

# COMPOSTING *in Schools*

## A Quick Guide

**What is Compost?** Compost, simply put, is natural fertilizer. It is composed of pure organic material. The act of composting is the intensifying and speeding up of natural processes. The result is rich humus (similar to what you would find on the forest floor) that returns nutrients to the soil. The plants in turn use the nutrients for their growth and development.



### Why Compost?

- › It's free fertilizer!
- › Making compost sends less organic material to landfills where they take up space and release methane, a potent greenhouse gas.
- › Helps the soil retain moisture (improved drought protection).
- › Releases nitrogen, phosphorus, potassium, and other micro-nutrients into the soil slowly, as plants need them.
- › The cooking process of a good pile will kill off weed seeds and most diseases.
- › Compost is filled with beneficial microbes and fungi that increase plant growth, antibiotics plants use to fight off disease, and hormones, vitamins and enzymes that are essential to plant health.
- › Decreased run-off and soil erosion.

### How to Make It:

1. Inform your principal and/or school district and cafeteria staff that your school plans to build a compost pile.
2. Pick a shady spot near or in your garden. If you are unable to make your compost pile within your garden fence, make a separate enclosure that is 3.5' x 3.5' to keep out animals.
3. Loosen up the soil in your 3.5' x 3.5' square for drainage.  
*Optional: Dig a 6" wide hole in the center, and place a 4-5' long pole (bamboo, stick) inside. Once the pile has been built up around the stick use it to make an air passage way by moving it in a circular manner. The moving of the stick can be done often throughout the life of your compost pile.*
4. Lay a thin layer of sticks over the loosened soil to allow for drainage.
5. Prepare a diverse mix of ingredients to ensure you get a variety of nutrients:
  - **Soil/Compost Starter:** roughly 10% by volume  
*Examples: soil from the forest or a good garden*
  - **Green/ Nitrogen Rich Ingredients:** roughly 45% by volume  
*Examples: Cafeteria scraps (i.e. fruit and vegetable scraps, egg shells, tea bags, coffee grounds), grass, green/fresh leaves. **Never add meat, dairy, bones, fat/grease/lard, or animal manure to compost pile.***
  - **Brown/Carbon Rich Ingredients:** roughly 45% by volume  
*Examples: Shredded paper and cardboard, dry leaves, crop residue, sawdust, dry straw/hay, woodchips*
6. Chop ingredients into 3" pieces and layer, alternating between green ingredients, brown ingredients and dirt, to create a 3-5" tall pile.
7. Water the pile as you go until it is as damp as a wrung-out sponge.
8. Cover with dry leaves or straw to hold in moisture.



*This institution is an equal opportunity provider.*



## Maintenance

The more you rotate your pile, the faster it will decompose. If you want your compost quickly, water it every day or two and rotate every 2-15 days. Only rotate every two days if your ingredients were finely chopped. Otherwise, your pile won't be ready to turn and you'll be distributing the microbes unnecessarily. Rotating can be a full rotation, where you move your pile from one location to another, or it can be as simple as poking holes in your pile to let in air. Both methods let air in, but rotating it completely will put the stuff on the outside in the center where it can cook. Add the compost to your garden at an approximate rate of 5-9 lbs. per 3ft 2in. The amount of compost you add depends on the quality of your soil. Bad soil = lots of compost. Good soil = a moderate amount of compost.



## Troubleshooting

- › **Man, this stink!** There's not enough air in your pile. Rotate the pile and add more brown ingredients.
- › **It won't get hot!** There is not enough nitrogen in your pile or you need a starter. Add more green materials and/or starter soil and water the pile.
- › **There are bugs in it!** Insects help break down the compost ingredients. Before using the compost, spread it in a thin layer on a tarp in direct sunlight to dry. The bugs will leave and you'll be left with bug-free compost.
- › **It's really slow!** A need for more nitrogen, water or turnings could slow down the decomposition. Faster decomposition is better for general nutrient content of the compost, but it will eventually decompose.
- › **Organic materials high in:**
  - Nitrogen: egg shells, peanut shells, coffee grounds.
  - Phosphorus: egg shells, citrus peels, banana leaves, sawdust.
  - Potassium: Citrus peels, banana leaves, sawdust.

## Compost Tips

- › USDA recommends (for youth/school gardens) using food waste compost on ornamentals and purchased soil amendments on school gardens. To learn more about how compost can be used in your school, contact:
  - Your local IFAS office by visiting <http://sfyl.ifas.ufl.edu/find-your-local-office/>.
  - Your County Health Department.
- › Consider enrolling in the FDACS' School Garden Certification Program by visiting [FDACS.gov/SchoolGardens](http://FDACS.gov/SchoolGardens).
- › If a traditional compost pile isn't for you, try purchasing a compost bin with the minimum dimensions of 3' x 3' x 3'. Ensure the bin has a tight-fitting lid and is placed on a hard surface (i.e. a concrete paver).
- › Compost bins should be brought inside by school staff and safely stored during tropical weather events, unless properly anchored to the ground.
- › Students and staff should always wear gloves (disposable is recommended) when handling compost. Wash hands with soap and water after use.
- › To limit exposure to dusty compost, lightly water compost before use.
- › Avoid handling compost if you have a weakened or compromised immune system. Individuals with open cuts or abrasions should avoid handling compost.

