

Educational Activities

Compost and compost bins



Introduction

The following are two examples of educational activities. Use your creativity to adapt them to your environmental, social, and cultural reality!

▶ Activity 1

Making a compost bin

In brief

There are many examples of composting activities. In addition to offering an alternative use of fertilizers in the garden, this activity can be a starting point for analyzing together the concepts of waste and resources. There is no such thing as waste in nature, and in the garden we can try “closing” the cycle of organic matter, just like in natural ecosystems, so that resources return to the soil that produced them. Let us learn, therefore, to eliminate waste and benefit from doing so. Below we will give you an idea on how to make a compost bin with reclaimed wooden planks and used plastic bottles.

Participants

Children aged between 8 and 15.

Objectives

- Make a compost bin with used materials: it will be used to recycle vegetable waste and to produce compost to restore garden soil fertility.
- Reason with the children on the importance of compost for soil fertility.
- Learn to consider waste (vegetable waste, plastic bottles, wooden planks) as resources.
- Learn to observe the environment and to respect nature’s times.
- Develop manual skills and group work.

Coordinators

Teachers, members of the community (e.g. an experienced carpenter).

Materials

- To make the compost bin with used boards: wooden boards, sandpaper, cold tar, nails (7-12 cm / 3-5 in), brushes, a saw, a hammer. Organic waste of different types brought from home.
- To make the compost bin with plastic bottles: used plastic bottles, other bigger containers.

Activity description

1. Making the compost bin with reclaimed wooden boards

Part 1

The pupils retrieve wooden boards from packing platforms (pellets). A tip: the boards can be found at markets, supermarkets or warehouses, building sites, sawmills and landfills.

Part 2

The children plan and design the compost bin in class.

Part 3

The children select the boards, clean them with sandpaper and paint them with cold tar which will make them resistant to decomposition.

Part 4

The compost bin is assembled with hammer and nails.

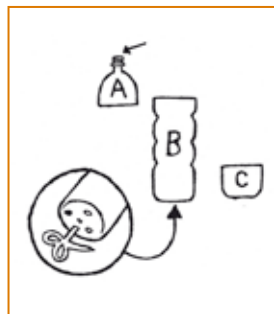
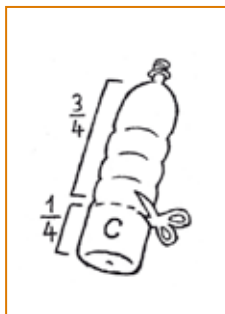
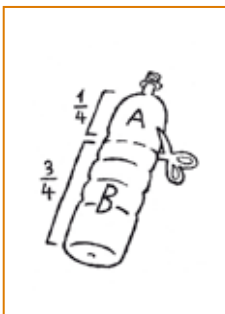
Part 5: team game



1. On the field, the teacher provides some drawings on paper, or directly samples of vegetable waste that will be placed in layers in the compost bin. He/she also prepares some drawings/waste samples or materials that must NOT go in the compost bin. As many (or almost as many) drawings and samples as there are participants are prepared. The children are divided into 2 teams and put in single file. At the starting signal, one child from each team runs to get the sample or the drawing in the order he believes is the most appropriate for the creation of compost. When he/she returns to the line, the next child in line sets off. The winner is the team that manages to collect all the elements that make up the compost and puts them in the right order.

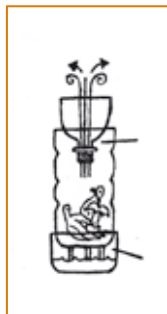
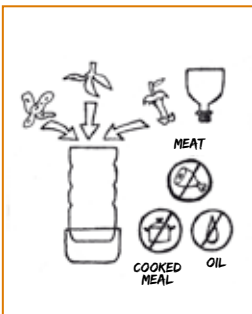
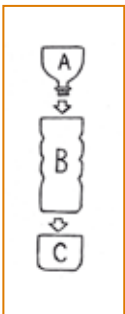
2. Some tests are prepared for the groups of pupils/classes (quizzes, relay races, identification using the five senses, human pyramids, sports tournaments, etc.) which, if passed, entitle them to a sample for the compost: the first team to pass all the tests wins. This can be an activity that occupies a whole day of garden fun and games.

2. Making a compost bin with plastic bottles



Part 1

The students make a small compost bin in their own homes with used plastic bottles. To collect a small quantity of kitchen scraps (preferably raw vegetable waste chopped into small pieces), a bottle cut in half can be used: using the top half as a funnel, and inserting it in the bottom half so that excess liquid drains.



Part 2

the compost material is then put into a bigger bin. In order to calculate when the compost is ready, consider your environment well: climate (hot, humid, arid...); the location of the compost bin and its size determine maturation times.

Variant

Another ideal container in which to mature small quantities of compost (even on a balcony) is a clay pot, closed at the top and the bottom with two saucers. Clay allows material to transpire and filters odors, thus limiting rotting and nasty smells.

Further information

For further information on the activity, contact Sara El Sayed – Egypt (sara@nawayaegypt.org) e Younes Zghari – Morocco (younes.zg@gmail.com).

▶ Activity 2

Let's compost! Recycling in the garden with Bokashi

In brief

The purpose of the activity is to give children a positive attitude and awareness towards garden activities. The activity takes place over a period of approximately 3 months. In order to apply Bokashi – a Japanese technique that allows you to have ready-to-use compost in just 21 days, thanks to already active microorganisms – they use composted material prepared in the Slow Food garden.

Participants

Children aged between 8 and 15, divided into groups of 15 students each.

Objectives

- Help to understand the importance of using natural compost instead of inorganic fertilizers.
- Provide the information necessary to recognize natural fertilizers.
- Learn to produce a natural fertilizer with the Bokashi technique.

Coordinators

Teachers, in the garden.

Materials

½ a bucket of corn husks, ½ bucket of ash, 1 bucket of natural soil, 2 sacks of corn stalks or chopped straw, 1 bucket of compost, 1 bucket of clippings or fresh leaves, 1 bucket of water.

Activity description



Part 1: theory

The teacher explains why to prefer a natural fertilizer – which replenishes the soil with nutrients and is inexpensive to produce – to an inorganic fertilizer.

The Bokashi technique is introduced.

Part 2: practical experience

In a bin, or in a hole in the ground, first put the ash, then the fresh leaves, the corn husks and the soil. Mix well and water. Make sure the materials do not stick to each other but are mixed homogeneously.

Form a mound (the shape will be similar to that of an anthill) and cover it with banana leaves or mud. Make a hole on top of the mound to allow air to circulate.

After 7 days, check the temperature: if it is cold, this means it hasn't worked properly and, therefore,



the mound has to be heated (e.g. covering it with a cloth) to allow the microorganisms to grow on the organic materials (correctly fermented Bokashi gives off a sweet, pickled odor).

After 21 days, the Bokashi - a fertilizer with a high content of nutrients – should be ready for use in the garden.

Part 3: team play

1. On the field, the teacher provides some drawings on paper, or directly samples of vegetable waste that will be placed in layers in the mound. He/she also prepares some drawings/waste samples or materials that must NOT go in the pit/compost bin. Prepare as many (or almost as many) drawings and samples as there are participants.

Divide the children into 2 teams and put them in single file. At the starting signal, one child from each team runs to get the sample or the drawing in the order he believes is the most appropriate for the construction of the compost. When he/she returns to the line, the next child in line sets off. The winner is the first team to collect all the elements that make up the compost and puts them in the right order

2. Some tests are prepared for the groups of pupils/classes (quizzes, relay races, identification using the five senses, human pyramids, sports tournaments, etc.) which, if passed, entitle them to a sample for the compost: the first team to pass all the tests wins. This can be an activity that occupies a whole day of garden fun and games.

Variants

The students can try to make Bokashi at home with their families; the experience will then be documented and discussed in class.

Further information

For further information on the activity, contact Fredrick Msiska (nyadenani@gmail.com) and Manvester Khoza (manvesterackson@yahoo.co.uk) - Malawi.

Help us find more photos!