

TrashMasters!™
REDUCE & REUSE
CHALLENGE



Elementary Division
Queens Borough
Honorable Mention

PS 239

Police Officer Ramon Suarez

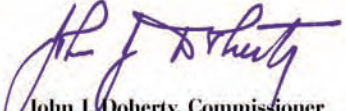
NEW YORK CITY DEPARTMENT OF SANITATION

2007 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, Michael J. Bloomberg, Mayor
Department of Sanitation, John J. Doherty, Commissioner


John J. Doherty, Commissioner
June, 2007

TrashMasters!™

REDUCE & REUSE

CHALLENGE



2007 Golden Apple Awards

Trashmasters: Reduce Reuse Challenge: Elementary Division

PS 239 P.O. Ramon Suarez School
17-15 Weirfield St. • Ridgewood, NY 11385 • 718 381-4009



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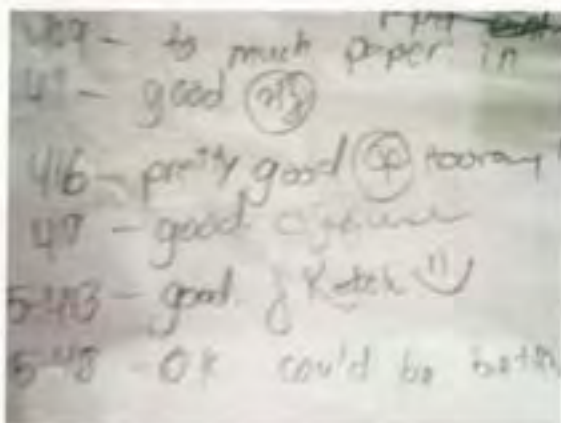
2007 Golden Apple Awards

Trashmasters: Reduce Reuse Challenge: Elementary Division

Don't Refuse to Reduce or Reuse your Refuse!!



Achieving excellence through education, student participation, and accountability!



Waste Not...

Winning the title of Citywide Recycling Champions for the Elementary Division was an amazing reward after much hard work was spent transforming our school. To start the transformation last year, I had the students consider an old mathematics problem called, "a penny a day doubled." This problem helped them to see that small change can lead to a huge

fortune, and that small changes in habits can lead to big victories in the war against waste. This year, the focus of our recycling program was based even more upon the Trashmaster Curriculum. Instead of "A penny a day doubled," I had the students use the lunchtime waste template to calculate their daily, weekly, monthly, and yearly waste production. Overall, students were even more amazed at the amount of waste they were contributing to the environment each month than they were by how much money they'd have if they saved a penny a day doubled.

Reduce/Reuse



SOMETHING NEW.....

WASTE WATCHERS

Students now weigh bins and lunch waste and keep track of data.

THINK.COM

Communication with students is done online. Assignments are given and completed virtually! No Paper Waste!!

INVENTIONS

Students Produce RRR inventions by reusing materials on a rolling basis. New ones include an alarm system for waste bins.

BRAINPOP

Students are learning about Fossil Fuels and alternative energy sources. Brainpop delivers these topics in a kid-friendly format.

A lot of the initiatives we're continuing from last year!

Something Old....

- We are continuing our innovative, efficient, tree-saving ideas such as iPledge, Yes I Scan, the Virtual Gradebook, and the Smartboard. Please read more inside. These are very exciting!
- Teachers and school aides have again pledged to use less paper by maximizing use of the full paper space when designing templates and by creating double-sided copies whenever possible. This will cut consumption in half for certain jobs.
- Teachers and students are saving scraps and used paper for use in the Art and Science rooms.
- We're taking on partners! We have instated a "Junior Drip Patrol" in conjunction with a DEP program to help reduce water waste. We have also distributed Energy and Safety comics distributed by Con-Ed. Students are learning the importance of energy conservation.
- We reduce by recycling! Although there is an important difference between reducing and recycling, the total amount of trash entering the waste stream is markedly reduced because we now have a much higher percentage of waste being recycled. This was a major weakness before.
- We're making better decisions! The paper in this binder is 100% recycled paper and the tabs are not only reused from last year but were 20% recycled before that!
- We participate in Materials for the Arts.
- The "We Are Model Citizens!" program. Students used scrap paper to build models of cities in a study of urban ecosystems. Part of this study was understanding inputs and outputs of resources. This included energy conservation and waste reduction.

LOCAL HEROES

NATIONAL ACCLAIM!!!

Name Lucy Fink 2/22/2011 Date 4/20/11

What items are at your lunch table, including all food, drink, containers, and wrappers?
2001 PARTY, Park, etc. containers, etc. etc. etc. etc.

How much lunch trash weight did you collect?
10000

What is left over after you eat your lunch, including all food, drink, containers, and wrappers?
Apple sauce

How much does the waste weigh?
1 ounce

How much lunch waste do you make per week?
5 ounces

How much lunch waste do you make per class?
786 ounces

How much lunch waste does your class make per day?
140 ounces

How much lunch waste does your class make per week?
700 ounces

How much lunch waste does your class make per month?
2696 ounces

How much lunch waste does your school make per day?
10000

How much lunch waste does your school make per week?
50000



REDUCE/REUSE MONITORS DID MORE WORK THAN EVER THIS YEAR! WHO SAID BEING A MONITOR WAS EASY?

THE STUDENTS TAKE PRIDE IN THE PROGRAM AND THAT IS WHY IT THRIVES.



OUR KID INVENTORS MADE IT TO NATIONAL BROADCAST TELEVISION!!!



ONE

I knew that the reduce/reuse program would not lead itself this year, so a plan was devised and enacted with the help of the new and expanded RRR team. First, monitors toured the school weighed waste bins in every classroom. We track output from different rooms now. Monitors keep watch on what goes on in the cafeteria, hallways, and other common areas as well as in their classrooms.

TWO

Students also weigh their lunch waste and now make conscious efforts to reduce it!

THREE

Several of our students were featured on the Television show Cyberchase on channel 13. They appeared on a segment about kid inventors. Inventions from last year's RRR invention convention landed them the gig!!!



Here are some of the new lessons that we covered this year. Lessons for K-2 students are being taught by Mr. Jacobs, the new science teacher for those grades. I have also added more 3-5 lessons onto the regimen from last year!!

The NYC Teachers' RRR Resource Guide.

RRR You Ready?

REDUCE/REUSE!!

MAKING A STRONG IMPACT

WORKSHEET (Grades 4-5)

Name: Prithvi, Akshat
Name: Kabir, E. Komarath Date: 4/20/07

What items are in your lunch today, including all food, drink, containers, and wrappers?
Sandwich wrap, 2 wrapper, 6oz, 1oz
How much does your lunch weigh before you eat it?
2 lb 10 oz all

What is left over after you eat your lunch, including all food, drink, containers, and wrappers?
Milk with a water 3/4 (PJ), Plastic paper, tissue, napkins
How much does the waste weigh?
6 some of trash in all

How much lunch waste do you make per week?
10 lb 10 oz all

How much lunch waste does your class make per day?
7.5 lb 10 oz all

How much lunch waste does your class make per week?
56 lb 10 oz all

How much lunch waste does your class make per year?
190 lb 10 oz all

How much lunch waste does your school make per day?
10,300 lb 10 oz all

How much lunch waste does your school make per year?
3,600



WE INCREASED THE NUMBER OF DOCUMENTS THAT WE HAVE ON FILE THROUGH "YES IS CAN."

YOUNG INVENTORS WERE FEATURED ON CYBERCHASE.



OUR "JUNIOR DRIP SQUAD" MEMBERS INSPECT CLASSROOMS TO FIND LEAKY FAUCETS.



NO WEIGH!!!

Something new that we started this year was the Waste Watchers. Students brought scales down to the cafeteria and weighed their trash. This gave them enormous perspective on trying to reduce the amount of trash that they individually produce each day!

INVENTION CONVENTION

Two years ago, students were mentioned in the Ridgewood Times (a local newspaper) for their original inventions. Inventions like "the Solar-Powered Hot Dog Cooker" and the "Remote Controlled Schoolbag" were created by reusing items that were going to be thrown away. Last year, students inventions were handed in and were featured on national television in Fall 2006! What's next???

DON'T BE A DRIP, PHASE 2

A leaky faucet can waste 400 gallons of water a year (plus an enormous amount of energy if its a leaky hot water faucet). Prevention is the key at PS 239. We also have light monitors to make sure lights aren't left on when classrooms are empty.

DATA COLLECTION

What items are in your lunch today, including all food, juice, containers, and wrapper?
Sandwich, milk, fruit - in wrapper, 9 cans, 1 can
How much does your lunch weigh today (not eat it)?
2 lb in all
What is left after you eat your lunch, including all food, juice, containers, and wrapper?
Milk with a carton, 2 of (RJ), plastic paper, 1 piece of plastic
How much does the waste weigh?
6 ounce of trash in all
How much lunch waste do you make per week?
10 lb in all
How much lunch waste do you make per year?
50 lb in all
How much lunch waste does your class make per day?
56 lb in all
How much lunch waste does your class make per week?
140 lb in all



THE RRS CURRICULUM
GUIDE EXPANDING ON
SOMETHING THAT
WORKS

STUDENTS HAVE THE
WILL TO SUCCEED



ILL HABITS GATHER BY UNSEEN DEGREES, AS
BROOKS MAKE RIVERS, RIVERS RUN TO SEAS.
-JOHN DRYDEN

3405
3-407 Bad Paper
404 One bad item
406 - Plastic in trash
407 - 21. 2000 very good

PUTTING THE RULES
INTO PRACTICE LEADS
TO POSITIVE
BEHAVIORS



CHIEF INSPECTOR

Nothing gets by the Chief. I even had teachers try to bribe him as a test and he passed with flying colors. He's the recycling guru and he writes tickets for everything from missing magnets to excessive litter. He pokes through the trash receptacles and with the eyes of a hawk finds items that do not belong. Teachers are told in not so many words whether they are living up to the recycling expectations of the Inspector!!

BEST PRACTICES



LUNCH

Students are integrating Math, Literacy, and Science to keep our new Waste Watchers program running.



EARLY START

It's never too early to learn the three R's! Students in K and even Pre-K learn to recycle properly and learn that reusing and reducing are sometimes that better options



GRADES 3+4 ASSEMBLY SUPER RECYCLERS

Students were invited to participate in a recycling assembly. Emphasis was placed on encouraging them to reuse items instead of throwing them away. Examples include: donating books to a library instead of discarding and using every part.

ACTIVE ENGAGEMENT



PRE-K AND K ASSEMBLY

Pre-K and K students participated in a similar assembly. Students watched parts of the Trzaskowski video, answered questions, and then competed in a series of contests involving recycling.

This was a follow-up to a very successful campaign with the younger students last year. These assemblies really made an impact and helped kids remember rules about recycling.

These pictures show students as they help me sort out the trash. Students were given RRR prizes such as dolls, shirts, and backpacks!



COOPERATION

RRR AND LITERACY



BUILD LITERACY WITH
RRR INFO.

INCREASE RRR
AWARENESS THROUGH
LITERACY.



A PERFECT
COMBINATION!



STEP 1: REVIEWING AND ACQUIRING

Before we started the Reduce/Reuse Challenge, the students were already familiar with the Con Edison comic on energy conservation and safety. Seeing how much they had enjoyed reading and writing in those, I was excited to find out about the RRR comics. The kids were even more excited to read them and to write in them.

STEP 2: IMPLEMENTING

Once the materials had arrived, we were ready to get started on the Reduce/Reuse Challenge. We were already prepared to do this because all of the students in grades 3-5 had participated in select RRR curriculum lessons and watched the Trashmasters DVD. The comics acted as a superb reinforcement for the students to remember their facts.

STEP 3: CONTINUING

Students are still reading and passing along their comics, solving the puzzles inside of them, and participating in further lessons from the RRR curriculum guide. Students are taking ideas from their comics to help build our school's reduce and reuse program.

Applied Learning Standards

A1 Problem Solving

Apply problem solving strategies in purposeful ways, both in situations where the problem and desirable solutions are clearly evident and in situations requiring a creative approach to achieve an outcome.

The student conducts projects involving at least two of the following kinds of problem solving each year and, over the course of elementary school, conducts projects involving all three kinds of problem solving.

- **Design a Product, Service, or System:** Identify needs that could be met by new products, services, or systems and create solutions for meeting them.
- **Improve a System:** Develop an understanding of the way systems of people, machines, and processes work; troubleshoot problems in their operation and devise strategies for improving their effectiveness.
- **Plan and Organize an Event or an Activity:** Take responsibility for all aspects of planning and organizing an event or an activity from concept to completion, making good use of the resources of people, time, money, and materials and facilities.

Each project should involve subject matter related to the standards for English Language Arts, and/or Mathematics, and/or Science, and/or other appropriate subject content.

A2 Communication Tools and Techniques

Communicate information and ideas in ways that are appropriate to the purpose and audience through spoken, written, and graphic means of expression.

A2: The student writes and formats information for short publications, such as brochures or posters; that is, the student:

- organizes the information into an appropriate form for use in the publication;
- checks the information for accuracy;
- formats the publication so that it achieves its purpose.

Examples of publishing information include:

- Design a format for publishing daily weather reports. *1a, 2b, 4a, 6b, 5c*
- Design a poster advertising a fund raising drive. *1c, 3b*

A3 Information Tools and Techniques

Use information gathering techniques, analyze and evaluate information and use information technology to assist in collecting, analyzing, organizing, and presenting information.

A3: The student uses information technology to assist in gathering, organizing, and presenting information; that is, the student:

- acquires information for specific purposes from on-line sources, such as the Internet, and other electronic data bases, such as an electronic encyclopedia;

A4 Learning and Self-management Tools and Techniques

Manage and direct one's own learning.

A4: The student learns from models; that is, the student:

- consults with or observes other students and adults at work, and identifies the main features of what they do and the way they go about their work;
- examines models for the results of project work, such as professionally produced publications, and analyzes their qualities;
- uses what he or she learns from models to assist in planning and conducting project activities.

A5 Tools and Techniques for Working With Others

Work with others to achieve a shared goal, help other people learn on-the-job, and respond effectively to the needs of a client.

A5: The student shows or explains something clearly enough for someone else to be able to do it.

Examples of showing or explaining something to someone else include:

- Show how to fix a specific breakdown in a bicycle. **1b**
- Explain how to figure out the average morning temperature recorded at school during the winter. **1a, 2b, 2c, 4a, 44c**
- Show how to operate a video camera. **1a, 4a, 5a**

S1 Physical Sciences Concepts

The student demonstrates conceptual understanding by using a concept accurately to explain observations and make predictions and by representing the concept in multiple ways (through words, diagrams, graphs, or charts, as appropriate). Both aspects of understanding—explaining and representing—are required to meet this standard.

S1 a The student produces evidence that demonstrates understanding of properties of objects and materials, such as similarities and differences in the size, weight, and color of objects; the ability of materials to react with other substances; and different states of materials.

S4 Scientific Connections and Applications

The student demonstrates conceptual understanding by using a concept accurately to explain observations and make predictions and by representing the concept in multiple ways (through words, diagrams, graphs or charts, as appropriate). Both aspects of understanding—explaining and representing—are required to meet this standard.

The student produces evidence that demonstrates understanding of:

S4 a Big ideas and unifying concepts, such as order and organization; models, form and function; change and constancy; and cause and effect.

S7 Scientific Communication

The student demonstrates effective scientific communication by clearly describing aspects of the natural world using accurate data, graphs, or other appropriate media to convey depth of conceptual understanding in science; that is, the student:

S7 a Represents data and results in multiple ways, such as numbers, tables, and graphs; drawings, diagrams, and artwork; and technical and creative writing.

S7 b Uses facts to support conclusions.

S7 c Communicates in a form suited to the purpose and the audience, such as writing instructions that others can follow.

S7 d Critiques written and oral explanations, and uses data to resolve disagreements.

S8 Scientific Investigation

The student demonstrates scientific competence by completing projects drawn from the following kinds of investigations, including at least one full investigation each year and, over the course of elementary school, investigations that integrate several aspects of Science Standards 1 to 7 and represent all four of the kinds of investigation:

S8 a An experiment, such as conducting a fair test.

S8 b A systematic observation, such as a field study.

S8 c A design, such as building a model or scientific apparatus.

S8 d Non-experimental research using print and electronic information, such as journals, video, or computers.

E1 Reading

Reading is a process which includes demonstrating comprehension and showing evidence of a warranted and responsible interpretation of the text. "Comprehension" means getting the gist of a text. It is most frequently illustrated by demonstrating an understanding of the text as a whole; identifying complexities presented in the structure of the text; and extracting salient information from the text. In providing evidence of a responsible interpretation, students may make connections between parts of a text, among several texts, and between texts and other experiences; make extensions and applications of a text; and examine texts critically and evaluatively.

E1: The student reads and comprehends informational materials to develop understanding and expertise and produces written or oral work that:

- restates or summarizes information;
- relates new information to prior knowledge and experience;
- extends ideas;
- makes connections to related topics or information.

E3 Speaking, Listening, and Viewing

Speaking, listening, and viewing are fundamental processes which people use to express, explore, and learn about ideas. The functions of speaking, listening, and viewing include gathering and sharing information; persuading others; expressing and understanding ideas; coordinating activities with others; and selecting and critically analyzing messages. The contexts of these communication functions include one-to-one conferences, small group interactions, large audiences and meetings, and interactions with broadcast media.

E3a: The student participates in one-to-one conferences with a teacher, paraprofessional, or adult volunteer, in which the student:

- initiates new topics in addition to responding to adult-initiated topics;
- asks relevant questions;
- responds to questions with appropriate elaboration;
- uses language cues to indicate different levels of certainty or hypothesizing, e.g., "what if...," "very likely...," "I'm unsure whether...";
- confirms understanding by paraphrasing the adult's directions or suggestions.

E3b: The student participates in group meetings, in which the student:

- displays appropriate turn-taking behaviors;
- actively solicits another person's comment or opinion;
- offers own opinion forcefully without dominating;
- responds appropriately to comments and questions;
- volunteers contributions and responds when directly solicited by teacher or discussion leader;
- gives reasons in support of opinions expressed;
- clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions.