

# What is Compost?

Compost is the result of organic matter, such as leaves, food scraps, and grass clippings, breaking down into nutrient-rich soil. All organic matter decomposes over time, and we can help it along through the process of composting. The final product helps make soil healthier and serves as an ideal component in vegetable and flower gardens.

# ready, set, Go Outside!

## Skills Learned:

**Concepts:** food webs, nutrient cycling, decomposition, ecological relationships, life cycles, and soil production

**Skills:** planning and design, observation and comparison, sorting, decision-making, problem solving, household recycling, landscaping, and gardening

**Experimentation:** measurement, forming and testing hypotheses, comparing results

## ONLINE BONUS!

Learn more at:  
[www.massaudubon.org/go](http://www.massaudubon.org/go)

- ▶ A Kitchen Compost Bucket
- ▶ Brew Some Compost Tea
- ▶ Try Vermicomposting
- ▶ Compost Problems? Solved!

## Composting is Cool (Well, Actually it's Hot)

Composting your yard waste, fruit and veggie scraps, and wood ashes reduces the amount of garbage you generate. Compost nourishes the plants in your garden (just like food nourishes you) and improves the soil in your yard. If you want to reduce, reuse, and recycle in a big way—compost!

## The Science of Composting

When you set up a composting system, you help speed up this natural process of decomposition by mixing the materials in your pile and keeping them moist and aerated.

A compost pile is rich with microscopic life—tiny organisms that feed on the carbon and nitrogen found in plant materials. The bacteria will break down the plant tissue, and next the fungi and protozoa join in. Then centipedes, millipedes, beetles, and earthworms get to work, eating up the organic matter and releasing waste rich in enzymes and nutrients. All this activity generates heat, so the center of a compost pile can become quite hot—up to 150 degrees.

## Setting Up Your Own Compost System

It's pretty easy to get started without using any special materials. Here's what you need:

**A container.** You can reuse an old kiddie pool, an open bin, a large garbage can, a circle of fencing material, or whatever you have—approximately 3- to 4-feet wide and 3- to 4-feet tall.

**Some base material.** Place at least four inches of sticks and twigs on the bottom.

**Fresh plant material.** Over the next year or two, add food scraps and yard refuse. You can also add coffee grinds, tea bags, and eggshells. (Meat and dairy should be left out.)

**Water (optional).** You can add water occasionally to keep the pile somewhat moist.

**Patience.** It can take up to two years for your compost pile to turn into dirt. Turning over the pile helps speed up the process.

The compost is ready for the garden when you can no longer recognize the original ingredients and the whole batch resembles rich, coarse soil.