

Composting

Did you know that banana peels, egg shells, bread crust, dead plant material and other natural waste make up 24 percent of the U.S. municipal solid waste stream?

Introduction to Composting:

Natural composting, or biological decomposition, began with the first plants on earth and has been going on ever since. The environmental benefits of composting are significant. You can list them for the class by utilizing the list on the following page, or you can also conduct a discussion about why it might be good for the environment based on what they have learned from the other lessons on garbage and the three R's. A good starting point is the difference between "waste" and "resources."

Compost can...

- Cost-effectively remediate soil contaminated by hazardous waste.
- Optimize reforestation, wetland restoration, and habitat revitalization efforts by helping improve contaminated, compacted and other marginal soils.
- Mitigates the percentage of industrial volatile organic chemicals (VOCs) in contaminated air.
- Promotes higher yields of agricultural crops.
- Outperforms chemical fertilizers.
- Suppresses plant disease and pests
- Takes out solids, oil, grease, and heavy metals from storm runoff.

Activities:

Start in the lunchroom! Every day, pounds and pounds of potential compost material is dumped directly into the school garbage, which will go directly to a landfill. Depending on the age of your students, here are a few ideas to bring awareness to composting:

1. Have the students make signs using recycled materials that remind people what can and cannot be composted. Organize bins together and put them by the garbage.
2. If you are working with an older group, have them write a scene that can be performed during an assembly or in the cafeteria at lunchtime.
3. Composting and gardening go hand in hand. If you have a garden at your school, see if you can get a student group involved in the landscaping and set up a composting program in conjunction with a gardening program.



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Depending on the space you have available in your school garden, you may want to consider purchasing a composting kit. See online resources to ensure proper management of compost, or check with your local municipality to see if they have any compost management programs that you could integrate into your school system.

Follow-Up: Weigh Trash

When all the programs have been instituted, ask the students to measure their weekly garbage and have a discussion. If any student seems particularly interested in the program, you should ask if they want to present the information to other classes, or encourage students to publish a story in the school newspaper!

Compost Do's and Don'ts:

The following list was taken from the EPA website (<http://www.epa.gov/>). Please check with your local municipalities about what services are available as to what you can and cannot compost.

Can Compost:

Animal manure
Cardboard rolls
Clean paper
Coffee grounds and filters
Cotton rags
Dryer and vacuum cleaner lint
Eggshells
Fireplace ashes
Fruits and vegetables
Grass clippings
Hair and fur
Hay and straw
Houseplants
Leaves
Nut shells
Sawdust
Shredded newspaper
Tea bags
Wood chips
Wool rags
Yard trimmings

Don't Compost & Reason Why:

Black walnut tree leaves or twigs
releases substances that might be harmful to plants

Coal or charcoal ash
might contain substances harmful to plants

Dairy products (e.g., butter, egg yolks, milk, sour cream, yogurt)
create odor problems and attract pests such as rodents and flies

Diseased or insect-ridden plants
diseases or insects might survive and be transferred back to other plants

Fats, grease, lard, or oils
create odor problems and attract pests such as rodents and flies

Meat or fish bones and scraps
create odor problems and attract pests such as rodents and flies

Pet wastes (e.g., dog or cat feces, soiled cat litter)
might contain parasites, bacteria, germs, pathogens, and viruses harmful to humans

Yard trimmings treated with chemical pesticides
might kill beneficial composting organisms