

## How to Make Compost at School

Eventually everything nature produces returns naturally to the earth and is recycled. Left alone all organic waste will compost itself eventually, but favourable conditions will shorten the time needed for complete breakdown of materials.

By following a few simple steps, composting in school is a great way to produce good compost for the garden and will also reduce the need for chemical fertilisers. It also helps to reduce waste and provides children with a great lesson in recycling.

### Choosing a Compost Bin

When composting domestic waste it is important to use a compost bin to prevent unwanted scavengers. When choosing one should remember a compost bin should be:

- Easy to erect – preferably slot together to make an attractive looking container
- Easy to fill – A large opening at the top and removable lid for access
- Easy to empty – Removable sides so it can be dismantled and reassembled. Remember you will want access to the best compost at the bottom of the bin
- Durable – Treated with preservative and robust design
- Size – Minimum 150 – 250 litres
- Environmentally friendly – If made from wood it should come from an FSC source, and be treated with a non toxic preservative

For an excellent range of wooden compost bins and accessories please take a look at [www.recycleworks.co.uk](http://www.recycleworks.co.uk).



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## Other Equipment You Might Need

- Compost Pitch Fork
- Shredder
- Compost thermometer
- Kitchen Waste Container

## Siting the Compost Bin

For convenience, site the compost bin either near to the source of the materials that will fill it or close to the place where the compost will finally be used. Good drainage is important and a bin placed directly onto the soil will have the benefit of the soil micro-organisms for decomposition. Avoid a location with too much sun or wind. A warm spot with good air circulation is probably best.

## How to Make Compost.

1. Gather together as much organic waste as possible and make a loose pile inside your compost bin. These organic materials will soon heat up and the composting process starts. The volume then quickly shrinks. The following organic material is suitable for a compost heap:

- Green material such as leaves, grass cuttings, weeds, moss, non-woody plant material and small bits of wood
- Brown materials such as bark, twigs, tough plant stems, dry roots, and shredded hedge trimmings and leaves
- Kitchen fruit and vegetable waste, cooked or uncooked, dead flowers, egg shells, coffee grounds, tea bags and small amounts of natural fabrics, paper and wood ash
- Vegetarian animal litter from small pets and poultry, small amounts of bedding such as straw, hay or wood chippings, hair and feathers

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**2.** Air is essential for the microbes and bacteria needed for composting. The microbes do the initial breaking down before the worms take over and do the heavy work. Air tends to be compressed out during the initial stages of composting, so it is important to do some aeration by turning the compost in the early stages and incorporating air evenly through. This helps to give an evenly balanced result. Use a pitchfork to make the job easier.

**3.** The heat naturally generated, quickly builds up again as the microbes resume composting in the improved conditions. The temperature will quickly reach around 65°C in a large well-mixed pile. This will help destroy seeds, weeds and disease and the materials will decompose much faster. Note that soft green materials are particularly important to build up heat in the compost heap. Ideally these should make up around a quarter to a half of the bin contents.

**4.** Check the compost heap regularly. Compost should be moist to give the best results, and dry materials take longer to break down. Conversely the natural bacteria and worms can't work well in waterlogged conditions and the compost will rot rather than decompose and it may then begin to smell. As a guide, if you squeeze a handful of compost water should not run off. If it does, add dry material to correct the balance. Alternatively if the compost is very dry add a bucket of water. A close fitting lid on top of the compost will help to maintain favourable conditions.

**5.** Once the compost bin is full and the contents have stopped shrinking quickly the compost can be left to mature. At this point you can start a new compost pile. In time the contents will become unrecognisable and the mixture will be ready for use. A big well-managed mixed pile can be ready for use in a few months. An unattended pile may take about a year.



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## Hints & Tips

### Material Size & Composition

The smaller the size of the material waste the faster it will compost. For example, if your school has lots of half eaten apples, try chopping them up into smaller pieces before putting into the compost bin.

Also, composting works best when there is a good mix of materials. It is better to avoid putting in large quantities of one waste type unmixed. So if you have quantities of shredded paper or paper towels, make sure these are well mixed in with fruit and vegetable waste.

### Unsuitable Materials To Avoid

- Grease, fats and cooking oil
- Raw and cooked meats
- Nappies
- Coal, ash, soot
- Glass
- Plastic
- Metal
- Man-made fabrics
- Very large amounts of paper
- Materials that have been treated with herbicide or pesticide
- Plants infested with persistent diseases
- Waste from pet dogs, cats, birds etc

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## Leaf composting

If you have large quantities of leaves they are best composted separately, as they can take about a year to decompose. Leaves are tough and tend to be dry, so they also benefit from a heavy shower, and will break down well in an open bin. Again composting leaves can be turned over with a pitchfork to mix and encourage even decomposition.

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## Grass

Grass has no structure and doesn't decompose well on its own and goes slimy. But when mixed with other compostable materials it will enrich the mixture.

## Wood Trimmings & Tough Garden Waste

These materials have a tough texture and so compost more slowly. If you want to compost them, they will decompose faster if shredded into small pieces first.

## Benefits of Modular Composting

A three-chambered compost bin is a very efficient and durable structure for fast composting. It works on an assembly line idea, having three batches of compost in varying degrees of decomposition. This gives easy access to a regular supply of uniform mature compost in rotation.



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