

Composting - KS2

Rotting rubbish

Do you know what compost is?

Compost is a type of 'fertilizer', that looks like soil, that is made from rotting plants from the garden or kitchen. Compost is easy and cheap to make as all it really needs is vegetable waste.



The vegetable waste is broken down by bacteria (germs), and made into compost.

There are different types of composters. These are special containers where you pile in the food waste and let them break down into compost. Do you have a composter? If you have space why not get one?

You can get wooden ones or plastic 'Dalek' shaped containers to use. Food waste goes in the top and compost is taken from the bottom once it is ready.



You can also get 'wormeries' where the worms help break down the food into compost quicker.

Reduce, reuse, recycle

This is the Education Team setting up a new wormery in our WRWA Schools reuse garden. We usually put left overs from school visit packed lunches in it. If you have been to our site do you remember the worms?



We started it off with some soil.



We were sent some worms in the post. Don't worry they were specially wrapped!



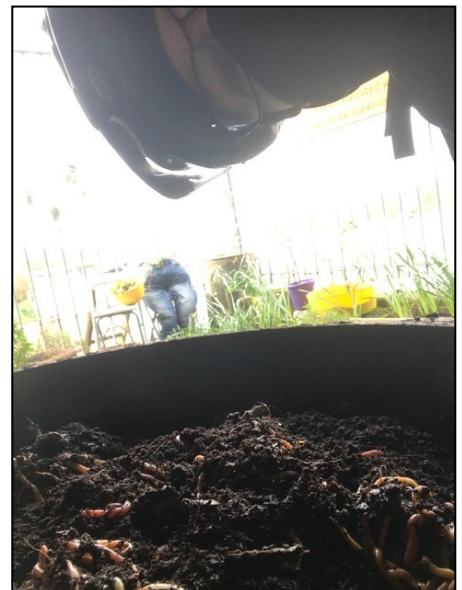
We spread them around.



Worms don't like light so they eventually all went under the soil.



We put the lid on to allow them to get to work and we added food to it a few weeks later.



I was allowed to go back once to the site so I made sure they were ok and have enough waste food.

Reduce, reuse, recycle

Why compost?

If you live in one of our boroughs, Wandsworth, Hammersmith & Fulham, Kensington and Chelsea, and you don't compost, your food waste goes in the Rubbish bin and is sent to the Energy From Waste Plant to be burnt. It is a waste of resources from growing, transporting and distributing food for good food to end up in the waste plus it is costly to collect and dispose of.



Some food waste such as bones, egg shells, carrot ends can't be avoided but **30% of all waste from your Rubbish bin is made from food waste**, and a lot of it is food that could have been eaten but got thrown away.

Can you think of 3 reasons why good food gets thrown away?

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.....

.....



If you live in Lambeth you might have one of these small grey 'caddy' bins in your kitchen to collect food waste in. Do you have one of these? Do you know or can you find out what you can and can't put in here?

You should also have one of these bigger, brown food waste bins to put outside for the bin collectors. These will get sent to an *in-vessel composting* (IVC) facility where it is composted.



If you compost at home you can save yourself money by not having to buy as much compost for your garden.



Reduce, reuse, recycle

If food can't rot properly it gives off bad gases which contribute to climate change.

Do you know or can you find out what climate change is and why composting helps?

Can you find out what gases are given off when food can't breakdown/rot properly?

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Not throwing as much good food away is called reducing food waste.

Reducing food waste and composting are widely acknowledged to be one of the most positive actions we can take for the environment.

What can you put in the home compost?



Fruit and vegetable peelings/waste



Egg shells



Teabags/coffee grounds/filters



Twigs & leaves/flower and grass cuttings



Shredded paper/cardboard

Reduce, reuse, recycle

How does food waste get turned into compost ?

The needs of compost are the same as all living things.

Can you name what all life needs to enable it to grow?

1.
2.
3.
4.

A compost pile also needs micro-organisms, bacteria and mini-beasts.,
water and air.



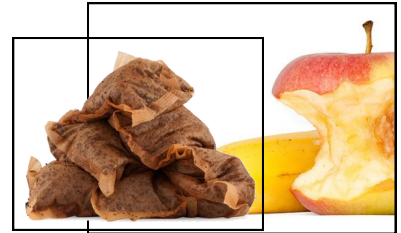
Reduce, reuse, recycle



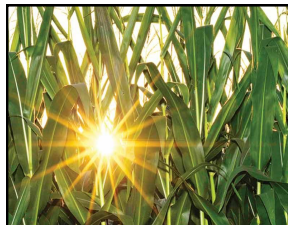
1. **Food:** we add material to the compost bin such as fruit and vegetable peelings, coffee grounds, egg shells, cardboard etc.



2. **Water:** most of the water comes from the wet materials we put in the compost bin, like apple cores, banana skins and tea bags.



3. **Air:** to create gaps and provide air and space in the compost, we need to add materials such as twigs/cardboard - egg boxes and loo rolls provide lots of air spaces!



4. **Warmth:** micro-organisms in the compost bin make their own warmth as they eat and breathe. Compost benefits from warmth from the sun. This is why composting happens faster in the warmer summer than in the cooler winter.



Compost micro-organisms and mini-beasts eat the materials in the compost bin and recycle it into compost. Can you guess/find out what each of these compost mini-beasts are?



1.

2.

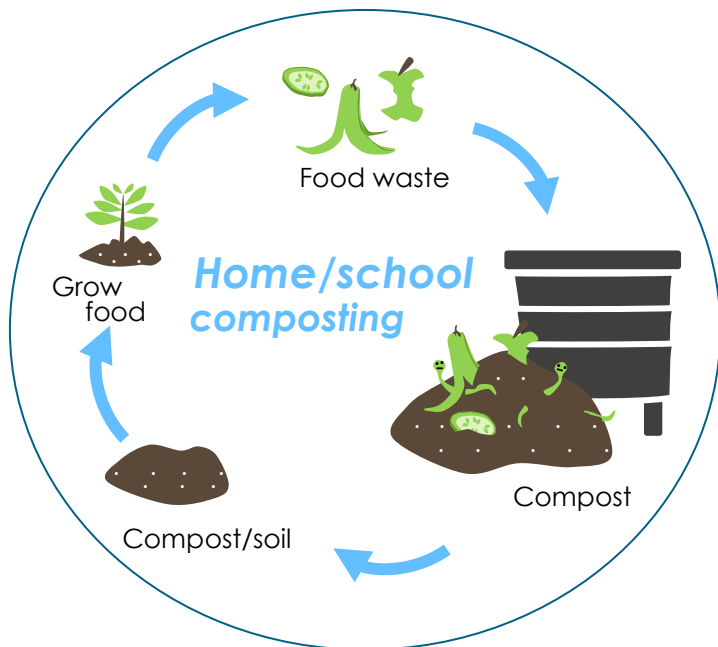
3.

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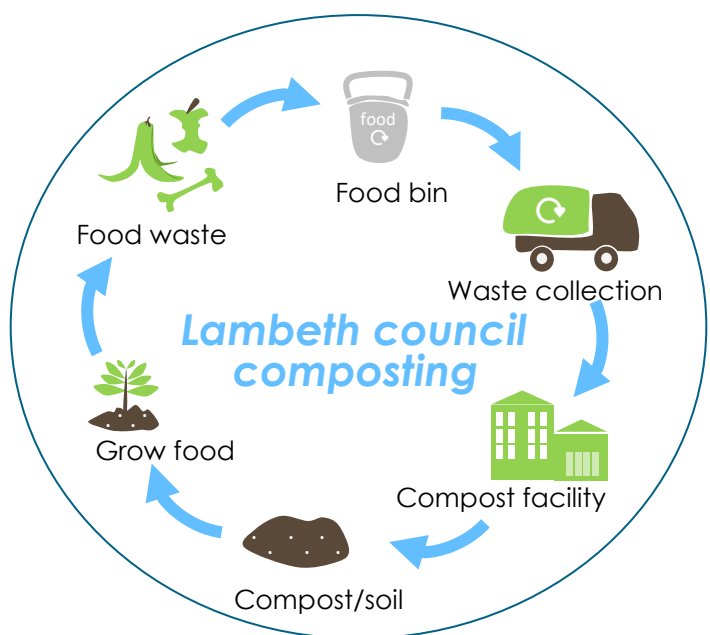
Reduce, reuse, recycle

Compost = the circle of life



A well run home composter will take about 6 months to make compost—it is quicker in the summer—why do you think this might be?

Do you know if your school has a composter? When you go back **why not find out if it has one and where it is and who in the school uses it.** Perhaps you can persuade the school to get one. Why not draw a poster that will encourage the school to get and use one. Think about how you can persuade them and include it in your poster. Do you think the school can save money by composting any food waste?



There is some food waste such as bones and meat that you can put in a council food waste bin . These can't be put into a home composter in the garden as they need higher temperatures than a home composter to rot easily and quickly and they also attract vermin such as rats and flies!

Reduce, reuse, recycle



Sometimes some vegetables might start to grow in your compost as they like the compost so much and take root.

Here is a vegetable that has started to grow in my compost.

Can you guess what it is? It doesn't look like the ones you buy in the supermarket!



If you have managed to make your own compost **why not find some things from your recycling bin to grow some seeds in?**

You can always try and buy a small bag of compost if you don't have a composter.

What can you find from your recycling bin to grow plants in? The good thing about cardboard is you can plant it straight into the ground when the plants are ready as the cardboard will rot.



Can you see what materials these containers are made from? These pots can't be planted into the ground like the cardboard ones above, as they don't rot, so should only be used as plant pots. Only 2 of them should be from your recycling bin. **Can you see which pot should never go in your recycling bin?**

Reduce, reuse, recycle

Answers : Page 6: Recognise the mini-beasts—1. slug 2. tiger worms 3. woodlice 4. centipede

Page 8: Name the vegetable growing in the compost? — it's a cauliflower!
Which pot should you not put in your recycling bin? The disposable cup — because it has a wax layer melted to the inside it can't be recycled by the council. Even those that say biodegradable cannot be put in your recycling.



If you have a home composter and disposable packaging that specifically says it is 'compostable in a home composter' then why not put it in and see how long it takes to rot. We put in this biodegradable sandwich packet from a school lunch and we found it took about 6 months to rot and disappear!

Further reading/info:

<http://www.ecofriendlykids.co.uk/composting.html>

http://www.bbc.co.uk/gardening/gardening_with_children/didyouknow_compost.shtml

http://www.bbc.co.uk/gardening/gardening_with_children/homegrownprojects_compost.shtml



If you have space persuade your adult to make or buy a composter and save money and the planet by recycling your food waste. You can get compost bins/wormeries that have a special offer here:

<https://getcomposting.com/>