



**SOLID WASTE MANAGEMENT
GRANT
PROJECT SUGGESTIONS
And
IDEAS**



1000 SW Jackson, Suite 320, Topeka, Ks 66612

785-296-1600 Fax:785-296-8909 Toll Free: 800-282-9790

Karen Lollman, Program Manager 785-291-3510

[Grant development workbook and on-line application](#)

http://www.kdheks.gov/waste/forms_grants.html

Our Mission: To protect and improve the health and environment of all Kansans

FIELD TRIPS

Landfill

Calculate how much waste the school currently sends to the landfill on a weekly, bi-weekly or monthly basis.

Find out the remaining expected lifespan of the landfill

Discuss ways the school can reduce the amount of waste currently sent to the landfill

Formulate a plan to reduce the amount of waste sent to the landfill.

Recycling Center

Discuss recycling options the school could implement

Conduct a waste audit to determine how much school waste could be recycled.

Research “downstream processors” to learn more about the recycling process.

Buy t-shirts or reusable bags (see “disposable to durable” project) made out of recycled materials.

Downstream Processor

Visit a company that uses recycled items, like paper, aluminum, plastic, glass or cardboard to create new items. Alternately visit a company that processes the same items to prepare them for a manufacturing process elsewhere.

Discover how much of the raw material must be processed to complete one finished product.

Manufacturer

Observe and discuss waste management practices that are beneficial to the environment and reduce waste going to the landfill.

Brainstorm ways the company could be more efficient with waste management.

WASTE AUDITS

Weigh all of the trash collected from the school for one day. Calculate how many cubic yards of material were collected.

Sort recyclable materials into individual bags. Weigh each category of recyclable material separately. Calculate how many cubic yards of material are recyclable or compostable. Determine how much waste could be diverted in one school year.

Start a recycling or composting program that addresses one or more of the materials collected. (See “Containers”)

Encourage students to “spread the word” about recycling and composting by filming the waste audit activities and having students talk about the amount of material they saved from the landfill in one day, and how that could impact the landfill over a year’s time.

RECYCLING CONTAINERS

Desk-side

Use these containers for collecting waste paper. Discuss with students the need to save landfill space and how waste paper can be recycled and turned into other products.

Have students make their own paper with paper from the recycling basket.

Shared-space

Use these containers in the hall ways, lunch room, and sporting venues to collect plastic and aluminum.

Encourage one of the student organizations to “adopt” the containers as a service project. The organization would be responsible for emptying the containers and either taking the materials to a recycling center, or placing them in the appropriate outside receptacle.

Outdoor

The large containers offer storage until the materials can be picked up by the recycling company.

Storage Trailer

These trailers can be towed to the recycling center, and are often large enough to share with the community.

With all of the above containers, discussions about recycling can be tailored to the appropriate age group. Recycling can be a whole school project.

The youngest students can make posters promoting recycling and maintain charts showing the progress of recycling. Middle school and high school students can supply the manpower to empty containers, make calculations, and report findings to the student population.

VERMI-COMPOSTING

This is one of the best “hands dirty” opportunities, especially for younger students. Desktop vermi-composting equipment, a laptop computer, and a microscope that can be used inside the vermin-composting vessel will give the students a bird’s eye view.

Let students take the vermi-composting equipment home for a week and record their observations.

Discuss with students how to use a thermometer. Have students practice recording temperatures. Assign students to record temperatures in worm bin, maintain a log of temperatures. Have students graph temperatures over a period of time.

Have students measure and record amount and types of food given to the worms. Have students graph amounts of food over a period of time. Ask students to identify foods that are easy/hard to vermicompost based on their observations.

Other activities can be found at

<http://www.calrecycle.ca.gov/Education/Curriculum/Worms/98Activities.pdf>

COMPOSTING

For help, education and information contact Ken Powell, the KDHE composting specialist. (kpowell@kdheks.gov or 785-296-1121)

Make mini individual compost “bins” out of 2-liter soda bottles. Find the details here: <http://www.gardeningknowhow.com/special/children/composting-ideas-for-kids.htm>

Download a fact and activity sheet here
https://www.teachervision.com/tv/printables/EPA_Composting-Unit.pdf

Begin composting food waste from school meals.

Investigate different methods of composting, implement several options and compare results.

Some schools give away their final product, others sell the compost to raise funds to support other recycling activities. One school donated their compost to a local nursing home to enrich the home’s raised bed gardens. (A great school-community partnership). Several schools start school gardens and use the compost for the gardens. (School gardens do not qualify for grant funding).

ENVIRONMENTAL STEWARDSHIP EDUCATION PROGRAM (WHICH FOCUSES ON SOLID WASTE ISSUES)

Environmental stewardship refers to responsible use and protection of the natural environment through conservation and sustainable practices.

A recycling program, an environmental club or Green Team are examples of programs that meet the above definition.

Environmental clubs can make training videos for the student population or the community. They can also address civic organizations about the benefits of good solid waste management practices. They can make posters promoting new or existing solid waste programs.

A green team can organize activities for America Recycles Day (November 15) or Earth Day (April 22). They can identify areas where the school can improve its solid waste management practices and challenge other schools in the district to a friendly competition for improvement.

DISPOSABLES TO DURABLES

Provide refillable water bottles for students and staff. Bottles can carry a school name, mascot, or environmental message. Have students track how many disposable bottles they use in a week and calculate how much landfill space can be saved with the use of refillables.

Cloth shopping bags are another example of improving waste management practices. Have students count the number of plastic shopping bags their families bring home in a week. Calculate the potential reduction for one school term.

Cloth napkins for classroom parties have been a big hit in some schools. Students personalize the same napkin each year as they progress through the elementary grades and it becomes a keepsake they are given when they move up to middle school.

One small school determined they could purchase durable flatware that would last indefinitely for less money than they were spending on disposable flatware for one month.

“BRING IT UP”

Involve the theater department, the art department, the green team and the environmental club to bring this KDHE-commissioned play to full production status for students and the community. Costumes, backdrops and other full-scale production necessities require a lot of people.

Alternately, the environmental club or a single class could do a scaled down production for a student assembly.

Whether small or large scale, the production delivers a strong environmental message to everyone who sees it.