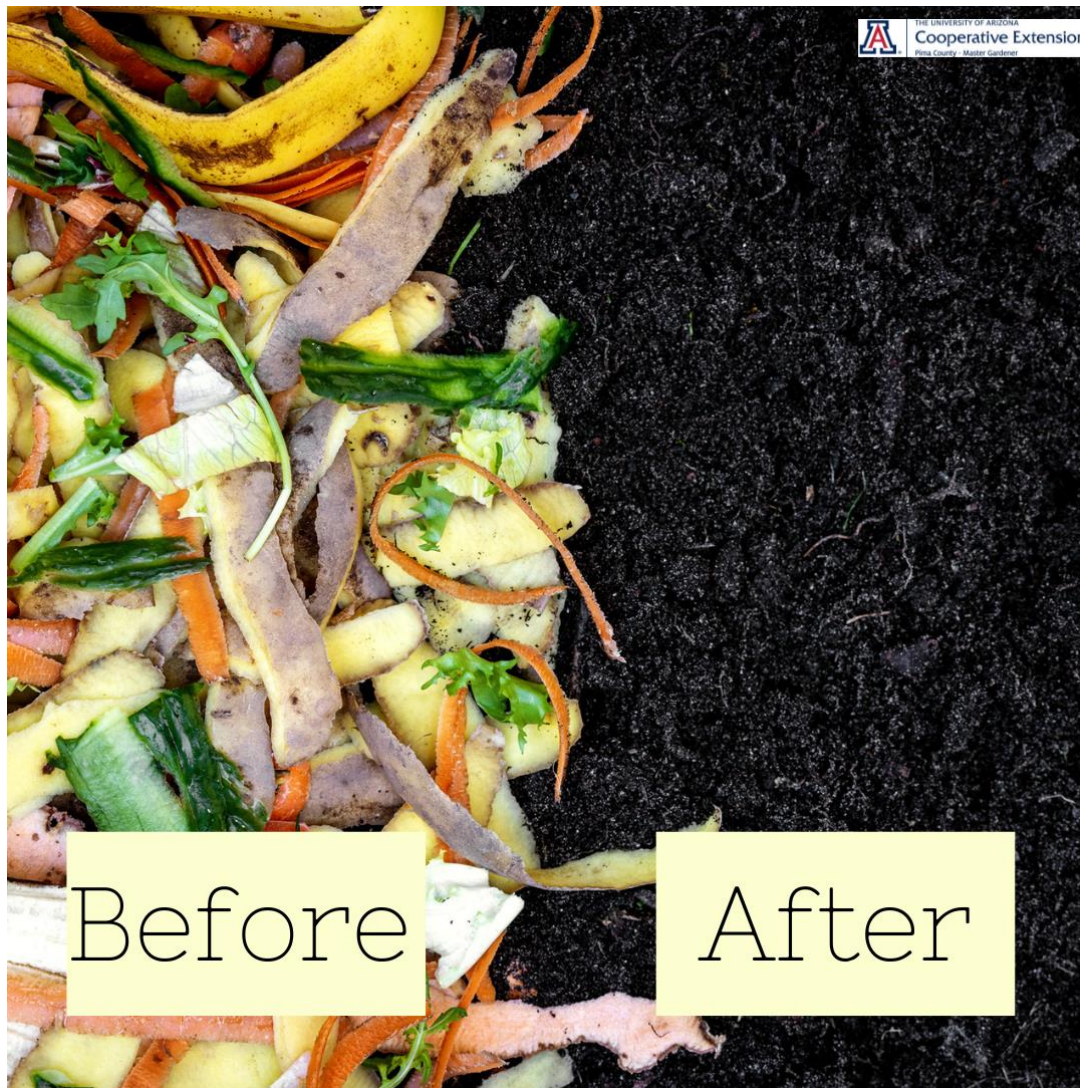


Practices of Making Compost



According to the EPA, 133 billion pounds of the overall US food supply is wasted every year, costing an estimated \$162 billion and contributes to the 18% of total U.S. methane emissions coming from landfills. Reducing food waste is good for the environment, for people, and for gardens. Including children in the compost making process can be a great learning opportunity spanning several subjects and will teach them a skill they can share at home.

From Waste to Fertile Soil



The waste added to a compost pile will be either carbon-rich or nitrogen-rich. Carbon-rich (C) items are referred to as “browns,” and nitrogen-rich (N) items are referred to as “greens.” Adding these items to a compost pile is a great way to recycle rather than throw away materials, while building soil with no additional costs.

The internal temperature of the compost pile should be maintained above 131°F for at least 3 consecutive days. This can be confirmed by using a compost thermometer. Below are two charts explaining what to add to a compost pile.

Compost Dos	Compost Don'ts
Begin with a shovel full of native soil to inoculate with microbes	Leave materials too large; small pieces break down more quickly
Keep the compost consistently moist (40% to 65% moisture (damp like wet sponge))	Let compost dry out or add too much moisture
Turn compost to introduce oxygen once per week	Add imbalanced browns: greens (20:1 ideal)
Add appropriate kitchen and yard waste	Don't add animal products, oils, diseased or pest-ridden plant matter, or fireplace ash
Locate compost bin at least 3 feet from structures	Cross-contaminate finished compost with still-in-progress compost



Benefits of Compost

Increase
Nutrient
Availability

Improve Water
Retention of
Garden Soil

Build Soil
Structure

Build Healthy
Soil Biology

Reduce Waste

Save Money



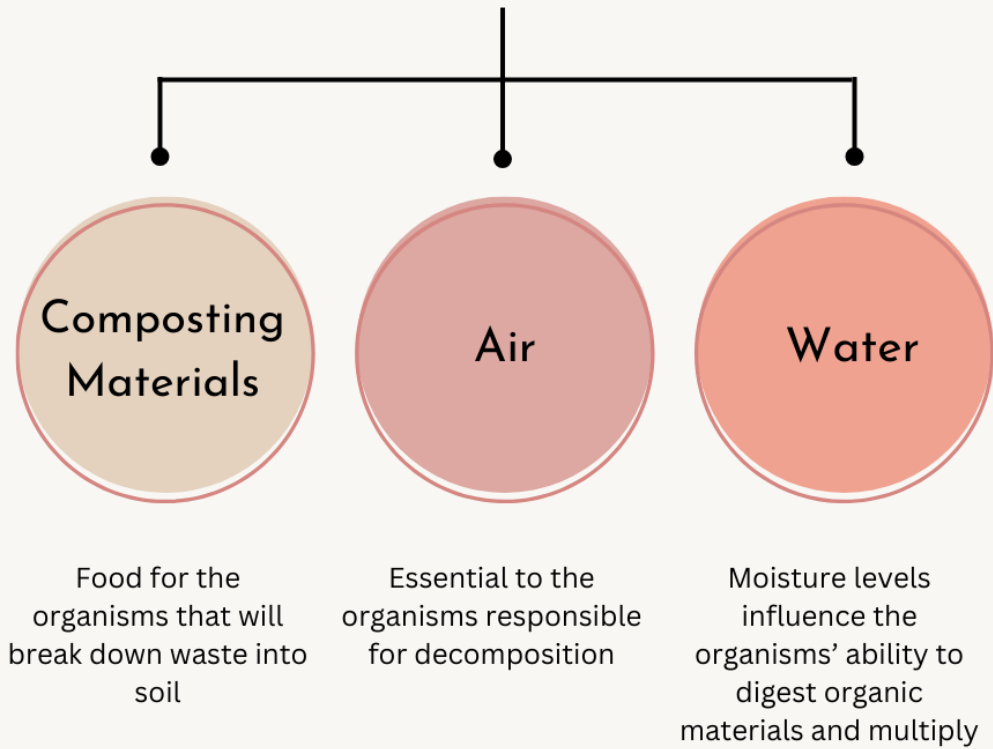
THE UNIVERSITY OF ARIZONA

Cooperative Extension

Pima County - Master Gardener



3 Requirements For Compost



Composting Material: Browns



Composting Material: Greens

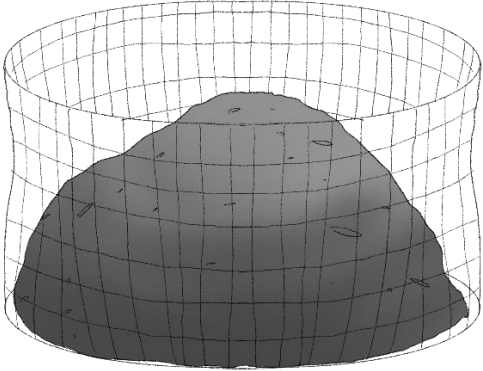
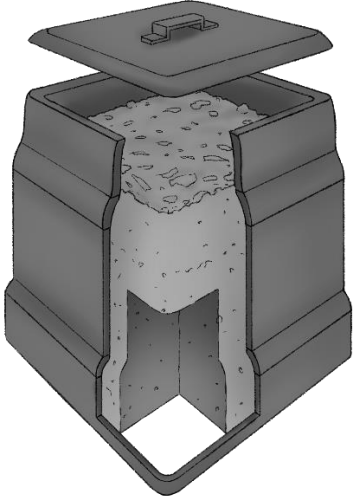
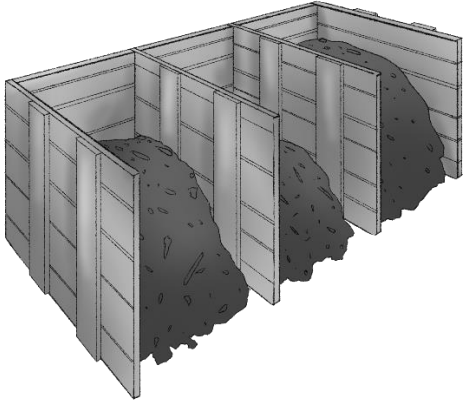



Choosing a Compost Container

There are many ways to contain a compost pile that vary in cost. A container may be purchased, which is a convenient way to begin, but will add to garden startup costs. There are a few very affordable options that don't require a container purchase:

- Reuse old pallets to build a compost bin system
- Some cities will provide a used trash container to use as a compost bin
- Build a compost basket out of chicken wire or hardware fabric
- Purchased bottomless or cylindrical plastic bin

Examples:

<p>Wire Fence Bin</p>	<p>Make a hoop from wire mesh or fencing to contain the pile. The hoop can be removed when the compost is finished and ready to be moved. The hoop can be reused.</p>	
<p>Upright Bin</p>	<p>Can be purchased online or at your local garden center.</p> <p>Can be build out of wood or made from repurposed plastic storage tub.</p>	
<p>Pallet Bin</p>	<p>Reuse wooden pallets. These can be obtained for low or no cost and used for years.</p> <p>Choose only pallets marked as <u>HT (heat treated)</u>. Methyl Bromide is also used to treat wood pallets and is highly toxic. These will be marked MB and are unsafe to use in the garden.</p>	

<p>Cylinder Bin (Tumbler)</p>	<p>A low or no cost option is a food safe metal 55-gallon drum. Drill holes for drainage and aeration before using.</p> <p><u>Option:</u> A cylindrical compost bin, called a tumbler, can be purchased online or at your local garden center.</p>	
-------------------------------	--	--

Using a simple pile method by making a heap on the ground is not recommended in the school setting because of the potential to draw pests. The important thing to keep in mind is that the chosen container should keep animals out, ensure good aeration and drainage, and allow easy access when adding material to the pile.

Additional tools needed for making compost

- Compost bucket for collecting kitchen scraps and easily moving outside for processing
- Pitchfork and shovel for turning and moving compost
- Wheelbarrow and bucket for distributing compost throughout the garden
- Compost thermometer to measure temperature and progress of the compost pile
- Compost aerator is nice to have for small piles, but a pitchfork will work just as well.

Location of a compost pile

- In Arizona's dry climate, it will be necessary to add moisture to the compost pile to facilitate microbial breakdown of organic matter. Place compost pile or bin near an approved water source.
- Setting up the compost pile or bin in a shady area will encourage moisture retention and hasten the decomposition process.
- Be sure to locate the compost pile or bin in a convenient area, such as close to the garden for the easy addition of plant debris, or near the kitchen for simple produce disposal. Compost area should be no closer than 3 feet to any structure.