



School Gardening
Resources

PRIMARY LEVEL

BORD BIA
IRISH FOOD BOARD

Composting in the School Garden





Time of Year	September to June
Aim	To demonstrate the importance of recycling plant material, to reduce waste, save money, feed the soil and encourage biodiversity.
Resources Needed	Wormery, hot bin, New Zealand compost box, green waste, brown waste.
Cross Curriculum Relevance	SESE: Living Things, Environmental Awareness and care, exploring/ research, web of life Visual Art: Making signs / drawings / photographs PE: Turning the compost heap / active learning SPHE: Myself & the wider world, active citizenship Informal Curriculum: Green Schools Programme, Discover Primary Science

Process



Wormery

A wormery takes small amounts of kitchen waste, including raw and cooked vegetables, eggshells and biodegradable tea bags. The worms that break down this material are called brandling worms or tiger worms. Small portions of waste are added little and often. The wormery has a tap for draining off excess liquid which is an excellent organic liquid fertiliser when it is diluted with water at a ratio of 1:10. The wormery needs to be placed in a shady, sheltered place and brought into a shed over the winter. The compost produced is extremely rich.



Hot Bin

This is an insulated bin in which heat is used to break down waste material fast. This heat is produced by the bacteria and fungi that digest the waste. Air is circulated within to enable them to survive. It is a sealed container so is virtually vermin proof. The bin takes cooked and uncooked kitchen waste, garden waste, small amounts of grass cuttings, shredded paper and bark mulch. Temperatures vary between 40°C and 60°C. It produces plenty of brown liquid food which can be accessed by a tap and diluted with water in a ratio of 1:10 to be used as a liquid feed. Position it in a sunny place if possible.



New Zealand Compost Box

This three-bay bin made from slatted wood takes garden waste, grass cuttings and leaves. It is a good idea to add about 50% of green waste and 50% of brown waste. Green waste is nitrogen rich and consists of grass cuttings and plant waste. Brown waste consists of carbon rich materials such as paper, cardboard, twigs, straw, dead leaves and biodegradable tea bags. When bay one is full the contents are forked into bay two. This process aerates the material and speeds up the composting process. When bay one is full again, the contents of bay two are moved to bay 3 and the contents of bay one moved to bay two. Kitchen waste should not be added as it might attract vermin. Position it in a sunny place if possible.



Leaf mould

Autumn leaves are gathered into a container made of netted wire or slatted wood. They can also be stuffed into polythene bags with holes pierced in the bags to allow fungi to enter. The best place for siting the container is a shady corner because fungi work best out of direct sunshine. It takes two years for the leaves to turn into a black, crumbly compost. Leaves from conifers should be treated separately. These are acidic and their mould is suitable for plants such as rhododendrons, summer heathers, azaleas and blueberries.

Health and Safety

- ★ Always wear gloves when handling compost.
- ★ The moving of compost from one bay to another is best left to an adult. A person with health issues should wear a mask at this task because of the release of possible harmful spores.
- ★ The disturbance of damp, wet leaves can release harmful moulds so children or adults with asthma or mould allergies should avoid them.
- ★ If plastic, cone shaped compost bins are used in the school do not add kitchen waste either cooked or uncooked to them as rats will be attracted to this. Also ensure that no food waste is left around any of the composters. Some gardeners maintain that attaching a few layers of fine mesh chicken wire to the base prevents rats from entering the bin.

