US Composting Cycle
The length of time to compost organic matter varies greatly due to all the different factors involved.
NORMAL
CONDITIONS:

4 to 6 weeks. EXCEPTIONAL CONDITIONS:

2 to 3 weeks.
NUMBER OF COMPOSTED POUNDS
PER YEAR:

450 to 900
NUMBER OF PICKUPS
PER YEAR:

5 to 10.

Composting Process
When a sufficient quantity of organic material has been collected, the composting process begins. It continues for a period that varies according to the nature of the materials used and the conditions created. The process can be divided into four phases, according to the temperature present at different times.
Stages in decomposition
of compost:
According to the four main phases in the transformation of compost, the compost is said to be:
FRESH:
At this stage, the materials of which it is composed are dark in color and still easily recognizable; micro-organisms are sparse and are just beginning their activity; a rise in temperature can be observed:
This is the heat phase.

PARTIALLY DECOMPOSED:
At this stage the compost has a mild, not unpleasant odor; it contains many micro-organisms the materials of which it is composed are very loose and brittle, and almost unrecognizable; mushroom may be present, aiding to decompose the most resistant materials: cellulose, lignin, and wood; chemical exchange takes place during this stage:
This is the gaseous and liquid phase.
MATURE:
At this stage, recombination of decomposition products from preceding stages occurs:
This is the humidification phase.
AGED COMPOST:
At this stage, the compost looks almost like soil (loam); it resembles natural topsoil; its organic matter and nitrogen content are low:
This is the mineralization phase.

Essentially the materials added in the composter will be two sorts: moist and dry. The composting process works best when the organic pieces are small.
Wet / GREEN
Moist composting materials include garden waste (non-perennials), fruit and vegetable peels, tea bags, coffee grinds (complete with filter papers), table waste, egg shells, peanut shells, plant trimmings, bird cage cleanings (chicken droppings), animal manures but only those from ruminants (not dog and cat excrement). All are high nitrogen materials that will feed the microbes a rich diet.
Dry / BROWN
Dry materials are things like hay, straw, fallen twigs, dry grass clippings, (Leave the mown grass on the lawn for a day before collecting to allow it to dry out enough - fresh grass added in the composter tends to compact and not rot as quickly as other materials.) sawdust, all kinds of tissue paper, newspaper (shredded), paper and cartons (shredded), egg cartons (shredded).
Kitchen and garden wastes are excellent composting materials, with certain exceptions. See the chart below.

These two categories should be avoided:
• Paper and cardboard may be used in limited quantities, but it would be preferable to recycle them thru a selective collection program, if there is one in your neighborhood.
• Excrement may contain pathogens that are difficult to eliminate during domestic composting, therefore it is better not to add it to a composting container.

See Diagram next page:

COMPOSTABLE MATERIAL	TO BE COMPOSTED	SUGGESTIONS
Table scraps	Yes	Except fat
Fruit & vegetable peelings	Yes	
Coffee, Tea filters	Yes	
Eggshells	Yes	
Meat	Yes	Remove fat and bone
Fish	Yes	
Paper napkins	In small amounts	Except in color
Dead leaves	Yes	Avoid walnut, conifers
Plants, flowers	Yes	
Weeds	Before they go to seed	
Underbrush	If shredded	
Sawdust	In small amounts	
Cat and dog litter	No	
Newspapers (in strips)	Yes	Excellent carbon substitute *if you don't have any dead leaves*
Grass	Yes	Leave on the lawn *gradually add it in small amounts*

AERATION,
MOISTURE
AND
DRAINAGE
Moisture and aeration during composting are inversely proportional. The more water there is, the less air, and vice versa. There must be enough aeration to ensure aerobic decomposition. Many more micro-organisms flourish in the presence of air.
Proper aeration also eliminates the risk of unpleasant odors. Moisture content should be between 50% and 60%, about as damp as a sponge that has been wet and squeezed out.

TIME
AND
TEMPERATURE
The more heat a compost generates the faster it decomposes. If you use an equal blend of brown and green materials, reduce the size of materials to be composted and provide adequate moisture and air, you will then create a hot, fast compost.

C/N RATIO
Organic matter contains varying proportions of carbon and nitrogen. In general, dry materials such as dead leaves, straw, strips of cut newspaper, sawdust or earth are very rich in carbon, while moist materials such as kitchen wastes and grass clippings contain a fair amount of nitrogen.

The proportion of carbon and nitrogen is very important for proper composting. If there is too much material rich in carbon (dry), composting will take place very gradually. Conversely, if there is too much nitrogen-rich (moist) material, decomposition will be very rapid, but there is a risk of odor, since the excess nitrogen will be given off as ammonia.

The ideal C/N ratio is 30/1. However, it is not necessary to do any complicated calculations to come out the right proportion. What you need to know is that dry materials should always be mixed with moist materials. If the compost does not decompose, there is too much carbon; if there is an odor, add some dry materials.

C/N Ratio of Compostable Materials

NUMBERS REPRESENT
CARBON PARTS FOR ONE PART NITROGEN. */1

Urine	8	Grass	20
Mixed abatoir waste	2	Water hyacinth	20
Liquid manure	2-3	Marsh cuttings	20-30
Blood peal	3	Garden wastes	20-60
Liquid pig manure	5-7	Potato vines	25
Fecal matter	6-10	Horse manure	25
Green vegetable matter	7	Manure with straw	25-30
Bone meal	8	Pine needles	30
Liquid cow manure	8-13	Farm manure with large amount of straw	30
Humus, loam	10	Black peat	30
Aged composted manure	10	Household waste	30-40
Fresh chicken manure	10	Brown or light peat	30-50
Aged composted manure	10-15	Foliage	30-60
Household water purification sediment	11	City compost	34
Kitchen wastes	12-20	Residue of mushroom-growing medium	40
Grass clippings	12-25	Straw from leguminous plants	40-50
Vegetable peelings, etc.	13	Dead leaves	45
Chicken manure	13-18	Oat straw	50-60
Barnyard manure	14	Rye straw	65
Brewery wastes	15	Millet straw	70
Domestic animal excrement	15	Wheat straw	70-150
Farm manure after 3 months storage	15	Rice straw	100
Vines of leguminous plants	15	Bark	100-130
Abattoir wastes (Stomach)	15-18	Tree prunings	100-150
Alfalfa	16-20	Sugar cane waste	150
Fresh manure with small amount of straw	20	Fresh sawdust	100-500
Coffee grounds	20	Decomposing sawdust	200
Cow manure	20	Cardboard	200-500

How to Use Your Compactor:
Compost can be used throughout the garden, in the vegetable garden, in the flower beds, on the lawn (if it has been sifted), under trees and hedges, etc.
The lawn and most ornamental plants will benefit from mature compost that ressembles topsoil. In the vegetable garden, the needs of different vegetables vary a great deal. The table below summarizes the requirements of the most popular vegetables.
PREFERENCES OF GARDEN VEGETABLES
FOR DIFFERENT TYPES OF COMPOST AND THEIR REQUIREMENTS