

Activity Title and Summary

Compost Relay Races

The leader will discuss compost and how to make compost. The children will then assemble compost using greens and browns in a relay race.

Learning Goals/Objectives (measurable outcomes)

Students will learn about what makes compost and why we make it.

Target Grade(s)/Age(s) and Adaptation for other Grades/Ages

Elementary age children.

Time required

Approximately 45 minutes to 1 hour.

Preparation, Space Requirements, Personnel needed, Supply List

Outdoor area large enough for children to run to wheelbarrows then to a compost bucket.
Supplies: 2-4 pairs of garden gloves; 2 wheelbarrows; 2 small plastic container; 2 large buckets; 2 garbage cans; leaves, grass clippings or other 'greens' and 'browns'.

Activity instructions

Intro/Engage the Students: (time needed)

Introduction—Has anyone ever heard of compost? Can anyone tell me what compost is?

Possible responses/ideas:

Decayed grass, leaves, vegetable scraps, paper wrappers, etc.

Worm poop

Decayed plants

Bags from the store

Compost is nature's way of recycling—it's a way to turn plant materials back into soil. If you are ever in a forest, look at the forest floor and you'll see that nature has recycled all of the leaves and trees and twigs and made compost to cover the forest floor!

Does anyone compost at home? At school? How do you do it? Some basic tips:

Only put natural things in compost (no plastic, Styrofoam, etc)

Combine green stuff and brown stuff

Activity: (time needed)

Today we're going to make compost by mixing green materials with brown materials. The reason we mix green things with brown things is that 'greens', like grass clippings and plants, contain a lot of nitrogen; and 'browns', like dried leaves, contain a lot of carbon. When the two are mixed together they create a reaction that speeds up the composting. There are also very small microorganisms that live in compost and help break it down into soil. When you mix up the right amount of 'greens' and 'browns', the compost pile should get hot and make nice compost.

Once we've made compost, what do we do with it? Possible responses:

Add it back to the garden

Makes nice soil

Adds nutrients (remember the carbon and nitrogen? Nitrogen is a fertilizer.)

Makes the soil lighter, fluffier, better for plants

Adds microorganisms to the soil—they help the plants

Today you get to help us make compost by doing a compost relay race.

Divide the group evenly into two teams.

Each team gets two pairs of gloves and a small plastic container (like a margarine tub).

We'll have wheelbarrows set up back-to-back in the center of the race course (so the teams can access both from their side of the course), one with leaves and one with grass clippings.

We'll have a small bucket for each team for layering the compost and a large trash can in case the teams fill their small buckets.

The object of the race is to be the team that makes the most compost in the given time by layering green stuff with brown stuff. (We're not sure how long this will take, but be sure that everyone gets at least one turn, run it longer as time allows).

When the leaders says "Go!" the first team member puts on the gloves and runs with the small plastic container to the leaf wheelbarrow, fills the small container with leaves, runs to the small bucket for their team, dumps the leaves in, then runs back to their team to hand over the gloves and container to the next person. (Note: If you use two pairs of gloves per team, the next runner can put on the gloves while waiting to run and it will go faster). This person then puts on the gloves and takes the container to the grass wheelbarrow and fills it with grass, etc. The race continues in this way alternating green and brown until the small bucket is filled. If it is filled before the race ends, the team can dump it in the large compost bin (trash can) and start refilling the small one. At the end, count up which team has made the

most compost by look at the amounts in the small bins and counting the number of times they have dumped it into the large bin. (A parent volunteer could stand by the buckets to help with counting). Since both teams will be running at the same time, be sure to instruct them to stay on their own side of the course so there are no collisions!

Reflection/Review: (3-5 minutes)

At the end of the race, have the students look at the layers they have made and talk about what will happen to it over the next month or so as it decomposes into compost.

Vocabulary

Compost	
Greens	
Nitrogen	
Browns	
Carbon	
Microorganisms	

Activity developed by Camas Roots Garden, Camas, Washington