What is composting?
Composting is the natural breakdown of organic materials. The product, compost, is the rich organic soil that is made as microorganisms decompose yard and kitchen wastes.

Why should citizens compost?
• Save money on fertilizer, water and garden supplies.
• Keep useful materials out of the landfill.
• Keep pollutants out of the environment.
• Improve lawn and garden.
• Save the community money.

Getting started
Decide what materials to include in your “compost recipe”
DO use these materials in your compost pile:

• “Greens” which are fresh and nitrogen-rich
  - Bread, grains, and pasta
  - Coffee grounds and filters
  - Eggshells
  - Fresh hay

• “Browns” which are dried and carbon-rich
  - Chopped or shredded branches
  - Paper towels
  - Leaves

• Soil, to introduce microorganisms necessary for decomposition

DON’T put these materials in your compost pile:

• Cat and dog manure, which may contain disease organisms
• Charcoal ashes, which may contain toxic compounds
• Herbicide or pesticide treated plants
• Meats, grease, bones, dairy products or cooking oil; these may attract rodents or other pests
• Pine needles or magnolia leaves, which take a long time to break down
• Sick or diseased plants
• Treated wood
• Weed plants or seeds

These materials can attract pests, generate foul odors, or contaminate the compost.
Step One: Choose a location that is convenient, shaded and well-drained. You may want to use a compost bin: it keeps the material in a confined area, retains heat and moisture, deters pests and reduces the effects of wind and rain.

Step Two: Build a pile with a balanced mixture of carbon and nitrogen.
- Carbons are “browns” such as dry leaves and woody materials.
- Nitrogen-rich materials are “greens” such as grass clippings and food scraps.
- A mixture of about 75 percent carbon material with 25 percent nitrogen material, along with water, oxygen, heat and composter organisms, makes compost happen.

To assemble your pile, add materials in layers. Start with leaves or other browns, add nitrogen-rich materials, and follow with a shovel full of soil or compost. Add water until the pile is the consistency of a wrung-out sponge. This recipe should be repeated in layers until you reach the desired size, typically one cubic yard (3’ by 3’ by 3’).

Composting can be accomplished with or without oxygen. Aerobic composting consists of a well-aerated pile from frequent turning, which speeds up decomposition, while anaerobic composting (limited oxygen flow) is a slower process that requires less maintenance.

If you plan to compost kitchen wastes, store them in a covered container. When the container is full, dig a hole in your compost pile, and bury the scraps at least 8 inches deep. The next time you add scraps, bury them in a different location. You can usually add scraps for about 8 weeks; after that, you may need to start a new pile.

Step Three: Maintain the pile
The key steps in maintenance are turning, maintaining the temperature, and watering the pile. For best results, turn the pile once in the first week, then three times during the next two months. A high temperature maximizes compost activity. Adding greens such as grass can often increase temperatures. Also, remember to keep the pile moist.

Using your Compost
Compost is ready when it turns a rich, dark brown color and has an earthy smell. The time required to fully compost materials will vary from six weeks to one year depending on pile type, temperature, moisture content and aeration. The three most common uses for finished compost are:
- **Mulch**: spread 1-3 inches around plants and bare soil to prevent erosion, control weed growth, and conserve water.
- **Soil Amendment**: work 2-3 inches of compost into the top six inches of soil each time you start a new garden or plant trees or shrubs.
- **Potting Mix**: sift compost through a ¼ inch screen and mix two parts commercial potting soil with one part compost.

Resources
For more about organics recycling, please visit the Organics Recycling and Composting Web site of the N.C. Division of Pollution Prevention and Environmental Assistance at [http://www.p2pays.org/compost/](http://www.p2pays.org/compost/). To learn about organics recycling in your community, contact your local government or county extension office. For a listing of local government contacts, please visit [http://www.p2pays.org/payt/ncwaste.asp](http://www.p2pays.org/payt/ncwaste.asp).

The N.C. Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and education on methods to eliminate, reduce, or recycle wastes before they become pollutants or require disposal. Telephone DPPEA at (919) 715-6500 or (800) 763-0136 for assistance with issues in this fact sheet or any of your waste reduction concerns.