Almost all of us—probably in grade school—planted a seed in a cup of dirt, watered it, and watched it grow. But creating a garden that produces fresh food and flowers all season is not so elementary—especially to those who did not grow up gardening. To get you started, we've compiled this guide to the basics of organic gardening and the keys to success that we've learned over the years. Before you get started—make sure that you have the 6 essential tools that you will need to successfully maintain your organic garden.
garden: a trowel, hand-weeding tool, a hoe, pruners, a fork, and a spade. When you're done reading, look at your thumb—you may see a tint of green that wasn't there before. Like what you're reading? Sign up for Today's Organic Life newsletter for must-have tips sent to your inbox.

**Planting Seeds**

1. **Make your bed.** About three weeks before you are ready to plant—at the soil has dried so that it doesn't clump when you pick up a fistful—sink a fork into the earth. Loosen it down to about 12 inches, add a half-inch layer of material from your compost pile, and rake the surface of your garden until it has no weeds, dirt clumps, or big stones. Over the next three weeks, pull any weeds that come up—raking and then letting the soil sit for a few weeks brings out weed seeds that were lurking in the soil.

2. **Dig a furrow—or not.** If you like symmetry and order—carve out a shallow trench with a hoe or hand trowel—but you don't have to plant in rows, you can organize your garden as a grid—with plants at the four corners of each square, or you can choose not to organize it at all. Whichever style you go with, dig shallow furrows or holes for the seeds.

3. **Water lightly.** Moisten but don't soak the soil. Watering before rather than after planting the seeds protects them from being swamped or washed up and out of the soil.

4. **Sow the seeds.** Spread the seeds through the trench or place two or three in each planting hole. The seed packet tells you how far apart to plant them. If you plant too closely, you can thin them after they come up and, in many cases, eat the thinnings.

5. **Cover with soil.** As a rule of thumb, bury seeds only about as deep as their diameter. Sprinkle soil on top of the seeds, pressing gently to ensure they have contact with the soil. A few seeds—such as lettuce and dill—need light to sprout, so cover them sparingly.

6. **Keep moist.** Sprinkle water on the seedbed whenever the surface is dry until all the seeds have sprouted.

Related: [12 Common Weeds + How To Remove Them](#)

**Transplanting**

These steps apply to vegetables you get in packs at the garden center—as well as annual and perennial flowers. If you want to start an annual crop—check out this Guide To Starting Annual Flower Seeds. We recommend transplanting on an overcast day to give the plants a chance to adjust to their new home without being withered by direct sun.

1. **Dig a hole.** Make the planting hole as deep as the plant's container and about double the diameter.

2. **Water the plant.** Give it a drink before planting—because until the roots start growing, they can't draw water from the soil.
3. **Remove the plant from the pot.** Place your hand on top of the pot with your fingers around the plant's stem. Turn the pot upside down and gently squeeze it or push the plant out from the bottom with your other hand. If you must tug it out—pull it by its leaves rather than the stem because if a leaf comes off, no harm done, however, if you damage the stem the plant will not survive.

4. **Check the roots.** If the roots have wrapped around and around the plant, gently pull a few loose with your fingers.

5. **Place it in the hole.** Set the plant in the hole at the same depth it was in its pot—generally where the stem meets the roots. However, tomatoes are an exception to this rule—planting these crops deeper is one of the 7 Rules Every Tomato Grower Should Follow.

6. **Replace soil and then water.** Backfill the hole with the soil you removed and press gently to ensure that the roots have solid contact with the soil. Be sure the soil stays consistently moist until you see the plant start to grow.

**Managing Weeds**
Weeds siphon water and nutrients away from your garden, harbor pests, and they sure can make your garden look a mess. But you don't need to spray toxic herbicides—which are harmful to people, pets, and wildlife—to keep plant invaders out of your organic garden. Try using fish and seaweed fertilizer, compost, and clove oil herbicide instead of synthetic fertilizers and chemical weed sprays on your garden. Combining a natural approach with the following tips will help keep your weed infestation under control.

1. **Mulch.** One essential tip that Every Gardener Should Know About Mulching is to keep your soil covered at all times to prevent light from reaching weed seeds. Spread a thick layer of 2 or more inches deep of organic mulch—straw, dried grass clippings, shredded leaves—on your garden each spring and replenish it throughout the growing season. A bonus of gardening with organic mulch is that the mulch nourishes your soil as it decomposes. For even better weed protection—use several sheets of newspaper, kraft paper like grocery bags, or cardboard under these mulches—they are nearly impenetrable by weeds.

2. **Hand-pull.** Sounds like a lot of work, we know. But pulling out a few weeds every day or at least every week keeps them from getting out of control and brings you up close to your garden so you can inspect your plants for problems. Keep a bale of straw or a pile of grass clippings on hand so you'll have mulch on demand to help prevent weeds from returning after you've pulled them.

3. **Hoe.** Use a hoe's sharp edge to sever weed stems from their roots just below the soil surface. Forget about the square-headed traditional garden hoe for this job—get a stirrup-shaped oscillating or a swan-neck hoe instead. To hoe your garden without cultivating a backache, hold the hoe as you would a broom.
4. **Spread corn.** You can suppress the growth of weed seeds early in the season by spreading corn-gluten meal. This works best in established lawns. Corn-gluten meal—a by-product of corn processing that is safe for people, pets, and wildlife—inhibits the germination of seeds and fertilizes at the same time. Bear in mind, though that once the weeds have grown beyond the sprout stage, corn gluten does not affect them. Also, corn gluten doesn't discriminate between seeds you want to sprout and those you do not, so avoid using corn-gluten meal where and when you've sown seeds.

5. **Solarize.** Where you have a persistent weed problem or you need to clear a thick mat of weeds from a brand-new bed—enlist the sun's help. In late spring or early summer—pull, hoe, or rake out as many weeds as you can from the bed. Then moisten the soil and cover it with a tight layer of clear plastic—weighting or burying the edges. Leave the plastic in place for six weeks so the sun cooks any remaining weed seeds.

6. **Be persistent.** This is your most important long-range weapon against weeds. Mulch and pull or hoe the weeds for a few minutes whenever you visit your garden. Do these things consistently for a few seasons and you will slowly but surely expel problem invaders for good. Weeds come out easily when the soil is moist—so think of a summer rainstorm as an opportunity to free your garden from a weed infestation.

**Related:** A Garden's 15 Worst Animal Pests + How To Get Rid Of Them

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**Controlling Pests**

Whenever you see insects in your garden, remember this—most are no threat to plants, many are even beneficial, and all of them, even the pests that eat your plants, are an integral part of the ecosystem you are cultivating. But what do you do when the pests seem to have the upper hand? You don't want to enforce a "no-fly zone" with pesticides. They're dangerous for you to have and to use, they harm wildlife, and contaminate water. Instead use safe, organic techniques and products to keep the pests in balance.

1. **Grow healthy plants.** The best defenses against insect attack are preventive measures. Pests target weak or unhealthy plants, so choose plants that are suited to the conditions you are putting them in and they'll be less stressed. Don't let plants be too wet, too dry, or too shaded. Use lots of compost but be sparing with high-nitrogen fertilizers—if you must use them at all.

2. **Integrate, don't segregate.** Mix different vegetables, herbs, and flowers together in your beds. This keeps pests from zeroing in on a whole crop of their target plant.

3. **Encourage pests' predators.** The most effective and natural way to control pests is to rely on the food chain. Plant herbs and flowers among your vegetables to lure predatory insects such as ladybugs and green lacewings—which feed on flowers' nectar—away while their larvae consume destructive pests. Put out a birdbath to enlist the appetites of songbirds to your cause. Treat toads, lizards, and garter snakes as welcome allies, too.
4. **Build barriers.** Row cover is a woven fabric that lets light, air, and water reach plants, but keeps pests—including deer—away from them. You'll find it in local garden centers, in catalogs, and online. The best-known brand is Reemay.

5. **Target the treatment.** When prevention is no match for infestation, take the time to choose the right organic tool to solve your problem. Start by making sure you have correctly identified the pest and confirmed it is the cause of the symptoms you've found. Check the undersides of leaves before applying an organic pest control—insects often hide out of sight. Then, depending on the pest, you can arm yourself with soap or hot-pepper sprays, horticultural oil, or Bacillus thuringiensis—a naturally occurring bacterium that disrupts the digestion of caterpillars and other leaf-eaters.

6. **Surrender.** As we said, insects attack plants under stress. Do you have enough healthy plants to spare the sickly ones? Can you restore sickly plants to robust health so they can resist insect attack? If not, let the pests do their worst, then watch as their predators flock to your garden and protect your healthy plants.

**Related:** Use Row Covers To Extend Your Season

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**Watering Wisely**

Keeping plants well hydrated is as easy as sipping ice tea on a sweltering day, right? Yes, if you stick to a few simple guidelines. Planning a big trip and are worried about your plants? Don't—we've got 4 Ways To Water Plants While You're Away. Make sure that your plants get about an inch of water a week—either from rainfall or you.

1. **Pick your plants.** When deciding what to grow, choose plants suited to the soil, climate, and site. A plant that grows best in shade, for instance, will demand lots of water in a sunny spot. As you set up your garden, try to group plants according to their water needs so that you can irrigate them efficiently.

2. **Putting down roots.** Every plant needs extra attention in its early days. Check newly planted crops frequently, and don't let them wilt from lack of water.

3. **Try early or late.** Water your garden in the early morning or in the evening—cooler temperatures mean less moisture evaporates than during the heat of the day. Direct your hose or watering can at the soil around your plants to get them the maximum moisture with minimum evaporation.

4. **Take the two-knuckle test.** Before you water, push your index finger two knuckles deep into your garden's soil. Feel damp? If so, don't water the garden, no matter what the plants look like—as many plants appear to wilt during high heat. Also, prioritize your water usage—seedlings, for example, have small, delicate root systems that require consistent watering. Give priority to transplants and newly planted crops and leave trees, shrubs, and perennials to find water in the soil with their deep roots.

5. **Dig the drip.** To use water most efficiently, use a soaker hose—which "weeps" water along its length—or even better, a drip-irrigation system—which lets you target exactly where you want the water to go.
6. **Weed and mulch.** Weeds compete with plants for water. Mulch shields the soil from the baking sun and keeps it moist.

**Related:** [What To Do If Your Soil Is Too Alkaline](#)

**Helpful Garden Vocabulary**

Reading seed packets is important when starting your garden, however, not all of the terms are common knowledge or easy to understand if you are new to the gardening game. Direct sowing plants are when you will need to plant seeds right in garden beds instead of in pots first and transplanting them to beds. Full shade requires less than 3 hours of direct sunlight each day, while full sun needs 6 or more hours of daily direct sunlight—most vegetables need full sun during their peak growing season. Heirlooms are varieties that have been saved by gardeners and farmers for decades, while hybrids are varieties created by cross-breeding others for desirable characteristics, such as pest-resistance. Perennials and annuals are plants that survive—sometimes just the roots—and regrow season after season without replanting. Your soil pH is the soil's alkalinity or acidity and is a critical measurement of its hospitality to plants. Most vegetables grow best in slightly acidic—pH 6.5 to 7.0—soil.

The [USDA Hardiness Zones](#) divide the United States and southern Canada into 11 areas based on average minimum temperature. Hardiness zone indicates whether a perennial will survive winter in your climate and very little else. The chemical symbols for nitrogen (N), phosphorus (P), and potassium (K)—three macronutrients plants need—are important to look out for. You will see the N-P-K ratio listed on fertilizer packages.