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An introduction to compost



What is compost?

- Compost is the product of the decomposition (rotting) of organic waste
- Organic waste is anything that comes from either a plant or an animal
- Compost is used in the garden to help improve the soil's structure, moisture retention and nutrient levels

How is compost made?

To create compost you need moisture, air, warmth, organic matter and micro-organisms (found naturally in the soil).

1 Compost Bin





 Soil micro organisms and invertebrates break down the organic matter to create a dark brown, humus rich, compost. This will take about a year if left alone but turning the heap every few weeks, and thereby re-introducing oxygen, will speed this up considerably.

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Plant waste will turn into compost in a heap on the ground, but containing it is tidier and may speed up the process. Here are some examples of containers:

2 Wormery



3 Leaf mould bin



 Leaves take longer to decompose so are best composted separately in their own container.
 Wire mesh is often used for this but black sacks with holes punched through work well too. Both of these methods will produce compost, known as leaf mould, after a year or two.

Facts

- There are more micro-organisms in a teaspoonful of soil than there are humans alive on the planet.
- Worms can regenerate. But a worm chopped in half will not re-grow into two worms. Usually it's only the head end that lives on.
- Worms were one of the first multi-cellular animals to evolve, up to 300 million years before the dinosaurs
- Green waste such as grass and plant matter is high in nitrogen, Brown waste such as leaves, paper and hedge cuttings are rich in carbon

What can we compost?

Compost goodies

- Vegetable / fruit peelings and skins / cores
- Coffee grains and tea bags
- Shredded paper (not shiny magazines)
- Cotton and wool materials
- Old plants
- Dead leaves
- Tops of perennial weeds
- Lawn clippings
- · Egg shells

Compost baddies

- Woody plant clippings
- Synthetic fabrics
- Cooked food scraps
- Meat or bones
- Diseased plant material
- Soil pests
- Weeds with seeds on
- Oil
- Whole eggs and other dairy products

Activity – can we compost it?











Before the class arrives place the two signs a few metres either side of the central area.



Start with a general discussion about compost, how it is important for plant growth and how it is an important way to recycle in the garden. Could show the pupils some examples of shop bought and home-made compost if available and discuss cost and how compost heaps make free compost.



Give each pupil an item from the box – make sure there is a mix of compostable and non-

compostable items. Get each pupil in turn to tell the rest of the group what they have and ask whether they think it is compostable – there can be a group decision on this. They then go and stand by either the yes or no sign as appropriate. Discussions can include how items such as paper, cardboard and tea bags all come from plants.



At the end of the activity highlight how many things can be composted and how this will be an important part of gardening activities during the year.

Can you compost what's in your lunchbox?



Identify the items in the lunchbox as either compostable, recyclable or to go to landfill. May include discussion on food groups, and Eat 5 a day with children.



Complete a pie chart showing % compost, % recycle or reusable, % landfill or simply sort into 3 bags.



Discuss how the landfill items may be reduced, and the importance of composting the organic waste