

Think Like a Citizen Scientist Journey: Take Action Guide

What's the difference between a community service project and a Take Action project?

Community Service makes the world better by addressing a problem "right now." For example, collecting cans of food for a food pantry feeds people "right now." Gathering toys for a homeless family shelter makes kids happy "right now." Providing clothing and toiletries to people after a fire or flood helps them "right now." These acts of kindness are important ways to help people — right now.

Take Action encourages girls to develop a project that is sustainable. That means that the problem continues to be addressed, even after the project is over. Sustainability simply means coming up with a solution that lasts.

For example, girls might want to do something about trash in a local park. If they go to the park and pick up trash, they've solved the problem for today — but there will be more trash to pick up tomorrow.

Instead, girls could explore why there's so much trash. Here's what they might discover:

- 1. There aren't enough trash cans in the park.
- 2. The trash cans are hard to find.
- 3. People have to walk out of their way to throw away trash because of where the cans are placed.
- 4. People don't realize the importance of putting trash in the trash cans.

Here's how girls might address these issues:

- Issues 1 3: Make a presentation to the city council to report on their findings and suggest adding more trash cans or moving them to more visible or convenient positions.
- **Issue 4:** Create a public awareness campaign that encourages people to use the trash cans instead of littering.
- Variation: Older girls may want to design interactive garbage cans that make tossing your trash fun. Do an online search for "the fun theory" or "the world's deepest bin" to see this in action.



What are the steps of a Take Action project?

Girls team up to:

- Identify a problem
- Come up with a sustainable solution
- Develop a team plan
- Put the plan into action
- Reflect on what they learned

Keep It Girl-Led: Girls should actively participate in each step in order for this to be girl-led. Younger girls will need more guidance, but they can and should decide as a team what problem they want to address.

How do girls make their project sustainable?

Here are three ways to create sustainable change:

- 1. Make your solution permanent.
- 2. Educate and inspire others to be part of the change.
- 3. Change a rule, regulation or law.

How can I help girls come up with Take Action Ideas?

Next are some specific examples you can use to help girls understand what sustainable Take Action projects look like.

Keep It Girl-Led: These examples are intended to give a sense of what a Take Action project could look like. **Please do not choose a project from this list for girls to do!** Instead, guide them to brainstorm ideas, get feedback, and come up with a plan. Girls will learn key leadership skills, such as decision-making, compromise, conflict resolution, and teamwork, when their Take Action project is girl-led.



Citizen Science Take Action Ideas

Issue: More kids and families should know about how they can have fun (and help scientists) by doing citizen science projects.

• **Solution: Educate and inspire others.** Do a presentation at your school's parents' night about why citizen science is important. Showcase a few citizen science projects that are particularly fun and easy for families to do together.

Issue: More people need to know how they can do citizen science projects to help scientists learn about the world.

• **Solution: Educate and inspire others.** Organize a Citizen Science Day at your school or in your town. Set up Citizen Science Stations with handouts explaining different projects (and materials, if needed). Invite everyone to choose a project, collect data and upload it.

Issue: Perhaps you've done a citizen science project that's really sparked your interest. You've discovered that a river near your town is polluted. You've learned that bees are dying off and that our food supply is threatened. You've realized that monarch butterflies are in danger because the milkweed plant, their main source of food, is disappearing.

- **Solution 1: Educate and inspire others.** You create a video, presentation, skit, event, poster campaign, movie, etc. to tell people about the problem and give them several ways they can take action to address it.
- Solution 2: Change a rule, regulation or law. You do some research and find out that
 changing a local law or regulation could address the problem. You make a presentation to
 your city council, start a petition drive, or advocate at the state level for a change in laws or
 regulations to address the problem.

Issue: More people need to know how exciting and fun STEM can be.

- **Solution 1: Educate and inspire others.** Create a list of great books, movies and documentaries that focus on STEM. Make copies for teachers to hand out or make posters for the school library.
- **Solution 2: Educate and inspire others.** Create a short play based on one of the books and perform it for your class or school.



Other Ideas for Take Action

Issue: We could conserve water if more people collected rain water and used it to water plants.

- **Solution 1: Make it permanent.** Make rain collection devices for family or friends that can be installed in their yards. Give them a list of different ways to use rain water and how they're helping the Earth.
- **Solution 2: Educate and inspire others.** Create a handout, video tutorial, or show-and-tell presentation about how to make a rain collection device, how to use rain water and how that helps the Earth.

Issue: Parents often run their engines outside the school as they wait to pick up or drop off their children, which pollutes the air.

• **Solution: Change a rule, regulation or law.** Make a presentation to the school board or administrators about why this is a problem and suggest a new rule that makes the pick-up/drop-off area a "no idling" zone.

Issue: There's no sidewalk along a street near the elementary school, which makes it dangerous for children to walk home.

- **Solution: Make it permanent.** Make a presentation to the city council about the problem and suggest that they build a sidewalk. (Note: Even if the council doesn't vote to create a sidewalk, the girls have earned their Take Action award because they came up with a sustainable solution and took action through their presentation.)
- Extra Inspiration: Do an online search for "Girl Scout Brownies Convince City Hall to Build Sidewalk."

Issue: There have been several accidents at a busy intersection that doesn't have a stoplight.

• **Solution: Make it permanent.** Research the number of accidents and make a presentation to the city council, asking that they have a stoplight installed.

Issue: The local park doesn't have a swing for children with disabilities.

- **Solution: Make it permanent.** Make a presentation to the city council explaining the problem and offering to use troop money from the cookie sale to help pay for the swing.
- Extra Inspiration: Do an online search for "How One Brownie Troop Became Social Entrepreneurs.")



Issue: We should recognize women who have helped their communities and made the world a better place in all kinds of ways.

 Solution: Educate and inspire others. Research the "hidden figures" in your community (unsung women who've done great things). Create a display about their accomplishments for a library or community center.

Issue: It's hard for new students to meet people and make friends at school.

• **Solution: Make it permanent.** Design and build "buddy benches." Partner with the school to have the benches installed on the playground so kids who want to make new friends can find each other.

Issue: The local shelter is having a hard time getting rescue animals adopted.

• **Solution: Educate and inspire others.** Use your photography skills to create pet portraits for the shelter's web site. Use your writing skills to craft heart-warming bios for each portrait.

Need more ideas?

Check out <u>Girls Changing the World</u> on the GSUSA web site. Girls post their Take Action and Bronze/Silver/Gold Award projects on this site. You can search by project topic or grade level. (And after the troop has done their project, please post it so they can inspire other girls!)



33 Ways to Take Action!

Make your solution permanent.

- 1. Make and install something outside (benches, bird houses, dog run, ropes course, sensory trail for children with disabilities, Little Library, etc.)
- 2. Plant something (butterfly garden, tree, wind chime garden, etc.)
- 3. Make something inside (Maker Space, reading room, etc.)
- 4. Create a collection (children's books children's hospital or family shelter, oral histories for town museum, etc.)
- 5. Advocate for building a permanent community improvement (sidewalk, bridge, park, streetlights, stoplight, etc.)

Educate and inspire others to be part of the change.

- 6. Do a show-and-tell
- 7. Create a poster campaign
- 8. Perform a skit
- 9. Make a "how to" handout
- 10. Draw a comic
- 11. Give a speech
- 12. Write and perform a song
- 13. Make an animated movie
- 14. Make a live-action movie
- 15. Make a presentation
- 16. Create a workshop (perhaps in partnership with a local business or organization) to teach a skill such as coding, camping, canoeing, robotics, sewing, car care, healthy eating, gardening, home repair, budgeting, etc.
- 17. Create a workshop to teach others about healthy living (exercise, nutrition, mental health, etc.)
- 18. Create a social media campaign
- 19. Make video tutorials to teach a skill
- 20. Organize an email campaign
- 21. Organize a petition
- 22. Organize an event (concert, play, poetry slam, art exhibit, sporting event, field day) to raise awareness about an issue
- 23. Make a "playbook" to help others follow your lead (how to mentor robotics teams, organize a workshop or event, advocate to city council, create an online petition, change a law, etc.)
- 24. Make an app that helps people take action on an issue
- 25. Create a web site
- 26. Write an op-ed or letter to the editor of a newspaper or magazine
- 27. Start a blog

Change a rule, regulation or law.

- 28. Make a presentation to your school principal
- 29. Make a presentation to your school board
- 30. Make a presentation to your city council
- 31. Speak up at your representative's town hall meeting
- 32. Create an online petition
- 33. Advocate for a law with your state government