



Gardening

Scouts BSA · Nature

Name

Started

Completed

Gardening is about growing your own food and flowers and learning how plants really work. You'll plant, tend, and harvest, test seeds, and learn about the bees and pests that share your garden. It takes patience, and the results are delicious.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/gardening/). Tips and examples are ideas, not extra requirements.

1 Safety and first aid

Tips for this section: Think about hazards like sharp tools, sunburn, bee stings, and garden chemicals, and know the first aid for each.

- ☐ **1a** Tell your counselor the hazards you're most likely to face while gardening and how to anticipate, help prevent, reduce, and respond to them

- ☐ **1b** Discuss how to prevent and treat health problems that can come up while gardening, such as heat reactions, insect bites, anaphylactic shock, cuts, scratches, puncture wounds, and reactions to fertilizers and pesticides

- ☐ **2** Grow the plants below, talking with your counselor about what you notice all along the way:

Tip: Plan your garden early so you have time to grow. Containers or a small bed work fine if space is tight.

Example: A small-space plan: lettuce, radishes, and bush beans in one bed; cherry tomatoes and peppers in buckets; herbs in pots; marigolds, zinnias, sunflowers, nasturtiums, cosmos, and petunias along the edges. Keep a log of planting dates, watering, and harvests.

- ☐ **2a** Grow six vegetables to harvest: three started from seed and three from seedlings

- ☐ **2b** Grow six flowers until they bloom: three started from seed and three from seedlings

- ☐ **3** Give the nutritional value of each of these:

Tip: Look up the vitamins and nutrients in what you're growing, and try a new vegetable at dinner.

Example: Make a chart of your crops with one key nutrient for each, like vitamin C in peppers, fiber in beans, and vitamin A in carrots. Then add a recipe your family made with something from your garden.

- ☐ **3a** Three root or tuber crops

- ☐ **3b** Three vegetables that grow above ground

- ☐ **3c** Three fruits

- ☐ **4** Run a germination test on 100 seeds, figure out what percent sprouted, and explain why you think some didn't

Tip: Count out 100 seeds on damp paper towels in a plastic bag and check daily. Record how many sprout.

Example: Roll 10 groups of 10 bean seeds in damp paper towels, seal them in labeled bags, and keep them warm. Count sprouts each day for about a week. If 87 sprout, your germination rate is 87 percent.

- ☐ **5** Visit your county extension office, a local university or agricultural college, a nursery, farm, botanical garden, or arboretum, and report what you learned

Tip: Call ahead to a county extension office, nursery, farm, or botanical garden and bring a list of questions.

Example: Bring questions to an extension office or nursery, like "What grows best in our soil?" and "Which pests are worst this year?" Write a one-page report of what you learned and how you'll use it.

- ☐ **6** Explain to your counselor how and why honeybees pollinate food crops and the problems bees face today. Discuss what would happen to people if there were no pollinators

Tip: Watch bees at flowers in your garden or park and learn why they matter and what threatens them.

- ☐ **7** Identify five garden pests (insects or plant diseases) and suggest two ways to deal with each, at least one of them organic

Tip: Check your plants often and use a guide or app to identify pests. Ask an extension office about safe ways to manage them.

Example: For aphids, try a strong spray of water or welcome ladybugs. For cabbage worms, pick them off by hand or use row covers. Write two solutions for each of your five pests, starting with the least toxic.

- ☐ **8** Do ONE project below, write down what you observe each week, and discuss the results with your counselor: (choose 1 of 6 below)

Tip: Start a compost bin with kitchen scraps and yard waste, or try another project that fits your space.

Example: A compost project could be a bin made from a plastic tote with air holes. Layer brown leaves and green kitchen scraps, keep it damp, turn it weekly, and write down the temperature and changes each week for 90 days.

- ☐ **8a** Build a compost bin and keep it going for 90 days

- ☐ **8b** Build a worm compost (vermicompost) bin and keep it going for 90 days

- ☐ **8c** Build a hydroponic garden holding three ornamental plants, or three herbs or vegetables, and care for it through harvest or bloom, or for 90 days

- ☐ **8d** Build a water garden, either in a container (12 by 6 inches or larger, 6 or more inches deep) or as a small in-ground pond (max 6 by 3 feet, 24 inches deep), and care for it 90 days

- ☐ **8e** Get a honey super ready for a hive or colony, then take a full super out of the hive and prepare its honey for sale

- ☐ **8f** Grow your own garden in soil, indoors in containers or outdoors, with at least three kinds of plants your counselor approves, from seed or plantings until harvest or 90 days, whichever comes first

9 Careers or hobbies: Choose 1 of 2

Tips for this section: Visit a farmers market and ask growers about their work, or join a community garden.

- ☐ **9a** Name three careers that use gardening skills. Research one: training, education, certification, experience, cost to get started, job outlook, starting pay, and advancement. Discuss it with your counselor and whether it interests you

- ☐ **9b** Find how gardening skills could support a hobby or healthy lifestyle. Research the extra training, costs, and groups to join that would help, then share with your counselor what you learned and your short- and long-term goals