



## BUILD YOUR OWN WORM BIN

### Materials needed:

- 1 large opaque bin with lid, and tray to sit under it
- a drill
- newspaper
- water
- red wiggler worms\* and soil
- food scraps

**Step 1 DRILL HOLES:** every 6" on the lid, sides, and bottom of the bin (the tray will catch any liquid that drains out of the holes). Worms need air to breathe! They are also sensitive to light so make sure your bin is dark inside and not see-through.

**Step 2 MAKE THE WORMS' BED:** Worms eat their beds! A worm bed includes dead leaves, straw, newspaper, or cardboard. Tear bedding into small pieces and wet it so it feels like a wrung-out sponge. Fill the bin halfway with bedding. Keep your bin in the shade during the summertime (their beds might require extra moisture in summer) and someplace where they won't freeze in the winter (indoors).

**Step 3 ADD SOIL AND WORMS:** Did you know that there are other living organisms in the soil alongside the hard-working red wiggler worms? There are microscopic fungi and bacteria that help worms to eat our food scraps, so add some soil (and its inhabitants) to start the bin. *\*Red wigglers are different from the earthworms found in our garden and you can get them online or at some feed supply stores!*

**Step 4 FEED YOUR WORMS:** In addition to the paper bedding (carbon=brown), worms need food scraps (nitrogen=green). *There should be about 25x more carbon-rich material as nitrogen-rich material.*

**Worms love:** apple cores, banana and orange peels, sandwich crusts (free of meat or dairy), kale stems, droopy lettuce, carrots tops, egg shells, coffee grounds, etc. (you can even feed them this paper when you're finished!).

**Worms do not love:** meat, dairy, or oil (including food cooked in oil) — these can rot and attract rodents. The acidity of too much citrus can harm the worms' skin.

**Step 5 TURN IT:** Worms help aerate the soil and turn what's inside the worm bin just by digging and moving around, but we can speed up the process by turning the soil, which is easily accomplished by exploring!

**Step 6 HARVEST:** Use your worms' waste (farmers call it "castings") in your own garden! Here's how: move all current worm bin contents to one side of the bin. Put new bedding and food scraps in the empty side and let the worms migrate over (this could take about a week) and harvest your amazing soil amendment.

### **Did something go wrong?**

**Bad smell** – Check to see if there is moldy food or meat/dairy in your bin and if so, remove it.

**Too wet** – Add more dry bedding like dead leaves and shredded newspaper. Worms breathe through their skin so they need to be kept moist, but they can't swim so the bin should not be too wet.

**Too dry** – It's okay to add more water over the dry bedding, or even dampen handfuls of bedding.

**Worm die-off** – Remove excess citrus and check that the bin has the proper ratio of dead leaves/newspaper to kitchen scraps (25:1). If the bed is mostly castings, harvest your castings and give your worms a fresh bed.

### Further reading:

[Compost Stew](#) by Mary McKenna Siddals

[Worms Eat My Garbage](#) by Mary Appelhof

[Worm Composting: https://kidsgardening.org/resources/gardening-basics-worm-composting/](https://kidsgardening.org/resources/gardening-basics-worm-composting/)