## Boston Mountain Solid Waste District Free Educational Programming

This document is intended to offer a sample of the educational programs we provide. Presentations are available on a variety of environmental topics and can be tailored to a range of audiences and age levels.

Program name	Grades	Approx. time	Description	Subject/s	Size limitations
Assorted Relay	PreK-8th	15-20 min	Students teams race against each other to try to correctly separate items into trash or recycling (can also add categories of compost, reuse, and special waste, or divide into different types of recycling); team with most items correctly placed wins	Social Studies, Physical Education	Must have as many items to recycle or trash as number of students; ideal size is about 30 students
Bad Habits	3rd-4th	60 min	In small groups, students act out scenarios in which someone litters; this is followed by a discussion about reasons and excuses for being different types of litterbugs, such as sport bug, movie bug, traveling bug, picnic bug, and bad aim bug	Social Studies, Performing Arts	Minimum of 15 students.
Bottle Cap Murals	3rd-12th	min. 2 hours (can be split into multiple days)	Students learn about pollution and making use of items that are traditionally landfilled by collecting bottle caps and creating artistic murals with them	Social Studies, Visual Arts	Best if groups of no more than 6 work on each mural
Carbon on the Move	3rd-12th	45-60 min	Students imagine they are a carbon atom and take part in a simulation that allows them to cycle through biological and physical systems, learning about the carbon cycle and the impacts humans have on this cycle.	Science	15-40 students
Cardboard Relief Art	2nd-12th	45min-1.5 hours	Students learn about the difference between reusing and recycling and discuss the "Hierarchy of Waste," as they create works of art using various forms of cardboard.	Social Studies, Visual Arts	Ideal for groups of 15 (or less)
Compost Cake	3rd-6th	30 min	Students will learn about the decomposition process by simulating what happens within a compost pile	Social Studies, Performing Arts, Science	Ideal for groups of 15-30

Creative Reuse Art	K-12th	45min-1.5 hours	Students discuss the "Hierarchy of Waste," and the differences between recycling, reusing, and 'upcycling.' Then, they create their own artworks by reusing/upcycling materials into: Calendar Boxes, Lid Mobiles, Magazine Beads &/or Envelopes, Musical Wastruments, (Nature) Journals, Tissue-paper Vases, or other creative projects.	Social Studies, Visual Arts	Up to 30 students
Program name	Grades	Approx. time	Description	Subject/s	Size limitations
Ecological Footprint	6th-12th	45-60 min	Students are introduced to the terms 'Sustainability' and 'Ecological Footprint,' and have a discussion of personal impacts on the natural world. Students then take an Ecological Footprint quiz to determine their footprint size, and have a race wearing different sized 'feet.'	Social Studies, Math	No more than 25 students
Energy Chants	3rd-12th	30-45 min	After an introduction to different energy sources (and a brief discussion about renewable vs. non-renewable resources), students try to determine what energy source they have taped to their backs by asking each other yes or no questions. They then do their energy chants to group together by source.	Social Studies, Performing Arts, Science	Need at least 20 to be able to pair up the 10 different sources.
Edible Landfill	K-12th	45-60 min	Students learn about landfill composition by constructing their own models using edible materials	Social Studies, Science	Ideally less than 30
Garbage Gallery	7th-12th	2-3 hours	Students examine the relationship between what is considered waste and what is considered progress by viewing photographs that portray waste and/or progress in a simulated gallery setting	Social Studies, Visual Arts	No size limit
Hand-Me-Down Chemicals	4th-12th	45-60 min	Students learn about bioaccumulation of hazardous chemicals in the food chain/web, by acting out the parts of Sun, Producers, Primary and Secondary Consumers eating different colored 'food'.	Social Studies, Performing Arts, Physical Education, Science	Ideal for 30 students, can be adjusted for other sized groups

Lethal Litter	K-6th	25-45 min	Students learn about the effects of litter on wildlife, simulating a situation in which they are birds blindly eating food or litter- represented by bottles caps- by collecting caps of various colors strewn about in a given area.	Social Studies, Performing Arts, Physical Education, Science	Ideal for 15-30
Message Mismatch	2nd-6th	45-60 min	Students learn about interconnectedness and dependence by working together to form sentences that make coherent statements; sentence topics can be tailored to reinforce current learning goals	Social Studies, Language Arts	Classes of less than 40
Program name	Grades	Approx. time	Description	Subject/s	Size limitations
Mixing Math with Natural Resources	5th-6th	60 min	Students learn how different materials that go into making a product all come from natural resources that are renewable or non-renewable. The students then work in groups to solve recycling/trash related word (math) problems.	Social Studies, Math, Science	No Limit
Mr. Can Man	K-2nd	25-30 min	Students learn about the concept of recycling vs. throwing in the trash, through discussion of different materials that are selected from Mr. Can Man	Social Studies	Ideal for class sizes of about 10-30
Natural Resources & the 5 Rs	6th-12th	30-45 min	Students investigate different types of natural resources, determine whether they are renewable or non-renewable, and discuss how to conserve resources using the 5(+) R's: Rethink, Reduce, Reuse, Recycle, Rot (Restore, Recreate, Respect, Renew)	Social Studies, Science	No Limit
Plastic, Plastic Everywhere!	6th-12th	60 min	Students will test the density of each type of plastic by submerging it in water, isopropyl alcohol, and acetone respectively in order to gain a better understanding of the plastics that we discard and recycle each day	Social Studies, Science	Groups of 10-30
Recycled Candlemaking	PreK-12th	45min-1.5 hours	Students learn about recycling and reuse by creating new candles from melted down old and broken candles and crayons; can also emphasize the history of candlemaking and/or the science of changing states of matter	Social Studies, Science	Best in small groups

Recycled Papermaking	K-12th	45-60 min	Students learn about recycling paper by creating new paper from old shredded paper; shredded paper is blended with water, poured into a shape, pressed, and dried. Students take home the unique pieces they make.	Social Studies, Visual Arts	No more than 40 students
Resource Use: Greed vs. Need	4th-8th	30-45 min	In small teams of 4, students learn about consequences of renewable and nonrenewable resource usage. Food items (such as popcorn or jellybeans) represent resources.	Social Studies, Math	Groups of 4

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Safer Substitutes: How to Reduce HHW	4th-12th	45-60 min	Students learn about what makes products 'Hazardous.' Then, they get to test out a name brand (toxic) cleaner vs. a 'safer substitute,' and discuss results, along with a more general discussion about why people might choose one cleaner over another.	Social Studies, Science	No more than 40 students
Safety in the Home	K-4th	15-20 min	Students are introduced to the term household hazardous waste, learn how to identify HHW symbols and items, and discuss how to stay safe around HHW.	Social Studies, Health, Science	No more than 40 students
The Incredible Journey	3th-12th	45 min	Students learn about the movement of water in the water cycle and identify different states of water as it moves through the cycle.	Earth Science, Language Arts	15-40 students
Trash Detective	4th-12th	45-60 min	Students work in small groups investigating the trash thrown out by one family during the course of one week in order to determine what types of choices consumers make about purchasing and disposal	Social Studies, Science	Groups of 4-6 per bag
Waste Word Sort	4th-12th	30-45 min	Student teams learn about solid waste management by racing against each other to correctly sort word cards (representing various household items) into one of five categories- landfill, special waste, recycling, compost, or reuse	Social Studies, Physical Education	No more than 50
Web of Life	4th-8th	45-60 min	Students will take a close look at a forest ecosystem and discover ways that plants and animals are connected by simulating a food web.	Science, Visual Arts and Language Arts	Up to 29 students

Wonderful Wiggly Worms (Vermicomposting)	K-4th	60 min	Students will investigate red wiggler worms and learn their abilities to break down food scraps efficiently; students will list things that they think worms can eat and discussion will follow about appropriate items to throw in a worm bin, worm anatomy, how composting works, etc.	Social Studies, Science	Up to 30 students
<b>Review Activities:</b>					
Beach Ball Quiz/Trivia	1st-6th	15-30 min	Students toss around a beach ball and are asked a question that corresponds to the color their left thumb is touching when they catch the ball.		Better for groups of no more than 20
Solid Waste Bingo	1st-6th	30-45 min	Can be tailored to any of above topics (Compost, Recycling, HHW, etc.), or could review a combination (general 'Solid Waste')		Up to 30 students
Solid Waste Jeopardy	4th and up	30-60 min	Can be tailored to any of above topics (Compost, Recycling, HHW, etc.), or a combination (general 'Solid Waste'). Also have an "Energy Challenge" version (covering Renewable, Non-Renewable, Energy & Society, and Energy Conservation).		No limit (students will be in groups)

Contact Taylor Gladwin at tgladwin@co.washington.ar.us for more information

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