WASTE DEEP

A data-driven lesson series for New York City middle and high school student changemakers

1 EXAMINING THE ISSUES

Day 1

Students will examine over 65 printable quotes, statistics, graphs, maps, definitions, excerpts, cartoons, and photographs to gain a multidisciplinary understanding of waste and its relationship to current economic, social, and environmental issues in New York City and the world.

2 UNDERSTANDING NEW YORK CITY

Day 2

With our interactive PowerPoint presentation, students will view city-based data, statistics, charts, maps, images, and visual games to understand the composition of their waste, where it all goes, how it gets there, and the challenges and goals of NYC's 0x30 sustainability plan. Students will also learn how to properly sort their waste in school and at home by focusing on both common and tricky items.

3 INVESTIGATING YOUR SCHOOL

Days 3-4

Students will learn about cases when citizen scientists used data to expose environmental issues and drive positive social change. They will then select and prepare a research tool to investigate the waste-related knowledge, attitudes, and behaviors of themselves, their peers, and the adults in their school community. Students can analyze their findings, present summaries to their peers, and use their research to guide their action plans.

4 TAKING CREATIVE ACTION

Days 5+

Many fun and creative options are available for students to educate and inspire their school community to move toward zero waste. Students will learn about popular changemakers from the past and active in society today. They will then develop and exercise skills in leadership, organizing, and the arts as they build awareness of the issues, share findings from their research, and express themselves in impactful ways.

5 TRACKING YOUR IMPACT

Ongoing

Students will collect data and make group reflections to evaluate the effectiveness of their action plans, present key findings, and discuss opportunities for continued improvement. Tracking and showcasing the impact that students have on moving their school community toward zero waste is an ongoing process.

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WASTE DEEP 1

OVERVIEW Examining the Issues

HOW DO YOU SPARK STUDENT INTEREST IN WASTE?

By using our Issue Cards! **Issue Cards are over 65 printable quotes, statistics, graphs, maps, definitions, excerpts, cartoons and photographs**. In groups, students will examine this content to gain a multidisciplinary understanding of waste and its relationship to current economic, social and environmental issues in New York City and the world. The Cards—also available as PowerPoint slides—are organized into five sets: Consumerism, Justice & Equity, Non-Renewable Resources, "Away," and a History of Waste in NYC. The size of your class, the dynamics and learning styles of your students and the amount of time you would like to spend with the Cards can guide the way your students use them. Here is one successful method:

Students Break into 5+ Groups

Each group receives a unique set of Issue Cards. Students spend time examining the content of their group's cards and begin to form reactions.

Students Complete Individual Response Slips

After examining their set of Issue Cards, students complete Response Slips to express what they think, feel or wonder about the information of one or more Cards.

Groups Construct a Poster and Present to the Class

In their groups, students share their reactions to the content, identify common themes and work together to create a poster to be shared with and presented to the rest of the class.

WASTE DEEP 2

OVERVIEW Understanding New York City

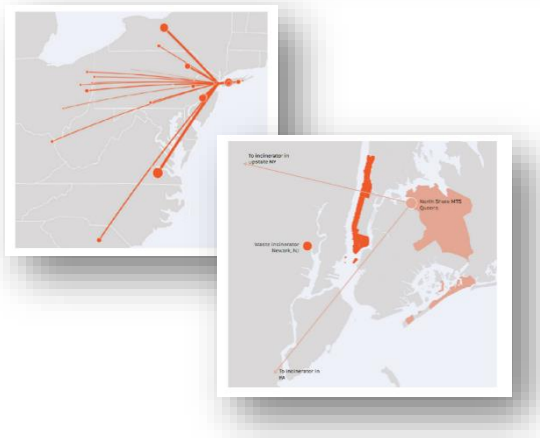
WHAT IS NYC DOING ABOUT ITS WASTE?

New York City's waste systems are vast, complex and fascinating. Many New Yorkers do not know where their waste goes and doubt the efficacy of NYC recycling. **Our PowerPoint presentation grounds students in the reality of NYC waste management today and empowers them to recycle right.** Upon viewing statistics, charts, maps, images, and visual games, students will understand the composition of their waste, where it all goes, how it gets there, and the challenges and goals of NYC's 0x30 sustainability plan. Students will also learn how to properly sort their waste in school and at home. With this overview and understanding, students will be equipped to identify specific problems in their school community and take creative action toward solving them. The presentation slides are organized into three general categories:

Data

Systems

Material Type	Instructions	Set Out Time	MON	TUE	WED	THU	FRI	SAT
organics	in latched organics bins	after 2PM but before 4PM	X	X	X	X	X	
mixed paper & cardboard	in clear bags or bundles	after 2PM but before 4PM	X		X		X	
metal, glass, plastic & cartons	in clear bags	after 2PM but before 4PM		X		X		



Sorting

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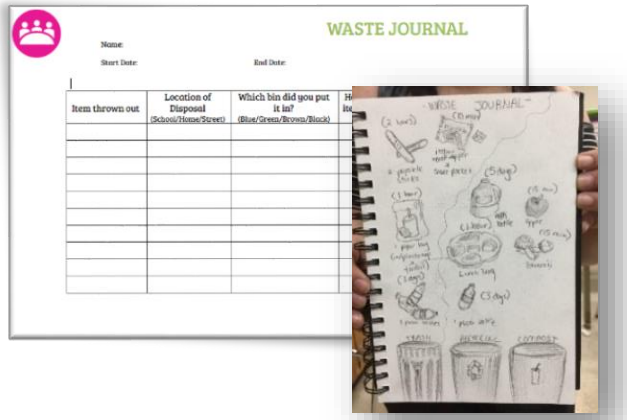
WASTE DEEP 3

OVERVIEW Investigating Your School

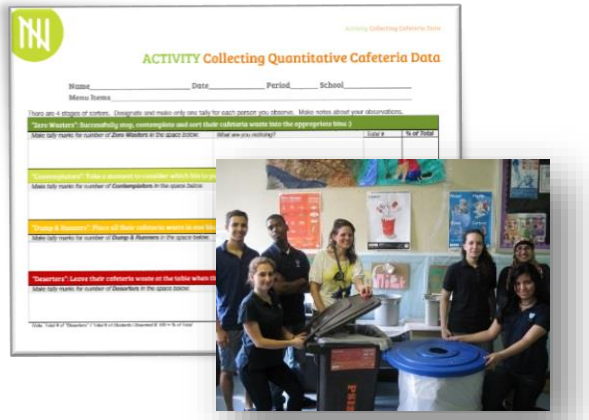
WHAT IS YOUR SCHOOL DOING ABOUT ITS WASTE?

Your school is a living laboratory for the study of waste. With quantifiable data, students can diagnose problems, identify opportunities, and ground solutions in school-based research. In this section of *Waste Deep*, students will learn about cases when citizen scientists used groundbreaking data to expose environmental issues and drive positive social change. **Students will select and prepare a research tool** to investigate the waste-related knowledge, attitudes, and behaviors of themselves, their peers, and the adults in their community. Students can analyze their findings, present summaries to their peers, and use their research to guide their action plans. Included here are several research templates for students to use as citizen scientists:

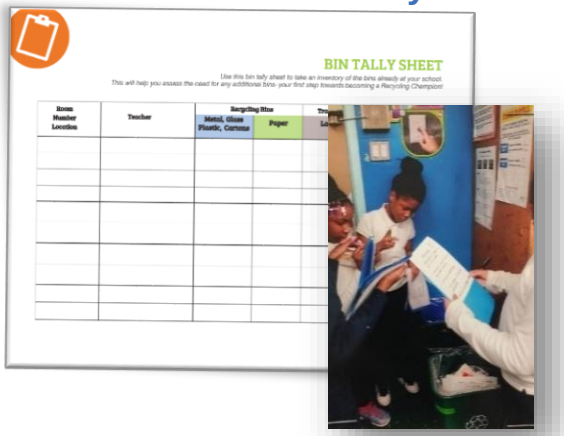
Waste Journal



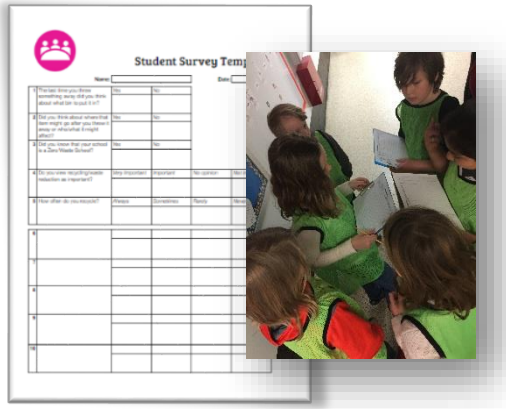
Cafeteria Observations



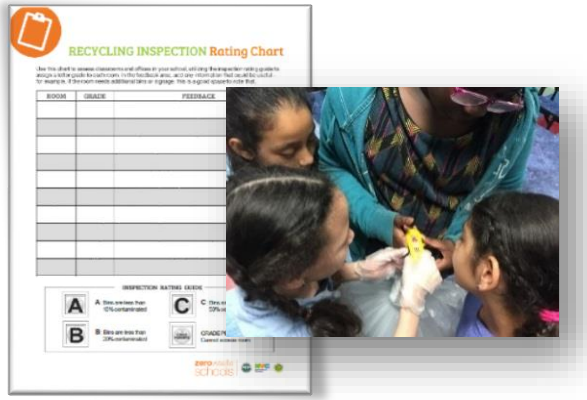
Schoolwide Bin Tally



Student Survey



Recycling Inspections



Waste Investigation

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WASTE DEEP 4

OVERVIEW Taking Creative Action

HOW CAN STUDENTS BECOME CHANGEMAKERS?

Depending upon the interests of your students and the focus of your curriculum, many creative options are available for students to educate and inspire their school community to move toward zero waste. **Students will develop and exercise skills in leadership, organizing, and the arts** as they build awareness of the issues, share findings from research, and express themselves in impactful ways. Here are some ideas for student changemakers:

Write, print and distribute an **article**, **pamphlet**, **comic,** or **'zine**

Create and display an **art installation – sculpture, assemblage, mosaic, mural**

Lead a schoolwide **campaign, competition, challenge,** or **event**

Organize a group of peers to tackle waste problems at your school

Install a **photography exhibit** in the hallway or cafeteria

Produce a **documentary or narrative film** to be screened by students

Create and lead an **educational presentation** for your peers, teachers or parents

Propose a new school **policy, procedure** or **infrastructure** improvement to your principal

Write and perform an original **song, rap, sketch, play** or **dance** in the cafeteria, over the PA or at a school event

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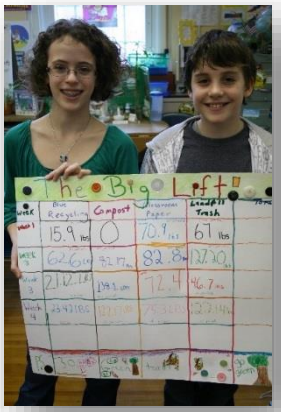
WASTE DEEP 5

OVERVIEW Tracking Your Impact

HOW CAN STUDENTS EVALUATE THE EFECTIVENESS OF THEIR WORK?

As students investigate their school and take creative action to move their community toward zero waste, it will be important for them to evaluate the effectiveness of their efforts and publicly display key findings. Are people in the school now more aware of the issues? Have recycling rates improved? If not, why? How much waste has been diverted from landfills since the start of the project? How have the principal's attitudes changed? And what are our next steps moving forward? In this ongoing step of *Waste Deep*, **students will make group reflections, discuss opportunities for improvement, and re-collect data—using the same tools from *Waste Deep 3*—to create charts, graphs, and bulletin boards for schoolwide display.** It is an all-hands-on-deck effort to advance your school's culture of sustainability. Here are a few examples of Zero Waste student changemakers who led the charge.



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