Compost

Compost is organic matter that has been decomposed and recycled as a fertilizer and soil amendment. Compost is a key ingredient in organic farming.

1. **Vermicomposting** is the product of composting utilizing worms. Vermicast, also known as worm castings, worm humus or worm manure, is the end-product of the breakdown of organic matter by earthworm.
   - **Materials needed:** one plastic or wooden box with a lid and with drain holes drilled on the bottom and large holes around the top for air; this bin needs to be shaded in summer and warm in winter
   - **Space:** 4’x2’
   - **Labor:** once the bedding is created and the worms installed, layers of shredded food waste must be added to the bin once or twice a week. Harvesting requires some labor and training

2. **Static Pile composting** requires a simple brick or wooden enclosure with an open front. The purpose of having three enclosures is to have a rotating stock of compost: the working one, the one that is being processed and the ready to use compost. This method takes several months to a year depending if and how often the pile gets turned.
   - **Materials needed:** 6-9 Pallets and metal brackets to attach the sides to each other
   - **Space:** 4’x4’ wooden enclosure (open front or 3 sided)
   - **Labor:** minimal with occasional turning the pile over. carbon, nitrogen, oxygen and water levels* (see below importance of these 4 ingredients that are key to the composting process) must be monitored

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3. **Wire hoop** composting is similar to the static pile but is contained by the mesh to speed up the process and keep it neater.
   - Materials needed: wire mesh to form a 3 foot circle about 3 feet high
   - Space needed: 3’x3’
   - Labor: minimal unless you want to turn it for faster composting

4. **Compost Tumbler** is the fastest way to get compost but it is more expensive in terms of labor and equipment. It is recommended for small gardens where there is no room for the more conventional types of composting.
   - Cost $90 and up
   - Space: 4’x4’
   - Labor needed to periodically fill and rotate the barrel

Common items that can be added to compost with no negative effect:
- Paperboard
- Cardboard rolls
- Clean paper
- Shredded Newspaper
- Dried-out egg shells
- Fruits and vegetables
- Coffee grounds & filters
- Tea leaves & bags
- Egg shells
- Fire Place Ashes
- Hair and Fur
- Hay and straw
- Houseplants
- Leaves
- Garden trimmings
- Wood Chips
- Nutshells
- Sawdust
- Wood Chips
- Wool or cotton rags
- Yard Trimmings

**Compost Ingredients:**

*Composting organisms require four equally important things to work effectively:*

**Carbon** — for energy; the microbial oxidation of carbon produces the heat, if included at suggested levels. High carbon materials tend to be brown and dry. **Nitrogen** — for growth: Nitrogen encourages the growth and reproduction of more organisms to oxidize the carbon. High nitrogen materials tend to be green (or colorful, such as fruits and vegetables) and wet. **Oxygen** — for oxidation: Oxygen oxidizes the carbon and promotes the decomposition process. **Water** — in the right amounts to maintain activity without causing anaerobic conditions.