



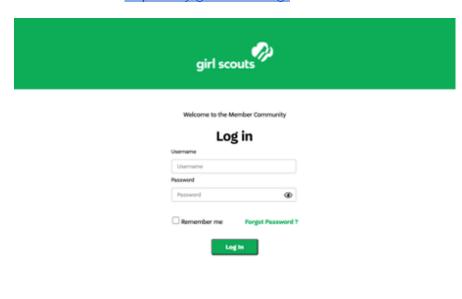
Girl Scouts and GLOBE Observer Think Like a Citizen Scientist Journey Getting Started

If you are interested in pursuing the Think Like a Citizen Scientist Journey with Girl Scouts, GLOBE Observer offers multiple citizen science projects where Girl Scouts can collect data that can be used by NASA scientists, academic researchers, and citizen scientists to learn more about our Earth. GLOBE Observer citizen science projects include: Clouds, Land Cover, Trees, and Mosquito Habitat Mapper (and Eclipse in times of a total solar eclipse). By its nature, GLOBE Observer allows Girl Scouts to choose projects according to their interest, making it easy for the Think Like a Citizen Scientist Journey to be girl-led. Journeys are extended engagement programs that culminate in Take Action projects. Because the citizen science data is available to Girl Scouts, girls can even use data collected from around the world, in addition to their own, to create their projects.

To get started, follow this guide for Girl Scout Troop Leaders.

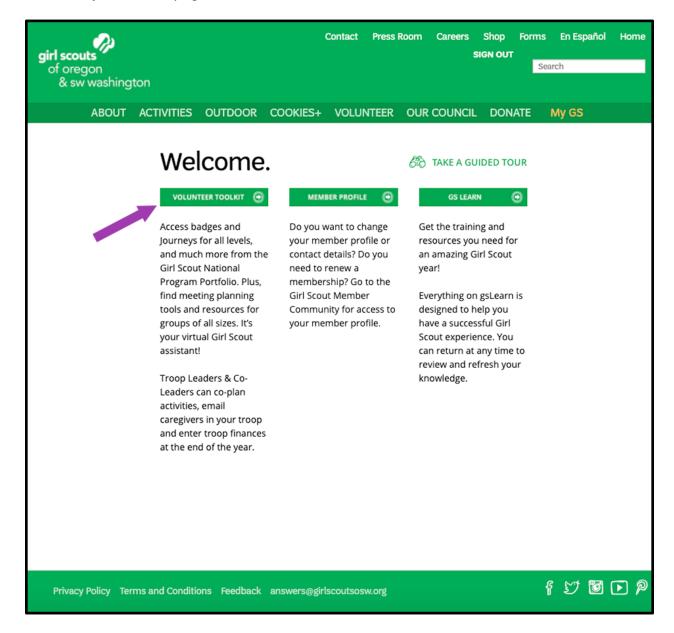
Step 1: Log in to your MyGS account.

If you do not have an account, sign up through your <u>local council</u>. MyGS account direct link: https://my.girlscouts.org/



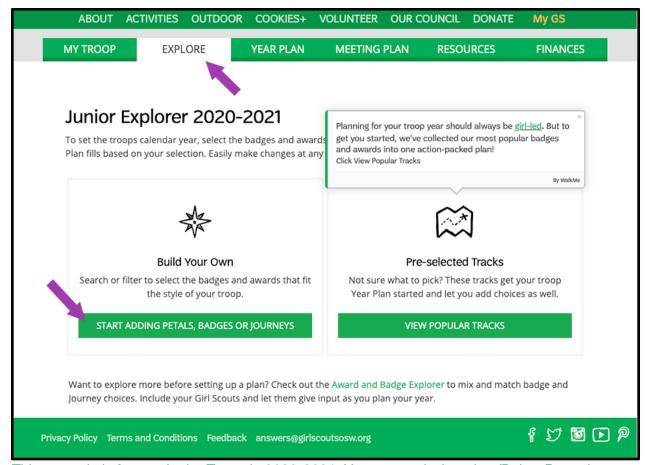
Step 2: Access the Volunteer Toolkit.

On the "My GS" Homepage, click on Volunteer Toolkit.



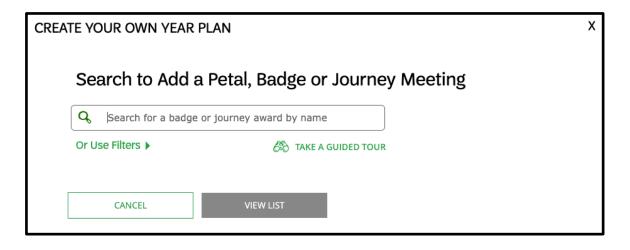
Step 3: Add the *Think Like a Citizen Scientist Journey* to your troop meeting schedule.

Step 3A: Open the *Explore* tab. Then click on *Start Adding Petals, Badges or Journeys*.

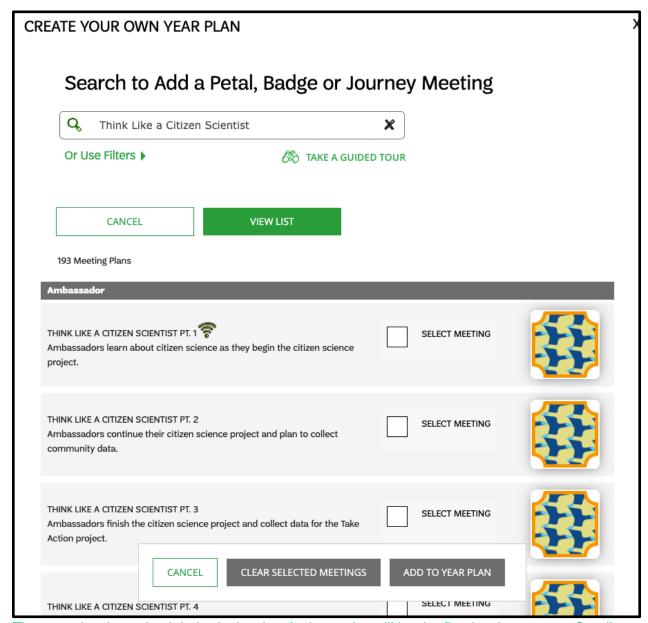


This example is from a Junior Troop in 2020-2021. Your troop designation (Daisy, Brownie, Junior, Cadette, or Ambassador) will appear where it says Junior 2020-2021.

Step 3B: Enter "Think Like a Citizen Scientist" into the search bar and click View List.

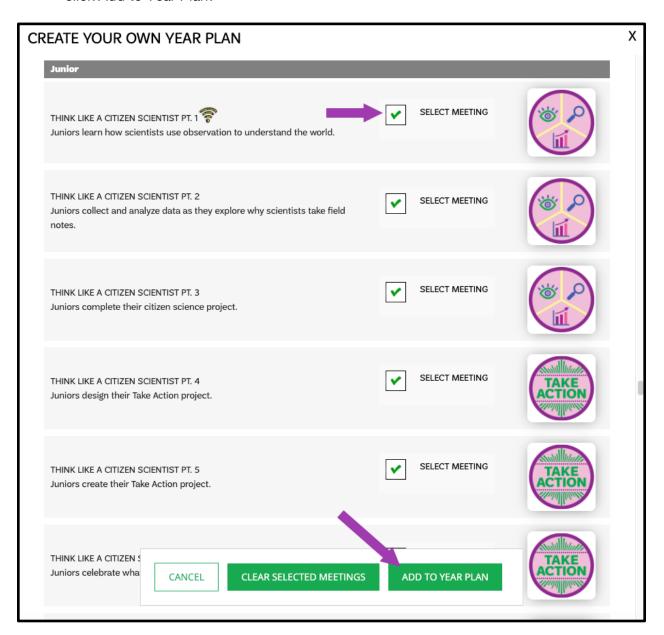


Step 3C: Scroll down until you find your troop's level (Ambassador, Cadette, Brownie, Junior, or Daisy).

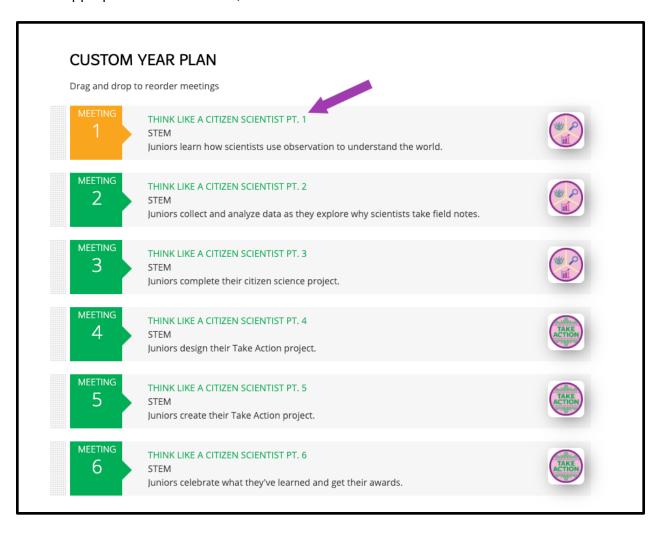


The troop levels are in alphabetical order. Ambassador will be the first level to appear. Scroll down to find the level of your troop.

Step 3D: Check all *Think Like a Citizen Scientist* parts 1 – 6 for your troop's level. Then, click *Add to Year Plan*.

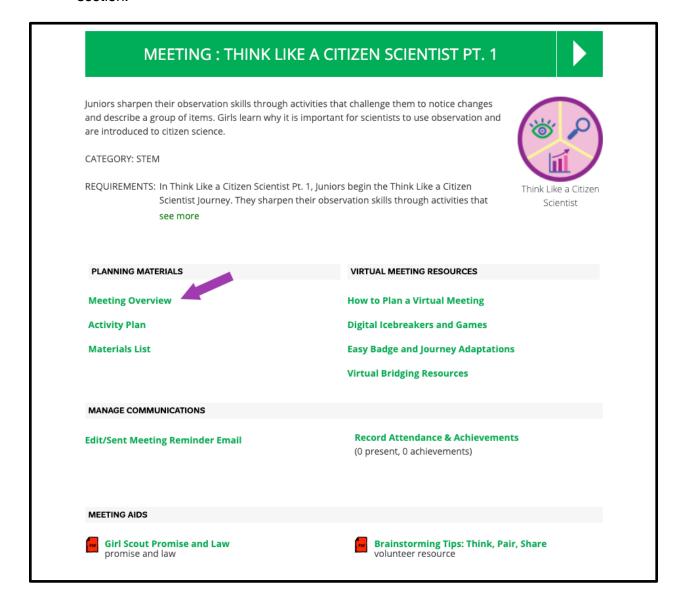


Step 3E: Your meeting schedule will appear under your *Custom Year Plan*. These meetings can be moved to be in the correct order if necessary, by dragging them to the appropriate location. Then, click on *Think Like a Citizen Scientist Pt. 1*.



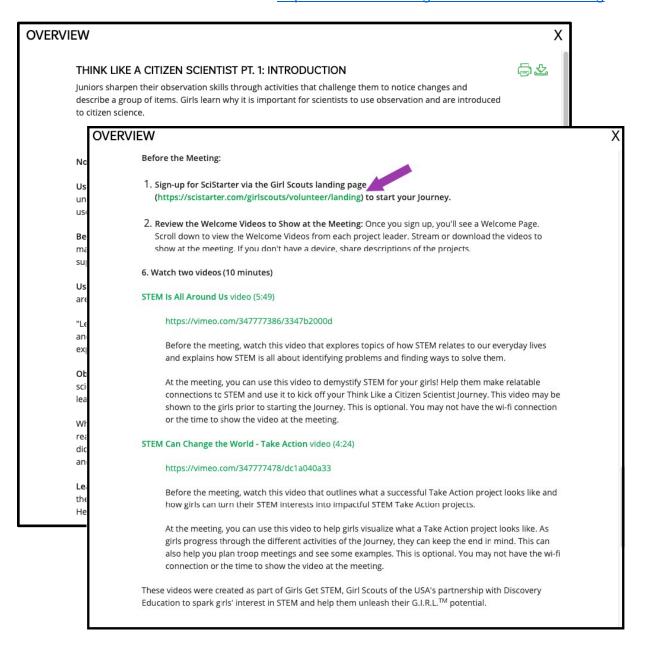
Step 4: Prepare for your first meeting.

Step 4A: Everything you need to run your first meeting is in Pt. 1. You will find a Meeting Overview, detailed Activity Plan, Materials List, and other resources to make your first meeting run smoothly. Select *Meeting Overview* from the *Planning Materials* section.



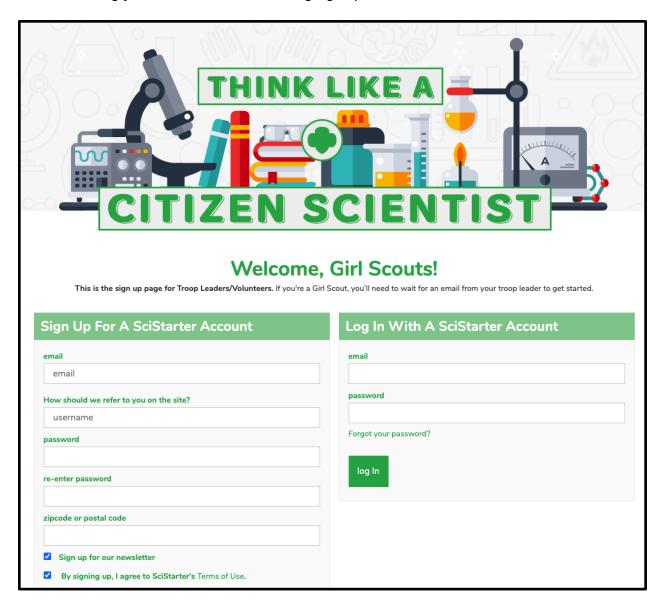
Step 4B: Read through the Overview to prepare for your first meeting. However, pay careful attention to the *Before the Meeting* section. Here you will find the link where you will set up the <u>SciStarter</u> account and register your troop.

Direct link for SciStarter: https://scistarter.com/girlscouts/volunteer/landing

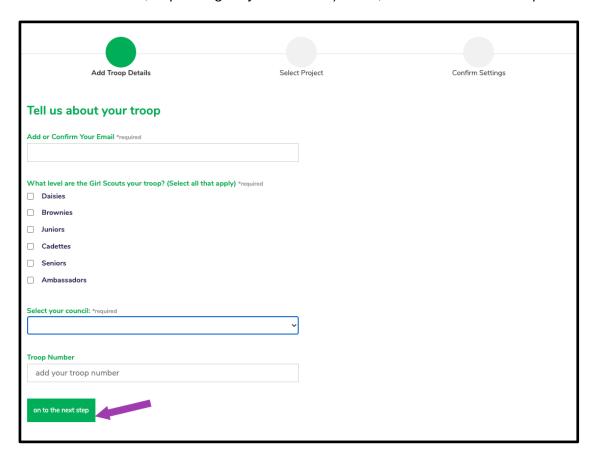


Step 5: Create a SciStarter account.

Step 5A: On https://scistarter.com/girlscouts/volunteer/landing, create an account by entering your information and clicking *sign up*.



Step 5B: Enter your troop's information (you may need to scroll down the page to access the fields, depending on your browser). Then, click *on to the next step*.



Step 5C: After signing up, SciStarter will send you an email. Follow the instructions that are sent to you by SciStarter. The videos in the email link back to the videos that are on the *Welcome* page, which is the page that you will be directed to after registering. These videos will help your troop decide on which citizen science project they want to choose.

You have successfully joined the SciStarter community and are on your way to leading your troop through the Girl Scouts' Think Like a Citizen Scientist Journey!
First step: - Show the short citizen science project videos to your troop. Have the girls choose which one they want to do Click "select" next to the project the girls chose Follow the step-by-step instructions to invite your girls to join SciStarter to participate on the Journey with you. Your accounts will be linked through the entire Journey, from selecting the citizen science project, to sharing your observations with a scientist, and even through the opportunities to Take Action!!
After you complete this Journey, you can choose another citizen science project to do with your troop if you'd like. You will also receive information on how to make the most of your new SciStarter dashboard to guide you to more citizen science projects that match your interests and location.
Nowlet's do some science! Click <u>here</u> to continue your Journey To Think Like A Citizen Scientist!
From, The SciStarter Team

Example of the email you will receive from SciStarter once you have registered your troop.

Step 6: Conduct meetings part 1-2 with your troop.

Meeting 1: Use observations to understand the world.

Follow the *Activity Plan** in *Meeting pt. 1* in your *Year Plan* of your *Volunteer Toolkit*. *If your troop has already expressed interest in doing GLOBE Observer, you may find activities from the <u>GLOBE Observer Toolkit</u> as a great substitute to the activities in the Girl Scout Activity Plan for Meeting Part 1. You can find a list of activities by each GLOBE Observer tool that can be used as a hands-on way to teach Girl Scouts observation skills.

- Clouds: https://observer.globe.gov/toolkit/clouds-toolkit/activities
- Land Cover: https://observer.globe.gov/toolkit/land-cover-toolkit/activities
- Trees: https://observer.globe.gov/toolkit/trees-toolkit/activities
- Mosquito Habitat Mapper: https://observer.globe.gov/toolkit/mosquito-habitat-mapper-toolkit/activities

Additionally, visit the GLOBE Observer <u>Girl Scouts Resource page</u> for links. Videos can be used as a plug and play with your troop, service unit or council. Alternatively they can be used as examples of how you might run your own program. There are also links to scripts and PowerPoint presentations can be used independently, if you choose the latter.

Direct link for resource page: https://observer.globe.gov/toolkit/guides/girl-scouts

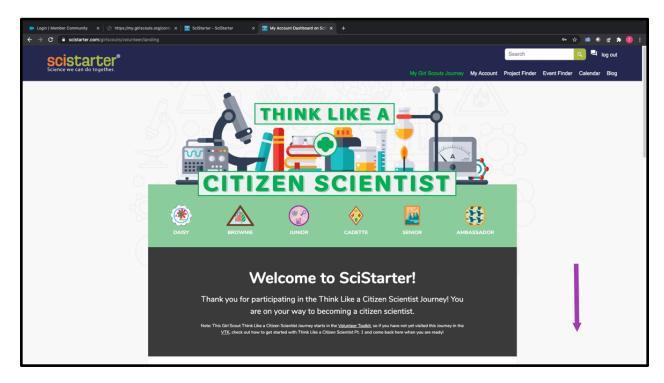
Meeting 2: Collect and analyze data, then choose your citizen science project. Follow the *Activity Plan** in *Meeting pt. 2* in your *Year Plan* of your *Volunteer Toolkit*. *If your troop has already expressed interest in doing GLOBE Observer, you may find activities from the GLOBE Observer Toolkit as a great substitute to the activities in the Girl Scout Activity Plan for Meeting Part 2. Additionally, Girl Scouts can go on a science scavenger hunt, where they will be collecting and analyzing data by classifying types of clouds, identifying potential mosquito habitats, and classifying land cover types. This can be done by printing out pictures of places and putting them around a room or by visiting places. A sample data collection sheet is found at the end of this guide in the Appendix.



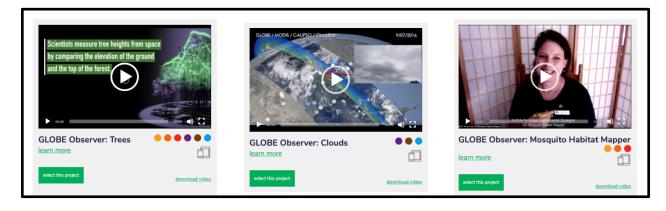


Step 7: Invite your troop to sign up for SciStarter.

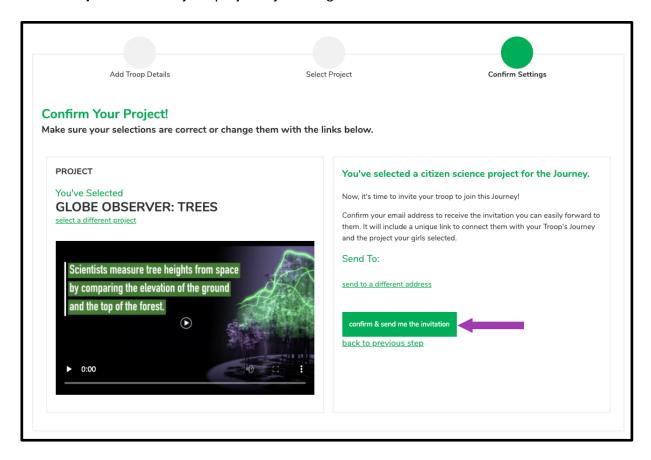
Step 7A: On the *Welcome* page, scroll down to find one of the GLOBE Observer citizen science projects. Select your troop's chosen project.







Step 7B: Confirm your project by clicking on *confirm and send me the invitation*.



Step 7C: You will receive an email from SciStarter with an email template to send to your troop's parents or guardians.

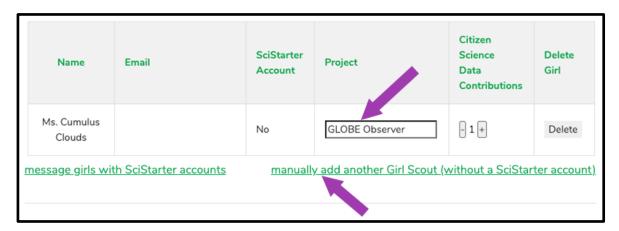
The email includes a link for Girl Scouts (with their parents or guardians) to set up their own SciStarter accounts as part of their troop. If you choose not to have girls register via a SciStarter account or if they don't have access, you can also manually enter them on your SciStarter Girl Scout Management tab on your Journey page.

If you need to manually enter your Girl Scouts Go to **Step 7D**.

If your Girl Scouts all are able to register on their own, proceed to **Step 8**.

Step 7D: Manually enter Girl Scouts into SciStarter.

On the *Girl Scout Management* tab click on *manually add another Girl Scout (without a SciStarter account)*. Enter the Girl Scout's name in the field and click *add*. Then enter the name of the project under the *Project* column.



Step 8: Download the GLOBE Observer app to Girl Scouts' devices.

Using the appropriate link for their <u>Android</u> or <u>iOS</u> device, your Girl Scouts can independently download the app and register with their parent, guardian, troop leader or registered volunteer. Links to methods to download the app are under *the Citizen Science Project* tab of your *Current Journey* on SciStarter. There is also an additional link that instructs you on how to enter data through the GLOBE system, if you cannot access the app.



Step 9: Choose a GLOBE Observer tool within the GLOBE Observer app.

Girl Scouts can choose from each of the tools that GLOBE Observer has available. These include: Clouds, Land Cover, Trees, and Mosquito Habitat Mapper (and during solar eclipse periods, Eclipse).

Step 10: Read the instructions in the app on how to take your observations.

Follow the instructions in the tool that they choose in the GLOBE Observer app. For more information and resources that you can use to acquaint your girls with the GLOBE Observer tool of their choice, use the GLOBE Observer Toolkit, where you can find curated hands-on activities, recommended books, videos, and promotional materials that can be used based on the needs and interests of your troop.

Step 11: Take observations!

Girl Scouts can take their observations independently or you can walk them through taking an observation as a group, then allow them to take more observations on their own.

Step 12: Record in SciStarter who from your troop participated.

Submit the number of observations each girl made under the *Citizen Science Data Contributions* field associated with her name in your SciStarter account.*

If the Girl Scouts were able to register in SciStarter they will be able to update this number themselves in their SciStarter accounts. It will automatically update in your SciStarter account.

Name	Email	SciStarter Account	Project	Citizen Science Data Contributions	Delete Girl			
Ms. Cumulus Clouds		No	GLOBE Observer	-1+	Delete			
message girls with SciStarter accounts manually add another Girl Scout (without a SciStarter account) Citizen Science Code To Invite ADDITIONAL Girl Scouts To This Journey:								
			the emails to the parents and	guardians of the g	irls you'd			

Step 13: Design and complete a Take Action project.

Step 13A: Support girls to design and complete their Take Action project.

Your Girl Scouts will create a Take Action project where they will create a sustainable solution to a community problem or issue that they care about. The *Take Action Project* section on your <u>Current Journey page in SciStarter</u> has ideas on how to spark conversations about taking action. The Take Action project satisfies parts 4 and 5 of the *Think Like a Citizen Scientist Journey*.







Take Action Project

1. Support girls to complete their Take Action project.

After your girls have completed their citizen science project, it's time to Take Action! For Think Like a Citizen Scientist Pt. 4 & 5, they'll create a sustainable solution to one community problem or issue they care about. Here are a few project ideas to spark a conversation:

- Organize a citizen science event at their school, library or community center to spread the word about how helping scientists helps the world.
- Tell classmates or younger Girl Scouts how much fun it is to do citizen science and why it's important. Girls could
 create a video, do a show-and-tell at school, or create a poster campaign.
- Address a problem they learned about while doing their citizen science project. For example, if they learned about
 declining pollinator populations, they might plant gardens to help bees and butterflies thrive or create tip sheets for
 creating "bee and butterfly friendly" backyards.

You can find the Take Action Guide and full instructions to support your girls to create their Take Action project in Journey meetings in the VTK.







Take Action Guide 6-12

Step 13B: Log your girls' Take Action project under the *Take Action Project* tab on your *Current Journey* page.

2. Log your girls' Take Action project

When girls have finished their Take Action project, log their Take Action project. If girls selected their own citizen science projects, they'll have the ability to log their Take Action project through their own Girl Scouts SciStarter dashboard. However, for troops that completed one project together and for girls that don't have a SciStarter account, use the button below to submit their answers.



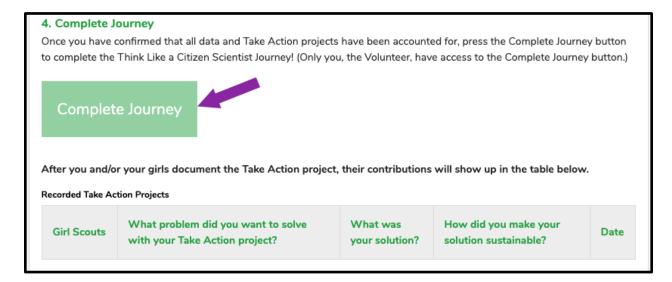
3. Check Girl Scouts' progress

To complete your Journey, first check your Girl Scout Management tab to make sure the girls properly earned credit for sharing their citizen science project data and their Take Action project(s). Use the +1 button to indicate data was added for each girl who participated.

For girls that do not have SciStarter accounts, manually submit data for the citizen science project (using the +1 button beside their name) on the Girl management tab and log their Take Action project on the Take Action tab.

Step 14: Complete the Think Like a Citizen Scientist Journey.

On the Take Action project under the *Take Action Project* tab on your *Current Journey* page, click *Complete Journey* once your troop has completed all the requirements.



Step 15: Celebrate!

Celebrate your accomplishment. Part 6 of the Think Like a Citizen Scientist Journey is to celebrate and reflect on what you have accomplished as a troop. Congratulations! Your girls have earned the *Think Like a Citizen Scientist* patch and *Take Action* patch to add to their uniforms.

Appendix

Meeting 2 Scavenger Hunt

Instructions

- 1. Print the Land Cover Quick Reference Guide and Clouds Identification Chart
 - o Land Cover Type Quick Reference Guide
 - Cloud Identification Chart
- 2. Print out pictures of different cloud types.
 - a. For clouds you could print and cut out the <u>Sky Window</u> or use any pictures of clouds.
 - b. For land cover, you could print off different landscapes (or you could have pictures with clouds and land cover in them.)
 - c. Alternatively, you can do this activity outside, by setting up posts where there are different types of land cover and include a cloud picture at each post. This is
- 3. Print out the Scavenger Hunt Recording and Analyzing Data on the following sheet.

GLOBE Observer Scavenger Hunt Recording and Analyzing Data



Meeting 2: Think Like a Citizen Scientist Journey

Post 1			
Тур	e of cloud		
Тур	e of land cover		
Any	mosquito habitats? Yes or no	If yes, what kind?	
	(circle one)		
Post 2			
	e of cloud		
	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 3			
	e of cloud		
	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 4			
	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 5			
Тур	e of cloud		
	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 6			
	e of cloud		
	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 7			
Тур	e of cloud		
Тур	e of land cover		
Any	mosquito habitats? Yes or no (circle one)	If yes, what kind?	
Post 8	·		
Тур	e of cloud		
	e of land cover		
•	mosquito habitats? Yes or no (circle one)	If yes, what kind?	