



Outdoor Classroom Project Plan: Materials List & Budget for VERMICOMPOST BIN

Vermicomposting is the method of using earthworms to speed up the process of composting. The worms in the compost bin consume the compost material such as used paper or coffee grinds and turn it into something useful – worm castings (or worm poop) that can be used as fertilizer or “black gold.” This system of composting demonstrates to students how important worms are to the health of our ecosystems. Just as they do in your vermicompost bin, worms help break down organic matter into nutrients for plants. They also break up the soil with their tunnels, which helps aerate the soil and allows the soil to retain more water. Earthworms help our wildflowers, grasses, bushes and trees survive and thrive!

❖ Location Requirements:

- Keep your vermicompost bin somewhere out of direct sun. Bins can be stored indoors as well.
- It is important to keep temperatures mild inside of the bin. Use a thermometer to verify it is between 55-70°F. Adjust the location of your bin as needed to achieve these temperatures.
- If you have a Box Turtle Habitat, you may consider placing you vermicompost bin nearby. This will give you easy access to worms when you are feeding the turtles.

❖ Photos of a Completed Vermiculture Bin:





OC Project Plan: Vermicompost Bin Materials List & Budget

❖ **Estimated Cost: \$275-295**

❖ **Materials & Supplies with Estimated Budget:**

Vermicompost Bin				
Holds 2 worm bins & 1 liquid fertilizer collection bin				
Station	Materials & Supplies	Estimated Cost	Example Source	Final Cost
Vermi	(1) ½-in x 4-ft x 8-ft Southern Yellow Pine Plywood Sheathing @~\$24.80 ea	\$25	Lowe's Item #12192	
Vermi	(1) 2-in x 4-in x 8ft #2 Prime Wood Pressure Treated Lumber @~\$5.38 ea	\$5	Lowe's Item #196087	
Vermi	(1) Gatehouse 3-in Zinc Mortise Door Hinge (2-Pack) (for top of box) @~\$3.27 ea	\$5	Lowe's Item #308972	
Vermi	(1) Gatehouse 2-in Zinc Mortise Door Hinge (2-Pack) (for front of box) @~\$2.47 ea	\$5	Lowe's Item #308970	
Vermi	(8) Simpson Strong-Tie 1.25-in x 1.25-in x 3.25 in 18-Gauge G90 Galvanized Steel Angle @~\$1.28 ea	\$10	Lowe's Item #1944409	
Vermi	(1) Hillman One #8 x 2-1/2-in Bronze Epoxy Flat Exterior Multi-Material Screws (for attaching 2x4's to sides of box to create shelf inside box) @~\$3.98 ea	\$5	Lowe's Item #875079	
Vermi	(1) Amerock Everyday Heritage 1.25-in Unfinished Round Traditional Cabinet Knob (for opening the bottom front door of box) @~\$2.93 ea	\$5	Lowe's Item #4068532	
Vermi	(1-2) Dark 10-Gallon (40-Quart) Centrex Rugged Tote with Standard Snap Lid (24" long x 16" wide x 8.8" deep) @~\$18.98 ea	\$20-40 total	Lowe's Item #831520	
Vermi	(1) Clear Storage Plastic Bin with Lid, 28 quart (2 Count) (5-7 Gallon, 22-24" long, 15-16" wide, & 5-6" deep) @~\$40.72 ea	\$40	https://www.amazon.com/HOMZ-Quart-Snaplock-Container-Storage/dp/B07STLHLCZ/	
Vermi	(1) Gallon of Exterior Stain/Paint (pick a light color that will help reflect sunlight) @~\$38.98 ea	\$40	Lowe's Item #147475	
Vermi	(1) Valspar 4-Piece Paint Roller Kit @~\$15.48 ea	\$15	Lowe's Item #1617024	
Vermi	Shredded Newspaper or fallen leaves, lightly moistened (for bedding)	FREE	Donated or On Campus	
Vermi	Handful of sand or crushed egg shell (for grit)	FREE	From School	
Vermi	~100 Worms (red wigglers, red worms, manure worms; NOT night crawlers)	\$10	Bait Store	
Vermi	Educational Sign (explaining vermiculture)	\$75	Ask OC Consultant about https://www.alabamawildlife.org/oc-signs/	





OC Project Plan: Vermicompost Bin Materials List & Budget

❖ Materials & Supplies with Estimated Budget (cont.):

Vermi	(1) 6 ft. U-Post for Fence <i>(for educational sign)</i> @~\$10.69 ea	\$10	Lowe's Item #493054	
Vermi	(1) Hillman 1/4-in x 1-1/2 in Zinc-Plated Coarse Thread Hex Bolt (2-count) @~\$0.88 ea	\$5 total	Lowe's Item #137634	
Vermi	(2) Hillman 1/4-in x 20 Zinc-Plated Steel Hex Nut @~\$0.10 ea		Lowe's Item #63301	
Vermi	(2) Hillman 1/4-in Zinc-Plated Standard Flat Washer @~\$0.53 ea		Lowe's Item #63306	
Total Estimated Cost: \$275 - \$295				

