## Gardener

# Junior GET MOVI NG! badge

Creating a bright bouquet of fresh flowers, making a dish with garden-fresh herbs, growing a little green cheer inside with houseplants – these are all things a gardener gets to do. In this badge, dig your hands into the earth and spend time with soil, water, and sunlight to find out how to help life grow from a tiny seed. You can make your own garden – no matter where you live!

#### Steps

- 1. Visit a garden
- 2. Explore garden design
- 3. Learn how to choose garden plants
- 4. Experiment with seeds
- 5. Grow your own garden

### **Purpose**

When I've earned this badge, I'll know how to help plants and flowers grow.

It goes without saying that Girl Scouts must have gardens. Getting right down and smelling the fresh soil is good for any one. It is mother earth's own breath.

- How Girls Can Help Their Country, 1913

Every step has three choices. Do ONE choice to complete each step. Inspired? Do more.

## Tips Before Takeoff

- You'll plant a garden in step 5. Your garden can be big or small, inside or out.
- ➤ If you have enough space, you can do steps 2 5 with your final garden in mind. Or, you can use the steps to explore gardening in general, and focus on your garden when you get to step 5.

# Step 1 Visit a garden

The best way to get inspired about gardening is to explore and enjoy a well-cared-for garden. Take a tour of one of the gardens below to start learning about how gardens are planted, how to take care of them, and the right way to pick flowers when they've blossomed.

#### CHOICES - DO ONE:

Visit an outdoor garden. Check out a garden at a neighbor's house, in a public space in your community, or at a farm. Take photos or make sketches or drawings of your favorite plants in case you decide to grow them yourself. Ask how they grow!

Visit an indoor garden. See what it takes to grow plants inside a greenhouse or hothouse. These can usually be found at a botanical garden or nursery. Ask why gardeners keep the temperature set differently in different areas.

OR

Visit a landscaped garden. Find a landscaped garden with pruned shrubs and lines of plants and other flowers. Many cities and large houses have specially landscaped gardens.

FOR MORE FUN: A shrub cut into a shape is called topiary. If you created topiary, what would it be? Share your ideas with friends.

If you enjoy seeing a few snails around your garden and admire the silver track they leave at night, then, you must expect to have a leaf or two taken. That is only fair.

-Girl Scout Handbook, 1940

During World Wars I and II, Victory Gardens were planted throughout the United States and Europe to help with food shortages. Gardeners grew vegetables, fruit, and herbs everywhere from backyards to apartment building rooftops. In New York City, parks along the river became gardens, as did part of San Francisco's Golden Gate Park.

The U.S. Department of Agriculture estimates that 20 million victory gardens were planted. In 1943, Girl Scouts sponsored about 15,000 of them! Our sisters created and tended gardens at home, at the homes of friends and neighbors, in public parks, and on hospital grounds. In addition, thousands of older Girl Scouts worked as Farm Aides, gathering eggs, feeding and watering animals, preserving food, and picking crops.

BE A GARDEN MATH WHI Z! Gardens are full of flowers – and math, too! Did you think of these bits of garden math?

Seed packets have directions that tell you how deep and how far apart to plant the seeds. You'll use math to figure out how many seeds can fit in your garden.

Plant under the full sun

 $^{1}/_{4}$  in. into soil

Scatter so plants aren't right on top of each other.

Different plants grow to different heights. Read the seed packages for instructions.

- When you buy a bag of tomatoes or a dozen roses at the store, you often pay more than you would have if you bought the seeds or plants and grew them yourself. You might save your family some money with your garden can you figure out how much?
- Many people think a flower bed looks best with short flowers in front and tall ones in back. Seed packets and flower tags will tell you how tall they'll become and how soon they'll bloom, but you'll get to do the math!

# Step 2 Explore garden design

The first gardens on record were planted in Persia 4,000 years ago. Humans have long known that well-designed gardens can have magical effects – they can make people feel cheerful, thoughtful, or inspired. What kind do you want?

#### CHOICES - DO ONE:

Plan your dream garden. Cut out pictures of flowers, trees, and other plants from magazines. Then, arrange a garden plan that appeals to you. Use the photos to experiment with various layouts. What kinds of colors, patterns, and shapes are your favorites?

OR

Look into surprising gardens. Gather information about three surprising gardens – try to find out who designed them and how they did it. What about rooftop gardens, English landscape gardens, palace gardens, midnight gardens, or gardens meant to attract certain insects or animal? Then, imagine a special garden of your own. Share your idea in a sketch.

## **Gardening with Frank Lloyd Wright**

Frank Lloyd Wright was a famous architect who used many natural elements from the garden, like pools or plants, in his designs. There are still more than 400 buildings designed by him across the world. One of the most famous is called Fallingwater (top), in Pennsylvania. Are there any houses with natural elements in your area?

Make a mini Zen garden. Zen gardens are from Japan, and use rocks, gravel, and other structures to represent natural things like ocean waves or swaying trees. Zen gardeners rake gravel in certain patterns to make people feel at peace. Find ideas in photos of Zen gardens, then, make your own. (With an adult's help find easy instructions online.)

## More to Explore

Design a theme garden like Girl Scouts in 1980 did to earn their Architecture badge. How about a kids-only garden, a medieval garden, or a storybook garden? Think about what will go into garden – the kinds of flowers and/or trees, sculptures, walkways, waterfalls or fountains, and places to sit. Plan the entrance and center of your garden. Then, make a model of the garden using inexpensive materials.

# Step 3 Learn how to choose garden plants

Before you begin planting a garden, you have to learn how plants grow. For help, visit an arboretum (a place where professionals show off their plants and gardens), a local nursery, or ask a gardening expert. In each choice, ask your helper how much water and sunlight a plant will need to stay healthy.

#### CHOICES - DO ONE:

Find six plants that will grow in your hardiness zone. Learn in which plant zone you live and which plants like your local climate and type of soil.

OR

Find six plants that grow in different ways. A gardener can begin to grow a plant from a seed, a bulb, or from roots. Find two plants you could grow from seeds, two from bulbs, and two from roots that are likely to do well in your garden.

Find six seasonal plants. Some plants only grow during certain seasons. Find three plants that would do well during the time of year you'd like to grow your garden. Ask whether your plants are "annuals," which only grow one season and then die, or "perennials," which come back every year.

## More to Explore

Get into garden pests. Find or describe three weeds or three insects that cause problems to farmers or gardeners in your area. Identify each pest by name and describe the kind of problem it causes and how you can get rid of it (without using chemical pesticides, if possible). Girl Scouts, in 1980, did this for their Food and Fibers badge.

"A garden is a friend you can visit anytime."

-Unknown

# THEME GARDENS

A Dessert Garden might have chocolate mint, strawberries, and sweet-smelling roses.

An American Garden could have red, white, and blue flowers, and or flowers that look like stars.

What about a Family Garden or Friendship Garden with plants and flowers your family and friends love, and that they help you plant?

Or you could try a Daisy Flower Garden, full of the 10 flowers from the Daisy Flower Garden. Invite Daisies to help with the garden, and, then, share the flowers!

A Desert Garden might be entirely made of succulents and cacti.

A **Spaghetti Garden** might provide the ingredients you need to make tomato sauce, like tomatoes, basil, and peppers.

A **Story Garden** could have plants and flowers inspired by or mentioned in your favorite stories.



In 2009, First Lady Michelle Obama – along with a group of fifth graders from Bancroft Elementary, in Washington, D.C. – planted an organic vegetable garden. It was the first vegetable garden at the White House since Eleanor Roosevelt planted a victory garden in 1943. The First Lady uses the garden to teach America about healthy, locally grown food.

Planted on the South lawn of the White House, the garden includes broccoli, peas, potatoes, onions, radishes, and carrots. (President Obama doesn't like beets, so they left them out.) With help from the Bancroft students, the Obamas harvested nearly 1,000 pounds of food in the garden's first year. The food provided meals for the First Family and nearby homeless shelters.

First Lady Obama invites kids every year to help pick vegetables when they are already in the fall. In 2010, they even found a four-pound sweet potato!

# Step 4 Experiment with seeds

If you can, do this step where you'll plant your garden in step 5. It should be a place where the plants can get plenty of sunlight and not too many people will bother them. Using an empty egg carton and 12 seeds from a plant you like, experiment with what works best when growing plants in your space.

#### CHOICES - DO ONE:

Experiment with soil. In two sections of the carton, add two tablespoons of soil. In the next two sections, add only one. Add one seed to each section. Cover the seeds with some of the soil and add a little water every day.

OR

Experiment with water. Add two tablespoons of potting soil and as seed to each of four sections. Water two sections every day and water the two other sections every three days.

OR

Experiment with sunlight. Add two tablespoons of potting soil and a seed to each of four sections. Cover two sections with paper cups. Add the same amount of water every day to all four sections.

More to EXPLORE Try all three! Use the full egg carton to do all three experiments. Someday you may need a science experiment for school and this would be a great start.

Seed Questions Keep track of the answers so you can use what you learn when you grow your own garden in the next step.

- How long does it take for the first leaves to poke through the dirt?
- Does each section look the same?
- Which plants did the best? How much water and sun is just right?

Window Gardening There are plenty of plants you can grow from inside your home! All plants like light, so they can grow nicely on a windowsill. Some plants need lots of light, and some don't need very much at all.

Find out which direction your window faces before you choose your plants. North-facing windows usually don't receive a lot of light. Ferns and ivy grow well with little light. If your window faces the south, a sun-loving plant like a geranium will thrive. East-and west-facing windows both needs plants that like indirect sunlight.

Talk to an expert about choosing the best options for your windows. Feel like a challenge? Move your plant to an outdoor windows box!

# Step 5 Grow your own garden

Create your own garden with the six plants you found in step 3, six from a nursery, or six from a friend or neighbor who really loves to garden. Follow the spacing and planting directions that come with them, and be sure to ask for help with planting and permission for your space.

#### CHOICES - DO ONE:

Plant an outdoor garden. If you have access to a yard, perhaps there's a plot you can use. Or, you might plant a garden in a small planter or an outdoor window box.

OR

Plant an indoor garden. Houseplants can be part of beautiful indoor gardens. If you have access to a greenhouse or hothouse, you could grow your indoor garden there – or perhaps at a sunny spot inside your own home!

OR

Help with planting at a community or school garden. Many schools and cities offer public gardening spaces. There might be a garden at your place of worship, your library, or in front of town hall. Perhaps one of these places could use your gardening help?

Add the badge to your Journey

When you do step 4, talk with a woman who works or volunteers at the garden you visit. Find out what she loves about her gardening role, and be sure to add her to your casting-call log.

## Now that I've earned this badge, I can give service by:

- Helping out at a community or school garden
- Sharing my flowers and vegetables with a nursing home or food bank
- Creating a vegetable garden for my family

I'm inspired to.