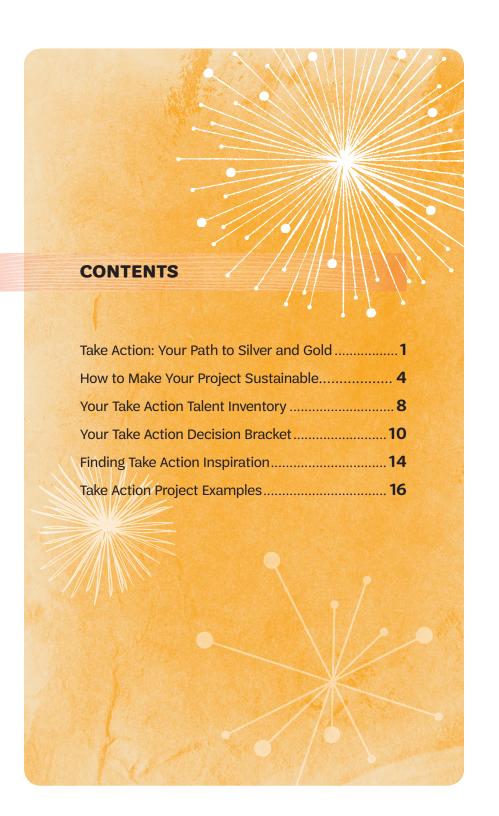


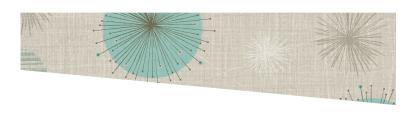
GRLSCOUT, TAKE ACTION GUIDE

Think Like a Citizen Scientist Journey



© 2019 GSUSA. All rights reserved. Not for commercial use. This material is proprietary to GSUSA and may be used, reproduced, distributed exclusively by GSUSA staff, councils, Girl Scout volunteers, service units and/or troops solely in connection with Girl Scouting.





TAKE ACTION: YOUR PATH TO SILVER AND GOLD

You develop important skills when you do a Take Action project—and you use those skills to help others. That's inspiring!

When you Take Action, you learn how to:

- Advocate for change
- Analyze data
- Communicate with others
- Craft persuasive arguments
- Create budgets
- Design for sustainability
- Develop timelines
- Empathize with others

- Give presentations and speeches
- Make good decisions
- Manage projects
- Negotiate with others
- Research root causes of issues
- Solve problems
- Think critically
- Work as a team

These are exactly the kind of skills that colleges, universities, and businesses hope to find on college and job applications!

They'll also give you a strong foundation for earning the Silver and Gold Awards, two of Girl Scouts' highest awards. That's because Take Action projects help you develop as a leader.

By doing a Take Action project, you may also discover an issue that's especially meaningful to you and that you'd like to expand to earn your Silver or Gold Award.

To do this, think about how you can amplify what you've already done—how can you help more people, get more support from other organizations, reach new communities, or find other ways to lift your Take Action project to the level of a Silver or Gold Award project.

As a Silver Award Girl Scout, you're advancing on the path to leadership and are eligible to earn your Gold Award. As a Gold Award Girl Scout, you've achieved the highest award in Girl Scouts and are eligible to be selected as a National Gold Award Girl Scout.

And it all starts with Take Action!

As a Cadette, you can earn the Silver Award by creating a project with a small team of girls or on your own. As a Senior or Ambassador, you earn the Gold Award by creating an individual project and organizing a support team.

THE BENEFITS OF GOING GOLD

Higher Education and Career

- Distinguish yourself in the college admissions process
- Earn college scholarships
- Enter the military one rank higher

Life Skills

- Be seen as a role model and distinguished leader
- Master time management skills
- Make the world a better place

Community

- Use your vision for change
- Tackle an issue, locally or globally
- Establish a lifetime network
- Create your community legacy with a sustainable solution to a problem



Ready to get started? *Turn the page* to find out how you can design a project that has lasting impact.

HOW TO MAKE YOUR PROJECT SUSTAINABLE

People sometimes wonder about the difference between a community service project and a Take Action project. Here's how you can explain this to others:

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

Take Action makes the world better by coming up with a solution that is sustainable. That means that the problem continues to be addressed, even after the project is over. Developing a sustainable solution is the key difference between community service and Take Action projects.

When you Take Action, you work as a team to:

- Identify a problem
- Research the root causes of the problem
- Come up with a sustainable solution
- Develop a team plan
- Put the plan into action
- Reflect on what worked, what didn't and what you've learned

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.

Here's an example of how to go beyond community service in order to Take Action:

Your team has identified a problem: there's too much trash in the local park. If you go to the park and pick up trash, you will have solved the problem for today—but there will be more trash to pick up tomorrow. That's not sustainable.

So what do you do?

Explore why there's so much trash. Here are a few ways you might do that:

Talk to people who work at the park in different kinds of jobs, from the park manager to the groundskeeper. What do they already know about why there's so much trash?

- What do they think causes this problem?
- What solutions have they already tried?
- If those solutions didn't work, what did they learn?

Do a walk-through of the park to understand what visitors experience.

- ▶ How far do you have to walk to find a trash can?
- How easy is it to find a trash can?
- Is it difficult or easy to collect your trash and carry it around the park?

Interview park visitors about their experience.

- Why do they think there's a trash problem?
- What are their ideas about how to fix it?
- > Record their answers and add them to your research.

Create a digital survey.

- Use social media to encourage people to share their complaints and ideas for solutions.
- ➤ Take your tablet to the park and ask people to take your survey in real time.
- Analyze your data and use them to brainstorm solutions.

Research the kind of trash problems that all parks—from community parks to national parks—deal with.

- Are there any studies or articles about how parks have tried to fix the problem?
- Which solutions worked and why?
- Which ones didn't and why?

Here's what you might discover:

- There aren't enough trash cans in the park.
- ➤ There *are* enough trash cans—but they're hard to find.
- ➤ The trash cans are not placed in convenient locations, so people have to walk out of their way to throw away trash.
- ➤ People don't realize the importance of putting trash in the trash cans.

Here's how you might address these issues:

- Make a presentation to the city council to present your data and advocate for your chosen solution.
- Create an anti-littering public awareness campaign.
- Design and build interactive garbage cans that make it fun to toss away trash. (For inspiration: Search online for "the fun theory" or "the world's deepest bin.")



Turn the page to start exploring your own.

7



YOUR TAKE ACTION TALENT INVENTORY

What are your talents—painting portraits, coding, creating fun events, public speaking, writing, organizing groups of people, creating budgets, speaking another language, playing a musical instrument?

What do you do for fun—skateboarding, building drones, sewing costumes, cooking, doing karaoke, hiking, playing games on your phone, listening to music?

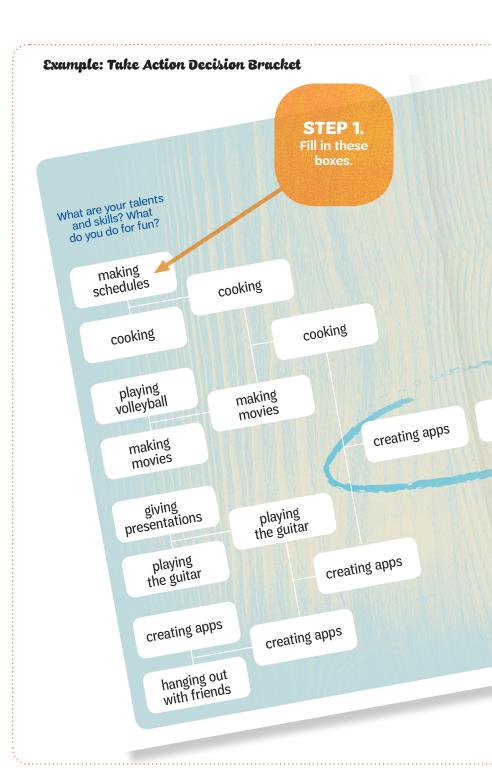
You can use what you're good at (your talents and skills) and what you do in your spare time (your interests) when you design your Take Action project. You'll have fun and people will be inspired by the enthusiasm you bring to your project.

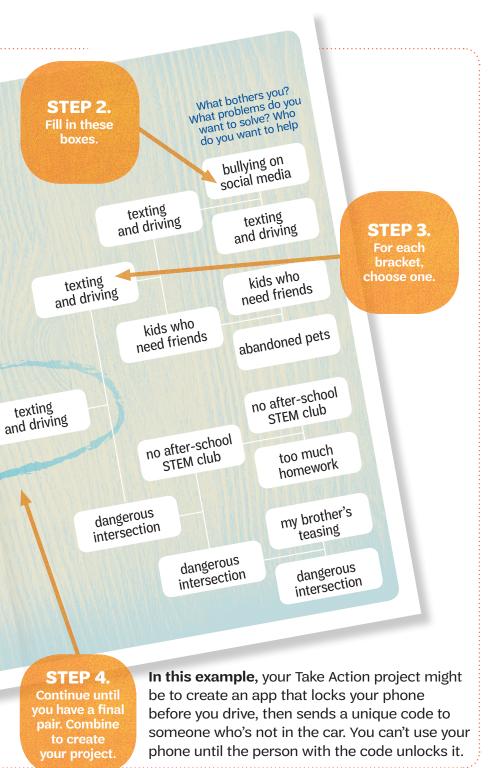
Check each talent or interest you can use to Take Action — then add a few more!

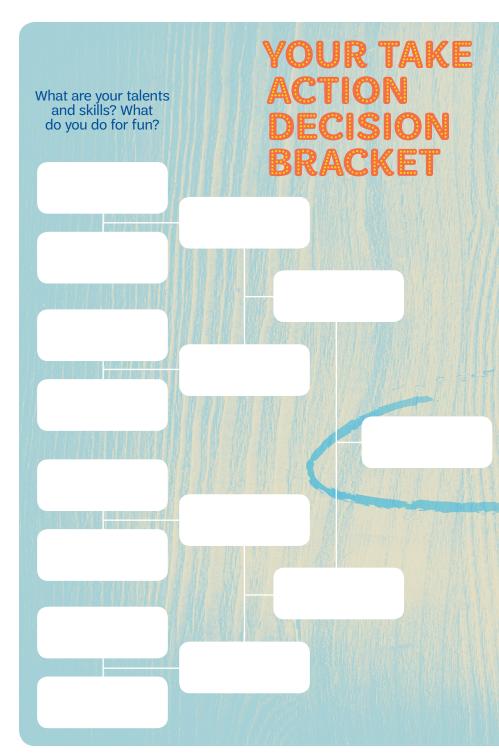
create a comic		organize a volunteer
start a blog		effort
design a website		design a video game
code an app		create an online
develop a workshop		
design a prototype for a new invention		create digital surveys and analyze the data
create a social media		create a data base
campaign		make an infographic
organize a "girl-led talks" event		hold a storytelling festival
build a maker space		advocate for a new
organize a panel		law
discussion or debate		change an existing
make a movie		law
design an exhibit	Ų	build a playground
write a book	Ш	create an art gallery
organize an online		organize a
community		community event
create an artwork		Other ideas:
invent a new product		
make a playbook	•••••	
create a 'zine		
circulate a petition		
create a volunteer group		
invent a new process		

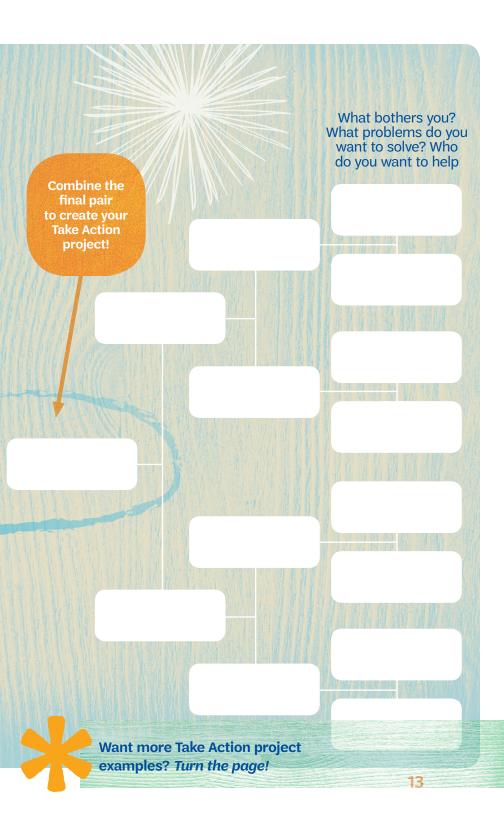


How can you match your talents and interests with an issue you care about? Turn the page to find out!









HOW TO FIND TAKE ACTION INSPIRATION



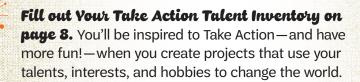
Follow the news. Watch news on TV, read newspapers and magazines, listen to the radio, follow social media, or subscribe to blogs and news feeds—it doesn't really matter how you tune into what's happening in the world. What matters is that, when you do, you hear inspiring stories about people who:

- stood up and spoke out to advocate for change
- invented a product—such as a language-learning app, new medical device, or robot that assists people with disabilities—that helps others
- created bonds between people of different backgrounds so they could solve problems together
- built something useful—such as a bike path, playground, public garden, or maker space—to improve their community

Keep a list of stories that inspire you. How can you address the same issues or use a similar approach to Take Action in your community?



Find out what other Girl Scouts have done. Many Take Action and Silver Award projects are posted on Girl Scout council web sites and social media. You can also attend council recognition ceremonies and meet other Girl Scouts who took action in meaningful ways.



Try out Your Take Action Decision Bracket on page 12. Use this interactive exercise to combine your talents/interests and the issues you care about. Play as many times as you like—you may be surprised by the ideas this generates!

If you're working with a team of girls on a Silver Award project, this could also be a fun way to narrow down your ideas. If you're working solo on a project, this is a good way to quickly come up with lots of possible "talent/issue" combinations.



Once you've chosen an issue you feel passionate about, it's time to put your imagination, creativity, and leadership skills to work—and come up with your own way to Take Action!





TAKE ACTION PROJECT EXAMPLES

In the Think Like a Citizen Scientist Journey, you learned about citizen science, the scientific method, and how scientists use both to answer scientific questions, solve problems, and learn more about the world.

When you develop a Take Action project, you can use what you learned: how to observe problems in your community, collect data and research about the problem, develop a possible solution, and put it into action. If your chosen solution doesn't work right away, you use data and feedback to make it better.

The Take Action project you do as part of this Journey doesn't necessarily have to be about citizen science (although it certainly can be!).

You may choose to address issues related to mental or physical health, food scarcity, civic engagement, the environment, online safety, and so on. No matter the topic, if you use what you learned about citizen science to develop your project, you'll be thinking like a scientist—and making the world a better place.

Use them as inspiration as you develop a project about something that you care about.

Issue: More people need to know how they can do citizen science projects to help scientists learn about the world. If more people participated, scientists would have more data to analyze!

Solution: Educate and inspire others by sharing your experience and what you've learned about citizen science. For example, you might organize a citizen science activity at your school, local library, or community center. Or, you might organize a Citizen Science Day at your school or in your town. You can set up Citizen Science Stations with handouts explaining different projects (and materials, if needed). Then, invite everyone to choose a project, collect data, and upload it.

Sustainability: Educate and inspire others.

Issue: Farmers need to conserve water during droughts while also sustaining their businesses

Solution: A Girl Scout Ambassador from Northern California developed soil moisture sensors and readers to help farmers conserve water and use less groundwater. The sensors are planted into the soil; they allow farmers to read and determine the moisture level in the soil. Based on this technology, farmers on average saved 25 percent of their monthly water use. Now, the Girl Scout is in the process of patenting her product and has created a Facebook site and video log to show others how they could replicate her project globally.

Sustainability: Make your solution permanent.

Issue: It's difficult to see stars and planets at night — even in a park — if there are too many street or other man-made light sources nearby.

Solution: A Girl Scout Ambassador from Virginia decided to get a state park designated a "dark sky park" by the International Dark-Sky Association. A "dark sky park" has a protected nocturnal environment that leads to clear, starry sky views. To earn her Gold Award, she changed the park's lights and added motion sensors and shields so they didn't emit as much light. She also created posters for the park cabins to let visitors know how the changes were reducing light pollution.

Sustainability: Make your solution permanent; educate and inspire others.

Issue: More than 500 million straws are thrown away each day in the U.S. alone.

Solution: For her Gold Award project, a Girl Scout in California formed a nonprofit, Jr Ocean Guardians, to share her passion to save our oceans with other kids. The Girl Scout and her team hosted beach cleanups and educated others about the issue of plastic waste and the importance of recycling. But, she didn't stop there! She advocated to CEOs of businesses like Alaska Airlines and Starbucks to stop using plastic straws. She also reach out to her local and state governments, and the California Coastal Commission unanimously approved her "No Straw November" Resolution. The following year, both the California State Senate and Assembly officially passed SCR-139 No Straw November to officially recognize November in California as No Straw November!

Sustainability: Educate and inspire others; change a rule or law.

5

Issue: Students don't always feel they have a voice in issues that affect them at school.

Solution: Use what you learned about data collection to create a survey that the school administration can use to poll students and collect data on a regular basis. Develop a database of responses, analyze the data, and create reports that can be shared with students, teachers, and administrators. Train school staff members to use your tools so they can continue to be used even after you graduate.

Sustainability: Educate and inspire others.

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

Solution: 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. Or, do some research and find out how changing a local law or regulation could address the problem. Make a presentation to your city council, start a petition drive, or advocate to your government at the state level for a change in laws or regulations to address the problem.

Sustainability: Educate and inspire others; change a rule or law

Issue: Through your citizen science project, you learned about the dangers of air pollution. Then, you observed that parents often run their engines outside the school as they wait to pick up or drop off their children - this pollutes the air.

Solution: 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.

Sustainability: Change a rule or law.

Issue: "Food deserts" are areas where access to affordable, healthy food is limited because grocery stores are too far away. Approximately 2.3 million people (2.2% of all US households) live in low-income, rural areas that are more than 10 miles from a supermarket. With limited options, many people living in food deserts get meals from fast-food restaurants.

Solution: Collect data from your community to find out what resources there are to start a community garden in your neighborhood. Or, you might learn by talking to community members that there's already a local garden whose work you can lift up and support. By spreading the word to your community and gathering volunteers to help tend the garden over time, you can help to provide healthy, affordable, and sustainable food options to others.

Sustainability: Educate and inspire others; make your solution permanent.

Issue: Name the issue — ocean-polluting plastics, middle-school bullying, girls opting out of STEM classes, homeless families, the health risks of obesity, the need for citizen engagement, the danger of cybersecurity breaches, and so on — and you'll find girls who want to find a solution.

Solution: Everyone's heard of TED Talks, the inspiring and informative speeches given by people with a mission to change the world. Create a "Girl-Led Talks" event that features girls speaking out on an issue they care about. Film the talks and post them to an online site to spread the word far and wide.

Sustainability: Educate and inspire others.

Issue: Communities are often economically and racially segregated, which can lead to a divided community.

Solution: A Girl Scout Ambassador in Florida used her hospitality skills to ease tensions in her racially and economically diverse area by building bridges among her peers. She hosted a dinner party for 120 students from 12 public and private high schools. The dinner party brought everyone together for critical conversations about how to prevent bullying and strengthen relationships that promote peace, equality, truth, and unity, both among the students themselves and within the community at large.

Sustainability: Educate and inspire others.





Citizen scientists can:

- make a direct contribution to scientific research
- collect data to help scientists answer scientific questions
- gather and use data to make a difference for people, animals, and the environment
- connect people around the world
- and much more!