Compost

Compost helps make healthy soil.
Healthy soil - healthy plants.
Healthy plants - healthy people!

1. Key Ideas

Compost is a mixture of materials which are brought together by the demolishing actions of living organisms (both physical breaking and chemical transformations).

In particular, organisms in the soil (worms, bacteria, fungi) have an important function in breaking bigger molecules into smaller ones, which then pass into solution in the soil and can be absorbed by the plants (cycling of matter).

For good and effective composting action, we need organisms in the soil, plus water, air, sun and other plants (as the roots of the plants can help too!).

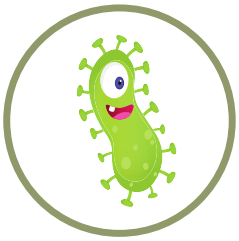
2. Compost

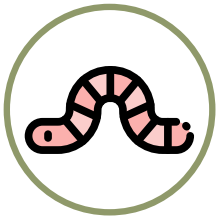
Compost is used to enrich the soil with nutrients and moisture.

It is glorious as it is full of minerals and organic matter which is derived from the mulching and decomposition of other materials we no longer use. You can spread it round the bottom of existing plants as a mulch, dig it into the soil where you are going to plant things, or mix it with soil to use as a potting mix to grow your seeds.

3. Why Make Compost?

- It's good for the soil - It improves soil structure and water retention, reducing the need for watering and fertiliser and encourages worms and micro-organisms (including bacteria and other small creatures)
- It helps plants grow better - adding compost to soil gives plants the nutrients they need to grow well and have more resistance to pests and disease
- It helps the environment and saves energy and resources:
  - Reduces waste going to landfill (where it produces methane, which contributes to global warming)
  - Removes the need for peat-based compost and so helps prevent destruction of peat bogs
  - Composting at home means compostable material (collected in your brown bin) doesn't need to be transported to bulk composting facilities
  - It saves money - Why buy it when you can make it yourself?





4. How to Make Compost

The composting process is simply the breakdown of organic matter by living organisms - bacteria, fungi, worms, insects and other small creatures. Like us they need food, air and water.

- Food - this is the material you put in the compost bin (see below - what to Compost)
- Air - composting needs plenty of air. You can let air in by turning over the compost with a garden fork, but a good mixture of material should make sure there are lots of air spaces in it
- Water - but not too much or too little! The right mixture should make sure it's just right but if it's too wet then add some more 'brown' material or if it's too dry then add more 'greens' or water with a watering can.
- Keep adding compostable material bit by bit as it becomes available.

5. What to Compost

Compostable items can be divided into Greens and Browns. When making compost a mix of 50/50 is good - not too much of one thing!

Greens

- These include: grass cuttings, soft green plants, green weeds (for example nettles), flowers, raw vegetables and fruit peelings, tea bags, coffee grounds, horse, cattle and poultry manure
- 'Greens' are nitrogen rich - they activate the process but can decay to a smelly mess on their own

Browns

- These include: cardboard (including cereal packets, eggs boxes, and toilet roll tubes), kitchen roll, scrunched up waste paper, shredded paper, hay, straw, wood shavings, bedding from herbivorous pets (rabbits, hamsters, guinea pigs), fallen leaves, wood ash, hedge trimmings, natural fibres (wool and cotton), eggshells
- 'Browns' are carbon rich - they balance the process but decay too slowly on their own

It's a good idea to put a layer of woody material like twigs or hedge trimmings at the bottom to help air circulate.

6. What Not to Compost

Meat, fish, cooked food, bread, cheese and oil and fat should not be put into compost as they will attract rats and other unwanted guests!

Also cat litter and dog faeces, coal ash, weeds with seeds, diseased plants and of course tins, bottles and plastic packaging!

7. Where to Compost

You can use a bin as it keeps your compost neat and manageable, or pile it in a heap if you don't have a bin. It should have a lid or cover to keep heat in and water out

It should be easy to access (near where you grow) in a sunny or partly shaded spot and on soil or grass.

8. How Long Does it Take?

It can take between 12 and 18 months to make mature compost. It depends on the mixture of material and how often you turn it over (turning it over makes sure lots of air gets in, which speeds up the composting).

Check the compost at bottom of the bin - when it's dark and crumbly with an earthy smell it's ready to use.

Any material from the top layers that hasn't finished composting can be put back in the bin. It helps if you have more than one bin so when one is full you can start another - when that's full the compost from the first should be ready.