

# Home Composting

You can compost a large amount of your kitchen and garden waste, at home in a compost bin. It can then be used around the garden to 'feed' other plants. All a compost bin needs is a mixture of greens, browns, air and water to make good compost full of nutrients.

## What are Greens?

Greens are quick to rot and provide important nitrogen and moisture. Greens include: vegetable peelings, fruit waste, tea bags, plant prunings and grass cuttings.

## What are Browns?

Browns are slower to rot, they provide fibre, carbon and also allow important air pockets to form in the mixture. Browns include: cardboard, egg boxes, scrunched up paper, twigs and fallen leaves. Crushed egg shells can also be included to provide useful minerals.



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## What to avoid

Certain things should never be placed in your compost bin these include: cooked vegetables, meat, bones, dairy products, fat, oils, diseased plants and definitely no pet droppings or babies nappies. Putting these in your bin can encourage unwanted pests and can also create bad odours.

A layer of soil or compost from your garden can be added to layers of greens and browns to introduce micro-organisms. Water your bin and tah-dah! The micro-organisms will set to work breaking down the material and in time you will see extra bugs in there such as: woodlice, earth worms and millipedes all helping break the material down into compost.

## Where should you put your bin?

Your bin should be on a level well drained spot. This allows excess water to drain out and makes it easier for helpful creatures such as worms to get in and get working on breaking down the contents. Placing your bin in a partially sunny spot can help speed up the composting process.



## Making good compost

The key to good compost lies in getting the mix right. You need to keep your greens and browns properly balanced. If your compost is too wet, add more browns. If it's too dry, add some greens. Making sure there is enough air in the mixture is also important. Adding scrunched up bits of cardboard is a simple way to create air pockets that will help keep your compost healthy. After approximately 6-9 months your compost will be ready.

## Using your compost

Finished compost is a dark brown, almost black, soil like layer that you will find in the bottom of your bin. It has a spongy texture and is rich in nutrients. Some bins have a small hatch at the bottom that you can remove to get at the finished product, but sometimes it's even easier to lift the bin or to tip it over to get at your compost. Spreading the finished compost into your flower beds greatly improves soil quality by helping it retain moisture and suppressing weeds. Composting is the easiest way to make your garden grow more beautiful.



## Food and Garden Waste

Some items of household waste can be buried in the ground, and will be broken down by bacteria, these are known as biodegradable. Kitchen, vegetable and garden waste all rot when buried in the ground.

### Activity 1: Biodegradable or not?

- Test items which can or cannot rot down. Bury items in a pot of soil in the classroom, such as apple cores and ring pulls, examine the contents at regular intervals and make a list of biodegradable and non-biodegradable materials.

## Compost

Fruit and vegetable peelings and garden waste can be collected together to be broken down or recycled into compost. Homemade compost mixed with soil makes a nutritious soil improver as an alternative to fertilizers or peat.

## Activity 2: Making a compost heap

- Design and make a compost heap. Think about how to keep rain out and prevent moisture and heat loss. Encourage children to put their apple cores and fruit peelings on to the compost heap, together with grass cuttings, leaf litter and shredded paper.

## Decomposers

Decomposers are nature's dustmen, they are creatures that break down dead plants and animals and turn them into a finer material such as compost. An example of a decomposer is a worm.

## Activity 3:

- Making a list of decomposers. The children will probably think of birds, rats and foxes – what about snails, slugs, worms and fungi?
- List the kinds of waste that decomposers feed on such as food scraps or rotting wood.

## Activity 4: How to make a wormery

You will need: a large glass jar, plastic bottle or fish tank and make a loose fitting cover from black paper or brown wrapping paper.

- Half fill the container with thin layers of soil and sand, add a few earthworms, then a layer of leaves. Collect your worms from the school grounds carefully, perhaps wait until after it has rained.
- Cover the box with a plastic bag, cling-film or lid and secure, making sure the cover has a few air-holes pricked into it.
- Sprinkle with water to keep damp but not wet and store in a cool dry place.
- Uncover for viewing, what can you see?
- Remember to wash your hands after handling the worms.

## Why not?

- Keep a note of how many leaves are in a wormery at each viewing.
- Try using different types of leaves – which do worms prefer?
- Look at the worms through a magnifying glass, discuss the importance of worms for aerating the soil and allowing water to pass through.
- Make a model of a worm using pieces of rubbish, an old sock or modelling clay.

