

1. Composting is one of the ways that we can turn dead things into nutrients for living things (T).

In the process of composting, anything that came from a living organism can be turned into a black substance called humus. Humus contains lots of nutrients and is a great addition to any growing area. Composting is a process that we control. Other processes that turn dead things into nutrients are fermentation, mulching and decomposition.

2. All dead plants and animals take the same amount of time to break down (F).

All dead plants and animals will eventually breakdown, but the rate of decomposition depends on the temperature, oxygen levels, moisture levels and the chemical composition of the plant or animal. Given the same temperature, oxygen levels and moisture levels, organic matter with a high nitrogen content (vegetables and fruits) will breakdown quicker than organic matter with a high carbon (wood and bones) content.

3. Our food waste is still full of nutrients (T).

Sometimes these nutrients are available for us to eat (like in the ends of broccoli or the beet tops that we cut off), but sometimes the nutrients are in a form that isn't available for us to consume (like the poisonous leaves of the rhubarb plant). When these waste products are composted, they turn into nutrients that growing plants can use to make more healthy food for us to eat.

4. Even wood can break down over time (T).

Think of fungi growing on dead trees in the forest. Although wood is high in carbon, it is organic matter, which means that it came from a living organism. Even wood can be broken down by other organisms. That's how the nutrient cycle works.

5. A cotton T-shirt cannot be composted (F).

A cotton T-shirt is made from the cotton plant. If you just threw a T-shirt into a compost pile it would breakdown slowly, but if you ripped it into pieces it would breakdown relatively quickly. A cotton T-shirt is high in carbon, so it would breakdown slower than things like banana peels. Wool or hemp clothing is also compostable. If a shirt has synthetic fibres, it cannot be composted.

6. Tea leaves are compostable (T).

Tea leaves come from plants and are compostable, as are tea bags.

*Activity cont.*

7. Glass is compostable (F).

Glass is made from sand, which is not living and therefore cannot be broken down through composting.

8. Banana peels are not compostable (F).

Banana peels come from banana trees so they are compostable. They are high in nitrogen, so they will breakdown quickly.

9. Newspapers are compostable (T).

Newspapers are compostable, but the ink that is used may contain heavy metals, which are poor for garden soil. Vegetable-based inks are the friendliest for composting newspaper and are commonly used for newsprint today. Newspaper is high in carbon, so it breaks down slowly, but it can breakdown relatively quickly when ripped into strips.

10. Plastic is not compostable (T).

Plastic is made from oil, which is the leftover material from once-living plants and animals, from millions of years ago. But, since plastic has been changed chemically, it no longer acts like organic material.

11. Worm poop is one end product of food waste that can be broken down (T).

In a worm composter, the end product, or worm poop, is one of the best products for gardens. It is made from worms digesting and excreting food waste.

12. The landfill is like a big compost bin (F).

Landfills contain a mix of items and not all are compostable. Many items leech toxic chemicals. All this material sits together and becomes compacted, which prevents oxygen from helping with decomposition. Therefore, organic matter does not belong in the landfill, because the nutrients will not be able to return to the soil.

13. Most of the organisms that breakdown organic material need the right balance of oxygen, moisture and temperature. Without these, the organic material will not breakdown (T).

Landfills, for example, do not have the right balance of these requirements for organic matter to breakdown. A compost bin, which is not properly maintained may not have the right balance either and may end up smelling stinky because the organic material ends up breaking down slowly.

*Activity cont.*

14. When we harvest nutritious food from a garden, we are not removing nutrients from the soil (F).

We eat food, because of its high nutrient content. This nutrient content comes from, and is dependent on, healthy soil.

15. If we did not add nutrients to our soil through methods such as composting, our soil would eventually produce less nutritious plants (T).

Every time we harvest plants from our soil, we are taking away nutrients from that environment. Composting is a way to return nutrients to the soil.

16. Meat in a compost bin attracts rodents (T).

Any animal product will increase the chance of attracting rodents. Having a well-contained bin (using chicken wire, plastic or wood) is the best defence against rodents.

17. Pee cannot be added to a compost bin (F).

Pee is sterile and is high in nitrogen, in the form of ammonia. A compost bin that is too high in carbon or too low in moisture would benefit greatly from pee.

18. 30% of our waste in Canada can be composted (T).

If you are not composting right now, you may be able to reduce the amount of garbage you create by 30%! Metro Vancouver is moving towards banning organic waste from the landfill, so now is a good time to start.

19. I compost at home (T or F).

If you do, congratulations! You are doing your part to help maintain healthy soil. If you don't, now's the time to start!

20. I am afraid to start composting (T or F).

Composting is not hard! There are many styles to choose from, depending on how much space you have, how much money you want to spend or how much effort you want to put into it. Nature decomposes organic material with hardly any effort, so any household—including yours, can too.