



Compost Bottles



It's May down on the farm, and Tractor Ted is helping to make silage. Silage is fermented from crops and used to feed cattle during winter. The process of silaging is not dissimilar to the process of composting, although silage feeds animals while compost feeds plants. Making compost in a bottle is a straightforward activity and gives children the chance to see how organic matter breaks down over time. Try the following with your children and show them how vegetable scraps can be turned into rich, dark compost for growing seedlings.

THIS ACTIVITY...

- shows children that natural substances change and decay over time
- gives them the opportunity to observe and record change
- introduces the idea that some processes take a long time and we have to wait patiently for results
- encourages children to explore different smells and textures
- offers children the experience of recycling rather than throwing away
- shows children the importance of compost for growing seeds

WHAT TO DO

Show the children online footage of silaging, and talk about why farmers need to make silage. Explain that you are all going to make something a bit like silage - but it's for feeding plants instead of animals, and it's called 'compost'.

Use a large, clear plastic drinks bottle as a container for your compost. Prepare the bottle by cutting round the neck, leaving a small plastic hinge so that the top can be opened and closed. Gather raw fruit and vegetable peelings, used tea bags, shredded newspaper and soil. Show the children how to layer the soil and vegetable scraps, taking care with the bottle's cut edge. Put a 2cm layer of soil in the base of the bottle, followed by a 2cm layer of scraps. Build up the soil and scraps in layers, including a layer of shredded newspaper between two layers of soil. Finish with a thin layer of soil. Spray the contents of the bottle with water to make them damp, but not soaking. Tape the lid shut and place the bottle in a warm, sunny spot.

Check the moisture content of the bottle from time to time. If the compost is too wet, open the lid and let it dry out a little. If the compost gets too dry, dampen it by spraying with water. Photograph the bottle once a week to create a record of the contents decomposing. Once everything has broken down into a rich, dark compost, plant a seed in the bottle to show the children that compost can be used for growing plants. Throughout the process, encourage children to feel and sniff both the items used to make the compost and the compost itself. Throughout the activity, emphasise the importance of washing hands after handling vegetable scraps, soil and compost.



THINGS TO THINK ABOUT

- Making compost can take anything from eight weeks to a few months. Speed things up by adding organic compost accelerator (available from garden centres).
- At the start of the process, draw a line with permanent marker to record the level of the bottle's contents. Look at how the level drops as the contents decompose.
- A thin layer of grass clippings and leaves can be added to the compost bottle, but they need to be dried first.
- Compare photos of the bottle at the start of the process and the end. Look at how the different coloured vegetable scraps have decomposed and changed into rich brown compost.
- With older children, make up a selection of bottles with different contents - such as just soil and newspaper and just soil and potato peelings. Do the bottles turn into compost in the same way as the mixed scraps?
- Highlight how you are re-using scraps and turning them into something useful, rather than throwing them in the bin.

JINGLE TIME

*To the tune of 'Oats and Beans
and Barley Grow'*

Dig the compost, rich and brown,
Plant the seed and pat it down.
Pour on water,
Now everyone knows ...
This is how a seedling grows!

See the little shoot, peeping through,
Count the leaves, one and two.
Pour on water,
Now everyone knows ...
This is how a seedling grows!

Summer sunshine, bright and warm,
See the plant all big and strong.
Pour on water,
Now everyone knows ...
This is how a seedling grows!

