

# Think Like a Citizen Scientist

FOR GIRL SCOUT DAISIES, BROWNIES, AND JUNIORS

## Overview

Girls will learn about observation and how they can use their observation skills to contribute to citizen science research.

To complete the Think Like a Citizen Scientist Journey, girls will need to plan and carry out a Take Action project using their Citizen Science skills to address an issue in their community.

## Material List

- An internet-connected device
- A notebook (optional)
- Additional materials may be required depending on the Citizen Science project your Girl Scout chooses to participate in

This activity guide is based on requirements from the multilevel Think Like a Citizen Scientist Journey for Daisies, Brownies, and Juniors. For complete Journey requirements, check out the Think Like a Citizen Scientist Journey meetings on the Volunteer Toolkit, or purchase the Think Like a Citizen Scientist Journey books from the online Girl Scout store.

## Sharpen your observation skills.

**Observation** is watching and noticing something using all of your senses, especially sight, to get information and better understand a situation or environment. Science with Sophie has a great video that demonstrates what observation is and why it's so important—[check it out here](#).

Play the Observation Game with your Girl Scout to practice taking in details!

### The Observation Game

1. Players will face off with a partner. Both will make mental notes of every detail they can about the other's appearance. What do their clothes look like? Are they wearing jewelry? Is their hair tucked behind their ears? Pay super close attention!
2. After about 15 seconds of observation, players will turn around so that they are standing back to back. Both players will change one thing about their appearance [Ex. turn up your collar, take off your glasses, take off a ring, or roll down your socks].
3. After both partners have made their changes, they will turn around again. Each will try to determine what changed, based on their initial observations.

Play a few rounds of the Observation Game. **Ask your Girl Scout to share her observation strategy**—what helped her remember her partner's original appearance? Were the changes in her partner's appearance always easy to notice, or were some changes more difficult to spot—why?

During the game, your Girl Scout probably relied on her sense of sight to make observations—ask her if there were other things she noticed during the Observation Game. Could she hear her partner rolling their sleeves up? Could she feel them moving around? **Why are different forms of observation important for scientists?**

## Participate in a Citizen Science project.

**It's time for your Girl Scout to put her skills to work!** Help her select a project to contribute to on SciStarter or Zooniverse.

### Things to discuss with your girl as she selects a project:

- What is a topic she'd like to learn more about?
- How much time can she dedicate to a project? Does she need to find one that can be completed in one sitting, or is she able to commit to gathering data over the course of a longer period of time?
- What kind of supplies or space does she need to participate in a project? Some projects are fully online, while others take place in an outdoor setting. What is most accessible right now?

After she starts her project, your Girl Scout will contribute data as she goes, or at the conclusion of the project. **For projects that require data to be input afterward, it's important that she have a space to record her findings, like a notebook or Google Doc.**

**There are lots of different ways to gather data**—work with your Girl Scout to take photos or record a video to share her citizen science project with others! In sharing her experience, she'll be documenting her work from another angle *and* encouraging others to contribute to citizen science.

## Plan a Take Action Project that uses your skills to help others.

**Check out Girl Scouts' Take Action guide for tips on supporting your girl in planning her Take Action project.** It's important to help your girl understand the difference between giving service and taking action. This will help her get the most out of her Take Action project, and help her understand the power she has to make real change.

### From the guide:

**Community Service** makes the world better for some people “right now.” For example, collecting cans of food for the local food pantry feeds people “right now.” Gathering toys for a homeless family shelter makes kids happy “right now.” Providing clothing and toiletries to people who have suffered a disaster helps them get through a traumatic event “right now.” These acts of kindness are important ways to help some people — right now.

**Service Learning (or Take Action)** encourages young people to understand the roots of a problem so they can develop a project that continues to address that problem — even after the one-time event is over.

Your Girl Scout may want to address a specific problem she learned about through her experience contributing to a citizen science project, or she may decide to focus her Take Action project on making Citizen Science more accessible in her community. **Encourage her to be creative and reach out to community members as she plans** so she can benefit from their insight on how to make her project sustainable and successful.