Compost: 5 Key Factors

1. **Food:** The fifty-fifty rule
   A perfect mixture of material consists of 1/2 Brown (carbon-based material), and 1/2 Green (nitrogen-based material) by weight.

2. **Air:** To turn or not to turn
   The organisms that live inside your compost bin need air to survive. For optimal results, mix or turn the pile three to five times per season for a wooden bin or one to two times per month for a plastic bin, using a pitchfork, garden hoe, shovel or compost aerator.
   Proper aeration can make a big difference. You will know if your bin is not getting enough oxygen if the pile smells of ammonia.

3. **Water:** Moist, not damp
   The organisms need water to survive, but not too much or they will drown. The ideal moisture level of your compost pile should be like that of a wrung-out sponge.

4. **Surface area:** Small is best
   Cut-up or shred organic waste materials before placing them into the compost bin. This increases the surface area, and speeds up decomposition.

5. **Bin volume:** Not too big
   A bin should be between 3’ x 3’ x 3’ and 5’ x 5’ x 5’. A bin that is too small cannot retain enough heat.
   If the bin is too large, it won’t get enough air to the centre of the pile. It is also easier to manage two or three medium bins than one large one.

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**Brown materials**
- Dried leaves
- Twigs and small branches
- Sawdust, wood chips
- Dried grass clippings
- Shredded paper

**Green materials**
- Fruit and vegetable matter
- Fresh grass clippings
- Fresh yard wastes
- Coffee grounds and tea bags

**Other materials**
- Do not add dairy products, meat or oily foods. These can attract pests and cause unwanted odours
- Avoid weed seeds, which can survive composting and germinate in your garden
- Add eggshells to help neutralize acidic materials, creating a richer finished product
- May add cooked plain rice or mouldy bread

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**Building layers**

1. **TWIGS (OPTIONAL):** This base layer decomposes slowly to provide long-lasting aeration to your pile.
2. **BROWNs:** Add an even layer of ‘Browns’ to the bottom of your bin.
3. **GREENs:** Add your ‘Greens’ to the pile. This layer does not have to be evenly distributed throughout your bin.
4. **BROWNs:** Cover all the ‘Greens’ with a thick and generous layer of ‘Browns’.
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**Realistic Layering in a Compost Bin**

- Greens
- Browns
- Twigs
Composting Q&A

1. Where do I set-up my compost bin?
The most important thing is to put your bin in a convenient place in your yard, where you can have access to it all year long. The area should be well drained and, ideally, set in part sun and part shade. Make sure you have access to the front of the bin to harvest finished compost. To allow for constant air flow, leave a few inches of space between the bin and any wall or fence.

2. Nothing is happening to my compost pile. What’s wrong?
This usually indicates that the pile needs more green materials or more water. A good trick to speed up the process is to build a “Hot Compost Pile”. Layer brown and green materials, add a shovel or two of soil and sprinkle some water. Top off the pile with a layer of brown material. In the coming weeks, stir the pile regularly, and maintain the right water level.

3. How long does it take to compost?
Composting can take as little as two weeks or as long as two or three years, depending on the type of compost bin, the kind of ingredients, and the amount of time you invest in tending the pile. If you are respecting the five key factors, you can expect to produce finished compost within a summer season.

4. How do I use finished compost?
Finished compost looks like rich dark soil and has a pleasant, earthy smell. It can be used as top-dressing in your garden or flowerbeds during the summer, and mixed into the soil before planting in the spring or after fall clean-up; one or two inches is enough. You can also add it to houseplants: they will love you for it!

5. There is a foul odour coming from the compost pile. What now?
A well-balanced compost pile should not give off unpleasant odours. Even if you maintain the composting basics, persistent odours may still occur if the middle of the pile is not getting enough air, or if there is too much nitrogen-rich material. Try this first aid trick for smelly compost: turn the pile, mix in healthy garden soil, and top it off with a layer of brown materials.

6. What do I do with grass clippings?
The best thing is to leave them where they are. Grass clippings are an important source of nutrients for your lawn, and help reduce the need for water and fertilizer. Contrary to popular belief, “grass-recycling” will not contribute significantly to lawn thatch. You can still put lawn clippings into the compost pile, but remember the right balance of green and brown materials.

7. What about all those leaves?
Dry leaves are a great source of carbon, and a great complement to food scraps or grass clippings. Have them available year round by saving leaves in the fall. For easy handling, keep the bags open and store them in a dry area. The smaller the bits of leaves, the quicker they will decompose. So shred them with a push mower, mulcher or have the kids play in them before putting them in the compost bin. If leaves are wet and the bags are closed, decomposition will begin—messier but great for the compost as well.

Why Should You Compost?

1. Save money and resources
Compost is free, and helps soil retain moisture—which should lower your water bills.

2. Recycle soil nutrients
Composting creates a natural fertilizer for your lawn or garden, and improves drainage and soil aeration.

3. Protect the environment
Compost reduces air, water and land pollution by reducing the amount of organic material that is dumped into landfill sites. Organics in landfills break down anaerobically, producing methane gas—a “greenhouse gas” 21 times more powerful than carbon dioxide—which contributes to climate change.

By composting you are eliminating a significant portion of your waste that would otherwise end up in a landfill. Recycling and composting go hand in hand for waste reduction!

40% Recyclable (Potential)

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<th>Organic</th>
<th>Recyclable (Potential)</th>
<th>Other</th>
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<tr>
<td>40%</td>
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SOURCE: November, 1996 WRAP Report