

Why make compost?



Suggested 1 lesson

Feeding plants during the Second World War was more difficult because chemical feeds were less readily available. Most allotments had compost heaps. Making compost costs very little and is easy to do!

What makes compost

- Tea leaves, grass clippings and vegetable matter are known as activators, because they break down quickly, they are full of nutrients but smelly so need mixing with other materials
- Tree bark and straw will compost, but may take up to a year to break down, so chop it up small before adding it to your compost bin
- Paper can compost, but it needs to be shredded and soaked with water to speed the process up
- Pet waste can be added, but it is advised only if the animal is a herbivore
- Fertile soil contains plenty of moisture, oxygen, organic matter, micro-organisms and insects; to speed up de-composition you can buy Tiger or branding worms

What can't compost

- Plastics and processed materials
- Virulent weeds, such as bind weed and Japanese knot weed
- Cooked food waste

How to construct a compost heap

- It is best for the soil if the compost bin is not sealed at the bottom, so excess water fertilises the soil beneath. By placing layers of wood at the bottom to allow air circulation you could use anything, such as an old bath or tractor tyres.
- Roughly dig the soil where you intend the heap to go, hammer in four corner posts and secure wood panels to the posts; do not dig the Perspex into the ground
- You will need a cover for your compost bin, such as a ground sheet

Maintenance

- Add water regularly to ensure the compost is moist
- Mix occasionally to help break down the matter and add oxygen
- Move compost heap to a new location if the ground becomes too wet

Why make compost?



All pupils will: Be able to name things that rot and those that don't.

Most pupils will: Describe healthy/unhealthy soil. Understand that soil is alive so needs food, oxygen and water to be healthy.

A few pupils will: Explain problems with waste such as overcrowded landfill sites, subsidence where some older matter breaks down quicker than others causing piles to become unstable and Leachates, liquid released from decomposition that picks up pollutants from batteries, etc and then seeps into the ground.

Pupil Activity	Learning outcome	Teacher input
Brain storm "what is soil"	Think about the world around us and consolidate knowledge	Spider diagram ideas. Introduce soil being alive.
In groups peel and eat a variety of fruit eg orange, kiwi, apple and 1 packet of crisps	Global awareness of why recycling is important	Introduce land fill sites, where waste goes and problems – add to spider diagram
Collect class organic matter in 1 large plant pot and all crisp wrappers in another. Add soil, water, mix well using hand trowel and wait 2 weeks	Pupils to make hypotheses regarding what will happen to waste once it is buried in mini landfill site eg the crisp wrappers writing will come off	Provide sentence stems for hypotheses eg Pot A contains... Pot B contains... In two weeks I think that the crisp wrappers in pot A would have... [whereas/on the other hand/alternatively] the organic matter would have...
Answer the key question "why make compost"		