

TEMPERATURE CONVERSIONS

F	C	F°	C°	C	F		
-40	-40			0	.....	32.00°
-30	-34.44			5	.....	41.00°
-20	-28.88			10	.....	50.00°
-10	-23.33			15	.....	59.00°
0	-17.77			20	.....	68.00°
5	-15.00			25	.....	77.00°
10	-12.22			30	.....	86.00°
15	-9.44			35	.....	95.00°
20	-6.66			40	.....	104.00°
25	-3.88			45	.....	113.00°
30	-1.11			50	.....	122.00°
35	1.66			55	.....	131.00°
40	4.44			60	.....	140.00°
45	7.22			65	.....	149.00°
50	10.00			70	.....	158.00°
55	12.77			75	.....	167.00°
60	15.55			80	.....	176.00°
65	18.33			85	.....	185.00°
70	21.11			90	.....	194.00°
75	23.88			95	.....	203.00°
80	26.66			100	.....	212.00°
85	29.44					
90	32.22					
95	35.00					
98.6	36.99					
100	37.77					
105	40.55					
110	43.33					
115	46.11					
120	48.88					
125	51.66					
130	54.44					
135	57.22					
140	60.00					
145	62.77					
150	65.55					
155	68.33					
160	71.11					
165	73.88					

$$F^{\circ} = \frac{9}{5} C^{\circ} + 32$$

Glossary

- actinomycete** — Bacteria resembling fungi because they usually produce a characteristic, branched mycelium.
- activated sludge** — Sewage sludge that is treated by forcing air through it to activate the beneficial microbial populations resident in the sludge.
- aerobic** — Able to live, grow, or take place only where free oxygen is present, such as *aerobic* bacteria.
- algae** — Small aquatic plants.
- ambient air temperature** — The temperature of the surrounding air, such as the outdoor air temperature in the vicinity of a compost pile.
- amendment** — See “bulking agent.”
- anaerobic** — Able to live and grow where there is no oxygen.
- Ascaris** — A genus of roundworm parasitic to humans.
- Aspergillus fumigatus** — A spore-forming fungus that can cause allergic reactions in some people.
- bacteria** — One-celled microscopic organisms. Some can cause disease in humans; others are capable of elevating the temperature of a pile of decomposing refuse sufficiently to destroy human pathogens.
- blackwater** — Wastewater from a toilet.
- bulking agent** — An ingredient in compost, such as sawdust or straw, used to improve the structure, porosity, liquid absorption, odor, and carbon content. The terms “bulking agent” and “amendment” can be interchangeable.
- carbonaceous** — Containing carbon.
- carbon dioxide (CO₂)** — An inorganic gas composed of carbon and oxygen produced during composting.
- cellulose** — The principal component of cell walls of plants, composed of a long chain of tightly bound sugar molecules.
- C/N ratio** — The ratio of carbon to nitrogen in an organic material.
- combined sewers** — Sewers that collect both sewage and rain water runoff.
- compost** — Organic material that is managed by humans to undergo decomposition by aerobic organisms such that internal biological heat is developed during the decomposition process.
- continuous composting** — A system of composting in which organic material is continuously or daily added to a compost bin or pile.
- cryptosporidia** — Pathogenic protozoa that causes diarrhea in humans.
- curing** — Final stage of composting. Also called aging or maturing.
- effluent** — Wastewater flowing from a source.
- enteric** — Intestinal.
- fecal coliforms** — Generally harmless bacteria that are commonly found in the intestines of warm-blooded animals, used as an indicator of fecal contamination.
- fecaphobia** — Fear of fecal material, especially regarding the use of human fecal material for agricultural purposes.
- fungi** — Simple plants, often microscopic, that lack photosynthetic pigment.
- graywater** — Household drain water from sinks, tubs, and washing (not from toilets).
- green manure** — Vegetation grown to be used as fertilizer for the soil, either by direct application of the vegetation to the soil, by composting it before soil application, or by the leguminous fixing of nitrogen in the root nodules of the vegetation.
- heavy metal** — Metals such as lead, mercury, and cadmium, having more than five times the weight of water. When they are concentrated in the environment, they can pose a significant health risk to humans.
- helminth** — A worm or worm-like animal, especially parasitic worms of the human digestive system, such as the roundworm or hookworm.
- human nutrient cycle** — The repeating cyclical movement of nutrients from soil to plants and animals, to humans, and back to soil.
- humanure** — Human feces and urine composted for agriculture purposes.
- humus** — A dark, loamy, organic material resulting from the decay of plant and animal refuse.
- hygiene** — Sanitary practices, cleanliness.
- indicator pathogen** — A pathogen whose occurrence serves as evidence that certain environmental conditions, such as pollution, are present.
- K** — Chemical symbol for potassium.
- latrine** — A toilet, often for the use of a large number of people.
- leachate** — Any liquid draining from a source. Pertaining to compost, it is the liquid that drains from organic material, for example, when excessive rain water drains through the compost.
- lignin** — A substance that forms the woody cell walls of plants and the “cement” between them. Lignin is found together with cellulose and is resistant to biological decomposition.
- macroorganism** — An organism that, unlike a microorganism, can be seen by the naked eye, such as an earthworm.
- mesophile** — Microorganisms that thrive at medium temperatures (68-99°F or 20-37°C).

- metric tonne** — A measure of weight equal to 1,000 kilograms or 2,204.62 pounds.
- microorganism** — An organism that needs to be magnified to be seen by the human eye.
- mulch** — Organic material, such as leaves or straw, spread on the ground around plants to hold in moisture, smother weeds, and feed the soil.
- municipal solid waste (MSW)** — Solid waste originating from homes, industries, businesses, demolition, land clearing, and construction.
- mycelium** — Fungus filaments or hyphae.
- N** — Chemical symbol for nitrogen.
- night soil** — Human feces and urine used as a soil fertilizer.
- nitrates** — A salt or ester of nitric acid, such as potassium nitrate or sodium nitrate, both used as fertilizers, and that show up in water supplies as pollution.
- organic** — Referring to a material from an animal or vegetable source, such as refuse in the form of manure or food scraps; also, a form of agriculture that employs fertilizers and soil conditioners that are primarily derived from animal or vegetable sources, as opposed to mineral or petrochemical sources.
- P** — Chemical symbol for phosphorus.
- pathogen** — A disease-causing microorganism.
- PCB** — Polychlorinated biphenyl, a persistent and pervasive environmental contaminant.
- peat moss** — Organic matter that is under-decomposed or slightly decomposed originating under conditions of excessive moisture, such as in a bog.
- pH** — A symbol for the degree of acidity or alkalinity in a solution, ranging in value from 1 to 14. Below 7 is acidic, above 7 is alkaline, 7 is neutral.
- phytotoxic** — Toxic to plants.
- pit latrine** — A hole or pit into which human excrement is deposited. Known as an outhouse or privy when sheltered by a small building.
- protozoa** — Tiny, mostly microscopic animals each consisting of a single cell or a group of more or less identical cells and living primarily in water. Some are human pathogens.
- psychrophile** — Microorganism that thrives at temperatures as low as 14°F [-10°C], but optimally above 68°F [20°C].
- schistosome** — Any genus of flukes that live as parasites in the blood vessels of mammals, including humans.
- septage** — The organic material removed from septic tanks and most dry toilets.
- septic** — Causing or resulting from putrefac-
- tion (foul-smelling decomposition).
- shigella** — Rod-shaped bacteria, certain species of which cause dysentery.
- sludge** — The heavy sediment in a sewage or septic tank. Also called biosolids.
- source separation** — The separation of discarded material by specific material type at the point of generation.
- sustainable** — Able to be continued indefinitely without a significant negative impact on the environment or its inhabitants.
- thermophilic** — Characterized by having an affinity for temperatures above 105°F (40.5°C), or for being able to generate high temperatures.
- tipping fee** — The fee charged to dispose of refuse material.
- vector** — A route of transmission of pathogens from a source to a victim. Vectors can be insects, birds, dogs, rodents, or vermin.
- vermiculture** — The conversion of organic material into worm castings by earthworms.
- vermin** — Objectionable pests, usually of a small size, such as flies, mice, and rats.
- virus** — Any group of submicroscopic biological entities that multiply only in connection with living cells.
- waste** — A substance or material with no inherent value or usefulness, or a substance or material discarded despite its inherent value or usefulness.
- wastewater** — Water discarded as waste, often polluted with human excrements or other human pollutants, and discharged into any of various wastewater treatment systems, if not directly into the environment.
- Western** — Of or pertaining to the Western hemisphere (which includes North and South America and Europe) or its human inhabitants.
- windrow** — A long, narrow pile of compost.
- worm castings** — Earthworm excrement. Worm castings appear dark and granular like soil and are rich in soil nutrients.
- yard material** — Leaves, grass clippings, garden materials, hedge clippings, and brush. Also called yard trimmings.



