



Project Instructions

Composting @ Home: Part 2

“CLEW” into Vermicomposting

Now that you have experimented with composting in a jar, it's time to take it to the next level and divert more of your family's fruit and vegetable scraps from the landfill. There are many ways to compost, but one of the best ways is vermicomposting. “Vermi” means worm, and a group of worms is called a **clew**.

Vermicomposting uses clews of special hungry worms called Red Wigglers. These critters eat their weight in decomposing fruits and vegetables and digest them, breaking down the minerals and elements into the most usable form for plants.



Known as **Black Gold**, worm castings are an extremely potent, 100% organic fertilizer that significantly increases plants and soil's microbial and nutrient health. It is a natural pest deterrent and helps soil retain moisture.

All EUSD schools have student maintained worm farms! If they can do it, so can you!

Build a Worm Farm

There are many different styles of worm bins. This activity will use simple and inexpensive stacking bins.

Once your worm farm is complete, continue to add the food scraps nitrogen source, “browns” carbon source, water when needed to keep as moist as a damp sponge, and don't forget to drain the leachate.

**Remember - DO NOT feed your worms citrus or onions.
Non-Citrus Fruit and vegetable scraps only.**

See Composting @ Home - Part 3 to learn how to harvest worm castings.



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WORM FARM

2 plastic bins with one lid (same size, opaque)

The top bin will be for the worms and the bottom will be the liquid (leachate) catch

Drill with 1/4" drill bit

Carbon source: Shredded paper, torn newspaper, egg cartons or coconut coir

Enough to provide a 4 to 6" layer as a base when getting started, and 2" layer over the

top of your pile everytime you add food scraps

Nitrogen source: Fruit and vegetable food scraps

No Citrus or onions - worms do not like them

Grit such as coffee grounds, ground egg shells, or garden soil, 1/2 cup per feeding

Worms have gizzards and need the grit to digest food

1-4 lbs of red wiggler worms depending on your family's waste needs

Email barbara@bckprograms for a doorstep delivery of 1 lb of wigglers



MATERIALS



Drill 15 to 20, 1/4" holes throughout the lowest spots in the bottom of the bin

Only drill holes in one of the bins - this will be the top bin where the worms will live.



Drill a total of about 12, 1/4" holes around the perimeter of the bin, just under the top lip.

Optional- Insert a valve or cap in the bottom bin to drain leachate, or place your farm outside over soil and drill drain holes in the bottom bin.



Nestle the top bin with holes, into the bottom bin with no holes.

BUILD



Place 4 to 6" of carbon bedding in the top bin to start. Sprinkle with water but do not drench. The farm needs to be as moist as a wet sponge. Mix in grit.

Add 1/2 lb food scraps per week and increase as your crew reproduces. Feed in sections right next to each other so the worms can wiggle over to the new area where the food is.



After adding the food scraps, cover with a 2" layer of carbon bedding and sprinkle with water. Add your worms in a mound in one section of the bin.

Cover the pile with a piece of burlap or cardboard and put the lid on securely.



Excess moisture will collect in the bottom bin. The liquid is called leachate and needs to be drained off frequently.

If your leachate stands too long and has a strong unpleasant odor, it will need to be put down the toilet. Otherwise, it can be diluted with water and poured on your ornamental, non edible plants.

FARM