had a greater value because they were “uncontaminated” by other materials. It was obvious that each category of waste could be sent to different groups/vendors for their reuse. From the very first day when students began to weigh and chart the findings, it was clear that the non-recyclable ‘trash’ would be greatly reduced. The real amount of ‘trash’ (things which currently were not being collected for reuse or recycling) was much, much smaller than we previously experienced.



In the Contest, the students were asked to project the weights for the final week and the total month of the project. Students needed to follow and analyze the weights of the source separated material and calculate a prediction for the final week. In this way students had to work with averages, projections and predictions. The final challenge for the students was to consider what recyclable material had been saved from the landfill and what non-recyclable trash was left.

PROJECT ANALYSIS

What worked? The students learnt to adapt to the new system very well. It became clear that the more visual the signage at the Recycling Station the better. Students generally understood the importance of the project. When asked if the project should continue, the response was absolutely positive. If/when there was hesitation it was with regard to logistical matters or changes.

What didn't work? Although most students understood the concept and practice – there were lapses that would result in improper disposal. The volunteer monitor redirected and deposited such items. The Recycling Station would need monitoring. The greatest challenge is arranging for monitors and coverage for such an exit station. Can faculty help; or kitchen staff? Ideally such monitoring should be incorporated into the student's Green Team.

Applicability to Other Schools

Designing bright, well-posted Recycling Stations could be used in many schools. Similar projects to weigh cafeteria waste could be adapted for various math, social science and sustainability classes. The practice of collecting and charting such data is a practical demonstration of the waste that students generate. The practice and discipline associated with such projects teaches students important recycling and civic responsibility lessons.



MS51 Cafeteria Environmental Experiment and Contest

Measuring Success

For lasting success, there are three aspects of the Experiment that would need to continue:

- 1) the Principal, Sustainability Coordinator and Custodians need to agree on implementing 3-bin collection: blue = bottle/can/carton; green = paper; and trash.
- 2) with our results we hope to lobby the Parent Association and the Principal to consider paying for the compostable trays this year and next year;
- 3) we would like to try to arrange for food waste management and collection.

The Experiment clearly demonstrated that 2/3 of our waste could be diverted from the landfills. Students understood the importance of recycling as many of them had recycling programs in their grade schools. With the benefit of their previous good training, we do a disservice by not continuing to recycle. Our students' future will surely require more awareness and handling of all materials in our world.

Nowhere was the success more plainly stated than in the words of the students responding to a question on their entry form: "Do you think we should keep recycling in the cafeteria?"



"The cafeteria should keep recycling because little changes can make a big difference. We should be Earthfriendly".
Mymuria, Room 808

"Yes, because this is going well." *Mei Luan, Room 611*

"Yes, because it helps the community and the world." *Diana, Room 606*

"I think we should continue. It keeps the planet clean and we understand the importance of recycling." *Aiveia, Room 808*

"Yes, because it is fun." *Samic, Room 611*

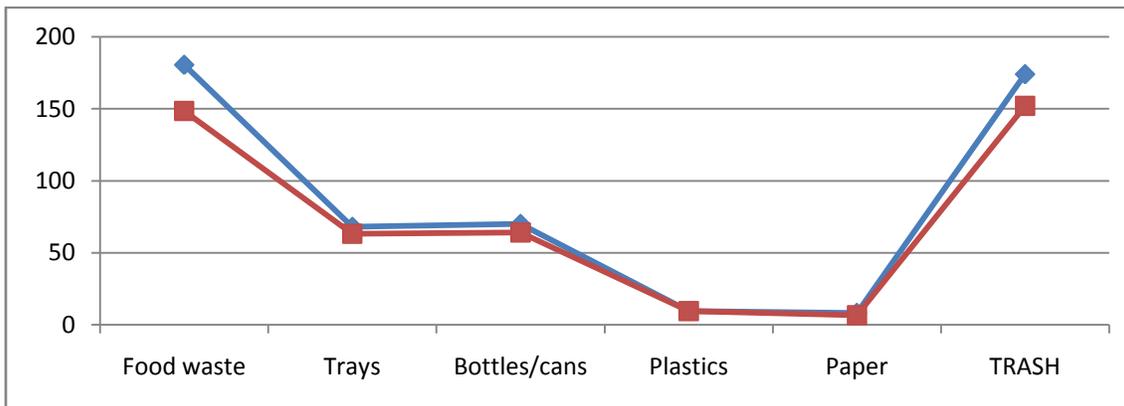
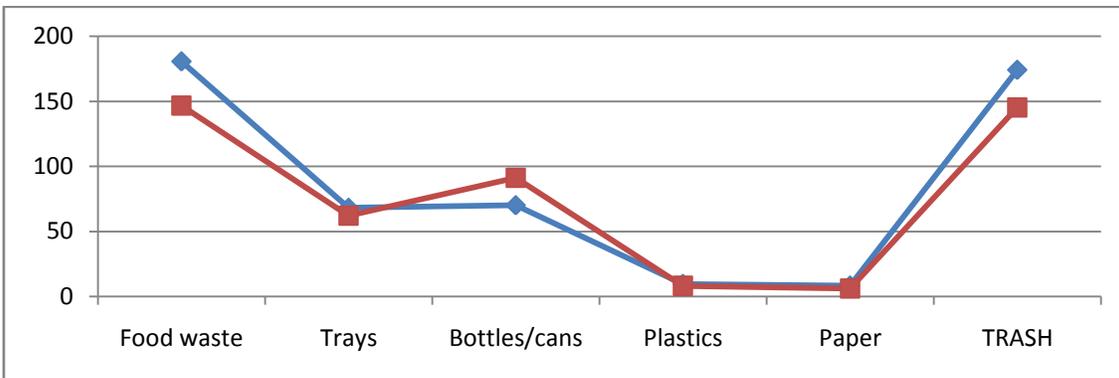
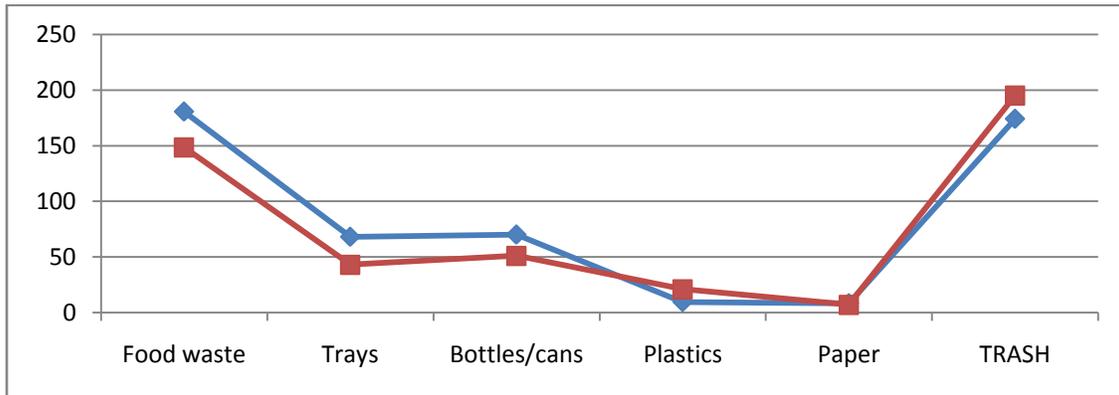
"Yes, because even though it takes more time, the school is making a difference to help keep planet Earth clean!" *Samiha, Room 808*

"Yes, recycling is good for the Earth." *E Jay, Room 809*

"Yes, I think we should continue because we need to save our planet from pollution because it causes global warming...Animals and humans are affected....and what if our landfills fill up?And by showing kids how to recycle, they'll tell their families and friends. It also makes me feel good that I am helping out our planet, even if it is a small amount per day." *Atifa, Room 806*

"Yes, it is such fun to recycle." *Daisy, Room 611*

Some Contest Predictions by line graph



Blue = Actual Red = Student Prediction



How the Contest will work...

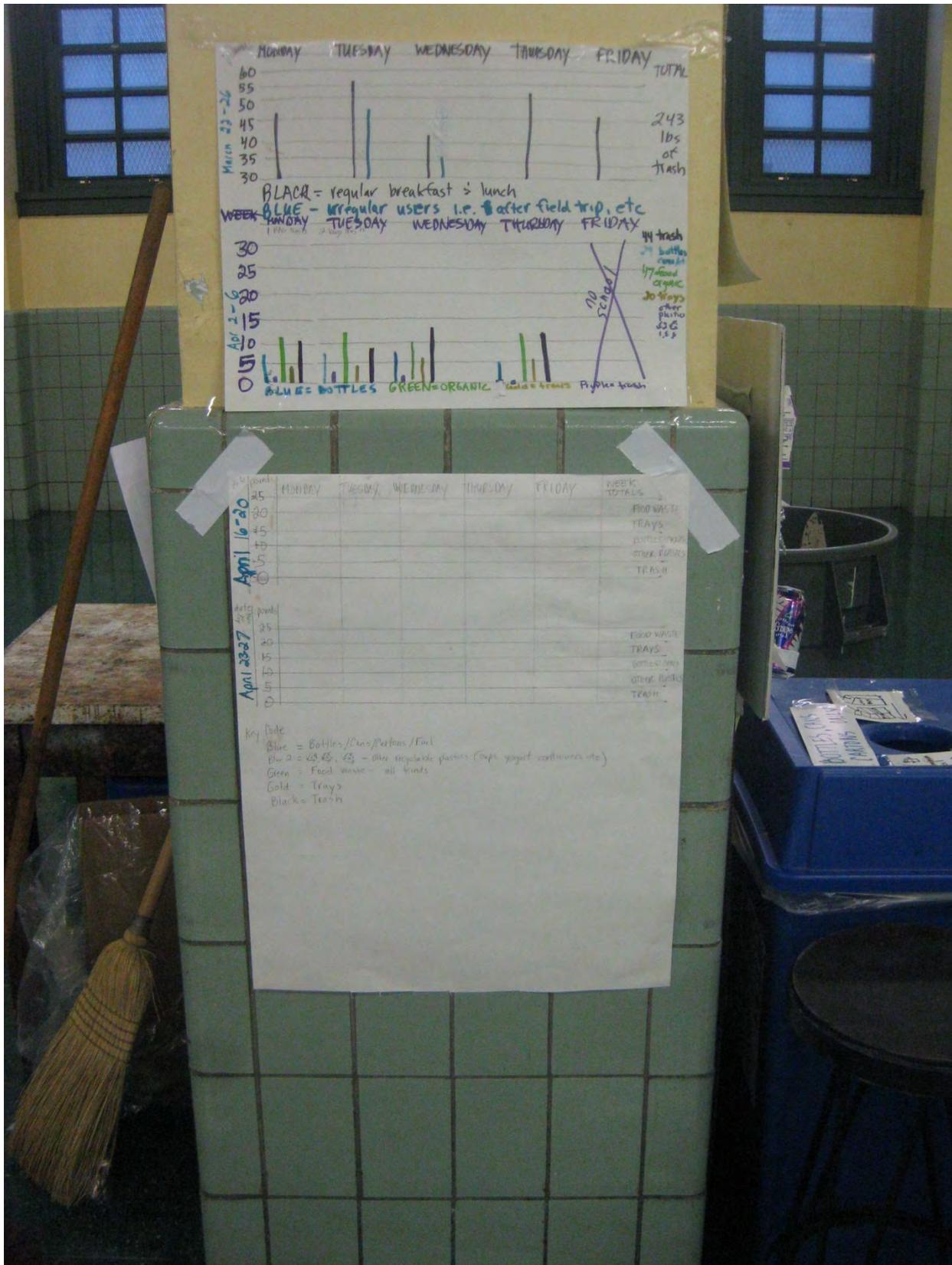
During the school week MARCH 26-30 we weighed the "unseperated" trash collected from the cafeteria each day.

During this week we will weigh all the seperate collection bins to see how much each category weighs.

After the break we will start taking entries of your guesses as to how many lbs of each material for the month and how many lbs "trash"

Prizes to be announced!!!

MS51 Cafeteria Environmental Experiment and Contest



*RRRRR Resource list for MS51 families
online ideas and neighborhood resources*

- greenmarkets, textile and food recycling, gardens, recycling, teaching resources of all kinds: www.GrowNYC.org
 - recycling, composting, laws, disposal guideline, refashion, take-it-back, bureau of waste prevention reuse and recycling, www.wastelessnyc.org
 - refuse, reduce, reuse, recycle, rot (in that order) <http://zerowastehome.blogspot.com/p/tips.html>
-

#1, #5, #6 PLASTICS (not collected by DOS i.e. yogurt containers, cups, delivery) RECYCLING /Open to Public The Park Slope Food COOP at 782 Union Street (betw 6th/7th Aves) 718.622.0560 www.foodcoop.com Bring the following (clean & dry) items : **#1 & #6 clear plastic (fruit, deli & salad bar containers),** #5 plastics (no labels) Chinese take-out soup containers, yogurt containers etc. **Plastic film and bubble wrap. **DROP OFF SCHEDULE:** 2nd Sat. o/t month 10am-2pm, 3rd Thurs. o/t month 7-9pm & last Sat. o/t Month 10am-2pm

FOOD WASTE - RECYCLING (Composting)

- 1) Take vegetable, fruit waste only to community gardens or green market drop offs OR
- 2) Ferment food waste (all kinds of food – veggies, fruits, meats, prepared foods, breads) with bokashi. Trench your own food waste or subscribe to NYC's first **composting service** www.vokashi.com

TEXTILES REUSING OR RECYCLING

Aside from wearable clothing that can be taken to resale businesses or charities **textiles of all kinds** accepted at Farmer's Market Textile pickups. www.GrowNYC.org

ELECTRONICS RECYCLING

Lower East Side Ecology Center's E-waste Collection Center/GOWANUS
469 President Street @ Nevins Street 718-858-8777. <http://www.lesecologycenter.org>
Drop OFF SCHEDULE Tues 10-5, Wed 12-7, Thurs 10-5, Fri 10-5, Sat 10-4

BUILDING MATERIAL RECYCLING

BUILD IT GREEN 69 9th St. (west on 9th St. just before canal) 718.725.8925 www.gowanus@gbignyc.com
Retail outlet for salvaged and surplus building materials - from panel doors to high end refrigerators and shutters to movie props, BIG's mission is to keep these materials out of the landfill, while offering deep discounts on their resale. Sponsored by Community Environmental Center (CEC) www.cecenter.org.
Over 75 tons of materials on sale at half or below their new prices: • doors • flooring • sinks and toilets
• liRRghting • windows • trim • cabinets • metal studs

REDUCING PACKAGING - Bring your own reusable bags or containers whenever possible.

At stores that carry foods/products in bulk you can pour goods into your reusable container:
Park Slope Coffee and Tea. 368 5th Ave. great quality coffee, tea and spices www.coffeetanspices.com

MS51 Cafeteria Environmental Experiment and Contest

D-vine Taste 150 7th Ave (betw.carroll/garfield) grains, pastas, spices, nuts 718.369.9548 www.dvine-taste.com Park Slope Food Coop 782 Union Street (6th/7th Aves) grains, pastas, legumes spices, 718.622.0560 www.foodcoop.com Green Depot 222 Bowery Refill yr dish & laundry soap, cleaning products 212.226.0444 www.greendepot.com

FILM BIZ RECYCLING – If you're in the industry and want to get rid of things in a cool manner... or when you just have to have a 10 foot tall rocking horse or 8 foot banana – or loads of gorgeous curtains at ridiculously low prices. Film Biz Recycling (FBR) is a not-for-profit organization, creating socially responsible and sustainable solutions from media industry waste. Developing redistribution networks which include: • Local Charity Donation • Self-sustaining Creative Reuse Center • Community-Building Initiatives • Media Production Industry 540 President (3rd 4th Aves) 347.384.2336. www.filmbizrecycling.org

Did you know...you can recycle corks and bras?

Picada y Vino Wine store
327 5th Ave (3rd/4th St.)
www.picadayvino.com

You can recycle all parts of your bras?
www.brarecyclingagency.com

**please join the MS 51 Parent Association Green Committee
and/or send your suggestions, comments, questions to
janetom1234@gmail.com**