

Support Document

Compost Column

Construction

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Preparing materials for making the column.

Materials Needed

21	2L plastic soda bottles Remove the labels.
7	Scissors or X-Acto knife
7	Marker
7	Cups shredded paper
17.5	Cups small kitchen waste
3.5	Cups dried leaves
3.5	Cups pencil shavings
7	Tablespoons compost starter
7	Cups soil
7	Cups water
1	Measuring cup
7	Reusable grocery bags
56	1-gallon Zip-Lock bags

For a class size of 30, prepare kits for 7 compost columns.

The class will be divided into 6 groups of 5.

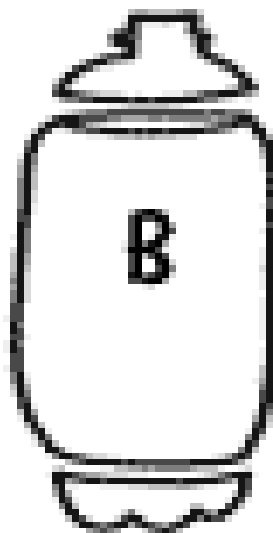
The 7th compost column will be made by the teacher as a demonstration.

Preparing the plastic soda bottles for the compost column

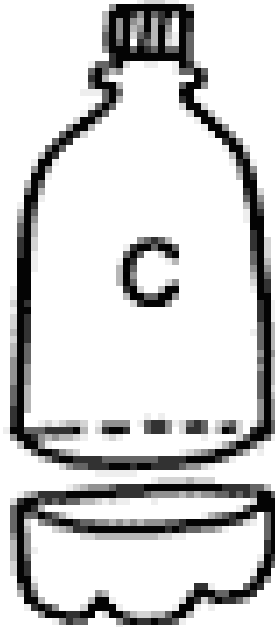
1. Cut top off of Bottle #1, 2-3 cm below neck so the cylinder has straight sides. Label parts as shown in pictures.



2. Cut top off of Bottle #2, 2-3 cm above shoulder. Cut bottom off 2-3 cm below hip, so the resulting cylinder has two tapered ends. Poke holes in bottom piece (not labeled in photo), and write "sieve" on this piece.

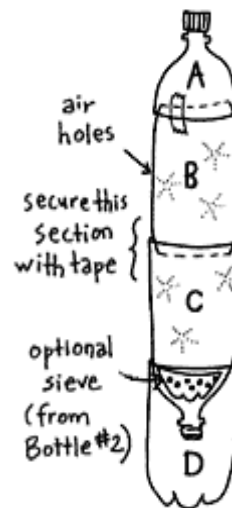


3. Cut bottom off Bottle #3, 1-2 cm above hip, so cylinder has a straight end.



4. Invert "C" and stack into base "D". Insert sieve into bottom of "C". Stack "B" and tape middle seam securely. Poke air holes. Add top "A" with a piece of tape for a hinge to the bottle column.

5. Poke air holes in column. Poke holes in the cap.



Prepare the contents of the landfill column

6. Measure 1 cup of shredded paper into each of 7 Zip-Lock bags.
7. Measure $\frac{1}{2}$ cup of pencil shavings into each of 7 Zip-Lock bags.
(Sawdust or any finely ground woody material can be substituted.)
8. Place $\frac{1}{2}$ cup dried leaves into each of 7 Zip-Lock bags.
9. Place 2 $\frac{1}{2}$ cups kitchen waste into each of 7 Zip-Lock bags.
(Include carrots and other colored vegetables to reinforce the fact that “greens” are not just green)
Chop kitchen waste finely.
Avoid fruits if possible—fruit flies will appear in the column
10. Measure 1 cup of water into each of 7 Zip-Lock bags.
11. Measure $\frac{1}{2}$ cup of soil into each of 14 Zip-Lock bags.
12. Measure 1 tablespoon of compost starter into each of 7 Zip-Lock bags.

13. Prepare the individual compost column kits in reusable grocery bags by placing the following items in each one:
 - 1 compost column or materials to assemble one
 - 1 bag of shredded paper
 - 1 bag of water
 - 2 bags of soil
 - 1 bag of dried leaves
 - 1 bag containing pencil shavings
 - 1 bag containing kitchen waste
 - 1 bag containing compost starter