

Flowers

Legacy: Naturalist

Flowers are so beautiful; we bring them from the outside into our homes to add cheer to a room. But there's more to flowers than just good looks. Without them, plants could not make seeds, and scientists think the world would be much drier (and a lot less pretty). Dig up more flower secrets in this badge!

Steps

1. Uncover the science of one flower
2. Look under the petals
3. Find out how flowers help people
4. Have fun with flowers
5. Send a message in flower code

Purpose

When I've earned this badge, I'll know all that's wonderful about flowers.

FUN FACT:

A flower uses its roots to pull water from the soil. Different flowers have different types of root systems that pull water through the part of the flower called the *phloem*, which absorbs the water.

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

Step 1 Uncover the science of one flower

Scientists called botanists track the history of different kinds of flowers. Become a botanist and figure out how, when and where one flower was first bred or found. Learn about when it blooms and what it looks like. Then do one of these activities.

CHOICES - DO ONE:

Go on a flower hunt. Find your flower and five other kinds that you can name growing around your town. Don't pick them, but use a magnifying glass and get up close to see more. Record or sketch what you see in your botanist's notebook.

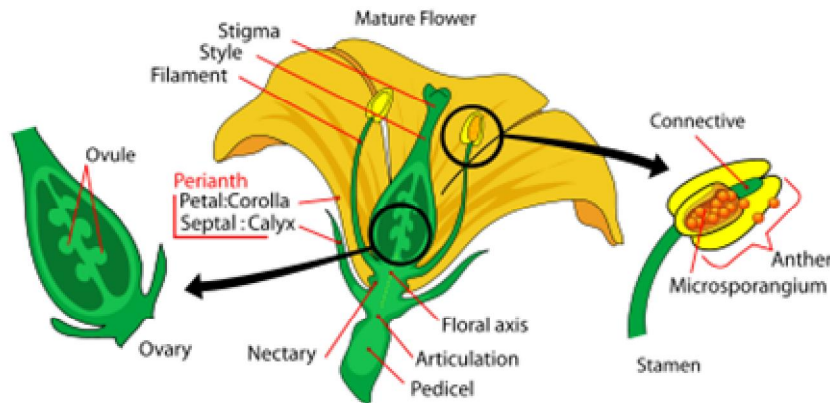
OR

Grow your flower. Plant a seed or a bulb. Grow it inside or outside, but plant it in the right season and tend to it until it blooms.

FOR MORE FUN: Experiment with several flowers and change how much you water or how much sun they get. Does it affect how the flower looks when it blooms?

OR

Talk to a real botanist and learn more. Interview a botanist, perhaps from a garden shop or at a college or university. Ask about flowers and why they became a flower scientist. Maybe they can show you flowers in books or in person.



Step 2 Look under the petals

Flowers aren't just pretty. They may look like they aren't doing a lot, but they're actually quite busy! Try one of these activities that will show you what a flower can really do.

CHOICES - DO ONE:

Dye a flower. See a flower's root system in action by coloring several white flowers (carnations work well). Cut the stems and put the flowers into water that contains your favorite color of food dye. The petals should soon be your favorite color! Keep track of your experiment in your botanist's notebook.

FOR MORE FUN: Try experimenting with different flowers and different colors.

OR

Stop and smell the flowers. Find a flower growing outside that smells, and watch it until you see something happen. Make sketches or jot notes in your botanist's notebook about what visits the flower. How long did it take for something to visit? Based on your observations, why do you think flowers smell? Find out if you're right!

FOR MORE FUN: Find out what makes flowers smell, and use the information to make your own perfume.

OR

Meet flower families. Just like people in your family might share common traits, the same goes for flower families. Go to the library or online with an adult, and find a flower family you like. Then take photos or draw pictures of different flowers within that family. Make a flower family tree with your art!

Step 3 Find out how flowers help people

Not only do flowers have a lot going on inside of them, but they do a lot for people. Find out how flowers benefit people in this step.

CHOICES - DO ONE:

Flowers are fruits in disguise. *Shh!* Don't blow their cover, but a flower will eventually become a fruit. For example, an apple grows from an apple blossom. Find a flower that turns into a fruit, and make a snack for your family or friends using that fruit. Tell them all about the flower that the fruity snack came from.

FOR MORE FUN: Sometimes even the flower is edible! Make a tea out of flower such as hibiscus or chamomile, or taste a flower that's safe to eat, like a nasturtium or zucchini blossom.

OR

Flowers are healers. Scientists who study how plants can help humans are called ethno botanists. They are constantly on the lookout for new flowers that could be made into medicines to help with common sicknesses. Find out about three different medicinal flowers or herbs and how they help.

OR

Flowers are calming. Some people believe the scent of flowers does more than smell nice—it can help people feel better. The use of flower scents is called aromatherapy. Aroma therapists say that lavender and rose help people de-stress and relax. Try the recipe for bath beads and see if it helps you feel calmer when you need a break.

Bath Beads Recipe

Dissolve one or two beads in a warm bath to release the scent of roses along with the skin-softening oil and milk. These are also perfect for gifts. (Ask an adult for help with this recipe).

Makes approximately 12 beads.

Ingredients:

¼ cup powdered milk

2 tablespoons powdered borax

2 tablespoons white flour

¼ cup rose or lavender water

1 drop of red food coloring (or red and blue if you want purple beads)

10 drops of rose or lavender fragrance oil

2 teaspoons mineral oil



Directions:

Combine dry ingredients in a bowl and stir until thoroughly mixed.













Add the liquid ingredients and stir until a thick dough is formed.

Roll a teaspoon of the dough into a ball with your hands

Continue to roll each ball of dough, and place on waxed paper or a foil-covered cookie sheet to air-dry at room temperature for 24 hours.

Bath beads may be stored in an open basket, decorated jar, or decorative fabric pouch.

Birth Month Flowers

January	Carnation	
February	Violet	
March	Daffodil	
April	Daisy	
May	Lily of the Valley	
June	Rose	
July	Larkspur	
August	Poppy	
September	Aster	
October	Calendula	
November	Chrysanthemum	
December	Holly	

Step 4 Have fun with flowers

Now that you've learned all about what flowers can do, create something beautiful with them! Find flowers in your yard or a neighbor's yard, at a store, or in a public place where you're allowed to pick them. (Always ask for permission before you pick.)

CHOICES - DO ONE:

Make a flower necklace. Hawaiians welcome visitors to their islands with beautiful flower necklaces called leis. You could string one yourself and use it to welcome a visitor to your home or group meeting. Or try gathering extra rose petals from a flower store, coat them with glue, let them dry, and string them together for a necklace.

OR

Dried-flower art. Make a pressed-flower bookmark by flattening a flower inside a heavy book. Then place it between two sheets of waxed paper. Have an adult help you iron the waxed paper, then cut around the flower to make the bookmark the right size. Or make a dried-flower bouquet: when a fresh bouquet starts to wilt, tie the bunch together with string. Hang it upside down for several days until the flowers dry out.

FOR MORE FUN: Make a dried-flower wreath.

OR

Fun with flower look-alikes. Make your own bouquet so you can have fresh flowers anytime. What about making a flower "imposter" bouquet - try a poinsettia made out of paper plates, poppies made of tissue paper, and tulips made of eggshells!

FOR MORE FUN: Make the Daisy Flower Garden from flowers you create, and share it with Daisies. (If you don't know the Flower Friends, make the garden from any flowers you like!)

Step 5 Send a message in a flower code

Many flowers are symbols that send a specific message when you give them. You probably know the American meaning of a bouquet of roses! Flowers have meaning in Girl Scouting, too—the Daisies have a garden full of Flower Friends who help them learn the Girl Scout Law. Send your flower message as a bouquet, corsage, or arrangement—it could be for a holiday, to show how you feel, or just because. Make it from fresh flowers or craft flowers.

CHOICES - DO ONE:

Bouquet. A bouquet is a bunch of flowers. To make one, gather some flowers, cut the stems to the length you want, then twist wire around the stems to hold the bouquet together. Cover the wire with floral tape or colored ribbon—you could use recycled ribbon or cloth, too.

OR

Corsage. A corsage is a brooch or bracelet made of real flowers, usually worn to a special event like a dance. To make one, cut the stems of a few flowers 2 to 4 inches below the flower itself. Wrap each stem in floral tape. Then group them and tape all the stems together. Use a pin to fasten the corsage to a shirt, or attach it to an elastic band for a bracelet.

OR

Arrangement. An arrangement is a group of flowers placed in a container in a pretty way. The container could be a vase, bucket, basket, or even a hat. Basic arrangements use an arch shape, with taller flowers in the middle and shorter ones around the outside. But flower arranging is about imagination. Mix flowers, colors, heights, and shapes however you want!

Add the badge to your Journey

Choose a story about a woman who is changing the world from one of your Leadership Journeys. What flower would you give her as a symbol of her leadership? What flower would you give yourself as a symbol of your leadership style? Trade ideas with your Junior friends! You might also make a bouquet or arrangement for a community member who's helped on one of your Journeys.

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

- Taking Brownies on a flower tour in our community
- Reading a Flower Friend story with a Daisy, and teaching her a simple flower craft
- Giving a calming flower sachet to a teacher

I'm inspired to: