

## Brownies Toolkit

# About Girls Get STEM: Unleash Your Inner Scientist

Girl Scouts of the USA has unleashed a new partnership with Discovery Education to spark girls' interest in STEM and help them unleash their G.I.R.L. (Go-getter, Innovator, Risk-taker, Leader)™ potential. Girls Get STEM: Unleash Your Inner Scientist provides educators and Girl Scouts troop leaders with standards-aligned curriculum that aims to address gender equity in STEM education across the country through a series of girl-led, girl-tested, and girl-approved resources for students in grades 2–5.

## Quick Facts

- **Program Name:** Girls Get STEM: Unleash Your Inner Scientist
- **URL:** <https://www.girlsleadstem.com/educator-resources>
- **Audience:** Girl Scouts in grades 2-5

## About the Girls Get STEM Activities

The Girls Get STEM activities below were created to bridge national science and engineering standards into the Think Like a Citizen Scientist Journey. This can support you as a troop leader in recruiting girls and establishing relationships with educators. In addition to our national standards, non-cognitive skills are factors that predict success in school beyond content knowledge and academic skills. In education, we refer to some of the most popular learning strategies in today's workforce as the “4Cs” for 21<sup>st</sup> Century Learning. They include critical thinking, communication, collaboration, and creativity. Each of the activities created in this partnership highlight and help develop these important skills.

The table below provides an overview of each Girls Get STEM activity, how to include this activity in your current Think Like a Citizen Scientist Journey, and identifies the 21<sup>st</sup> Century Learning Skill featured.

## Communication

# Share Results Activity: Communication

**Note to Volunteers:** If you want to complete this activity, you'll need to take pictures of your troop working on each step of their Take Action project: from brainstorming to reflection.

**Timing:** Approximately 40 minutes, but tailor this activity to fit your troop's needs!

**Focus Area:** It's always important to celebrate successes with those around us. Your troop has done a lot that should be celebrated, and this activity will help you showcase what your girls have accomplished!

**Activity Overview:** Girls will create a Take Action quilt that retells the steps they took to make their project happen—as well as the results! In order to create this, an adult should photograph the girls throughout each step of their Take Action project: from brainstorming to reflection. These photographs can then be distributed to the girls, who will glue them onto a quilt template square along with a description of the photo. The squares can then be combined into a quilt that tells the story of how the girls worked together to create change.

## Where can this activity fit in?

- Take Action project: This activity can be completed at any point after the girls' project is complete. The final photo quilt can be displayed at the end of Journey celebration in Think Like a Citizen Scientist Pt. 6.
- At other points of reflection: This activity can also be completed whenever the girls would benefit from a reflection or celebration (e.g. at the end of a year, after the completion of a service activity, etc.). If you don't have photographs to document the girls' efforts, the girls could draw pictures instead!

## Materials:

- 4 ½ x 6 or 3 x 5 photographs that document the troop's Take Action project from beginning to end (**Note to Volunteers:** There should be enough photographs so that all girls can have one and a square or rectangle can be made with the total number. If possible, the total should equal 9, 12, 16, 20, 24, or 25.)
- **Quilt Template**, as many template squares as you have photographs (**Note to Volunteers:** There should be enough copies of these templates so that each one can be paired with a photograph and a square or rectangle can be made with the total number (total should equal 9, 12, 16, 20, 24, or 25). Ideally, you will have as many quilt template squares as you have photographs!)
- Crayons, markers or colored pencils, enough for all girls to share

## Communication

- Pencils, one per girl
- Glue-sticks, to share
- Tape
- **Optional:** Phone or other timer

### Steps:

Brownies will create a Take Action quilt that retells the steps they took to make their project happen, how the girls worked together to create change, and the results of their Take Action project,

#### Part 1: Remember

Pass out one photograph to each of the girls. Ask them to look at their photograph but no one else's.

#### SAY:

- What happened before this photograph?
- What is happening in this photograph?
- What happened after this photograph?

Give the girls a moment of reflection before explaining the activity.

#### SAY:

- When I say "go!", stand up and share your photograph with the Brownies around you.
- Then, work together as a group to get in a chronological line that demonstrates the progression of your project. In other words, the oldest photograph should lead the line and the newest photograph should end the line.

**Optional:** For an added challenge, time the girls to see how long it takes!

By communicating with each other, have the girls work together to get into a chronological line that demonstrates the progression of their project.

When the girls are lined up, ask each girl to step out of line when it is her turn and say one or two sentences about what was happening in her photograph.

After everyone has shared their photo, number the back of each photograph so you can quickly put them back into chronological order later.

## Communication

### Part 2: Reflect

Gather the girls and explain that they will be using the photographs to create a quilt that will visually tell the story of their Take Action project from the very beginning to the very end! This quilt will then be shared with families at their celebration.

Distribute one **Quilt Template** to each girl and lead them through the following instructions, step by step:

1. Cut out your quilt square from the **Quilt Template**.
2. Write the number of your photograph on the back of your square.
3. In writing, describe what is happening in your photograph on the lines provided. Include details so readers can picture the scene even without looking at the photograph!
4. Glue or tape the photograph onto the template.
5. Decorate the background of your square using the markers, colored pencils or crayons. Try to make the design relate to your Take Action project.

As the girls finish their quilt squares, arrange the squares into a larger quilt.

If you need additional quilt squares in order to make a square quilt, here are a few ideas:

- **If you have extra photographs**, nominate quick workers to create a second quilt square.
- **If you don't have extra photographs**, use words and illustration instead! For instance, one quilt square could contain your troop number, one quilt square could have every girl's name, and/or one quilt square could have your school's name. You could also ask girls who finish early to draw a picture representing their favorite part of the project. Then intersperse these throughout the quilt!

Once the squares are in their correct position and you have a full quilt, turn them over and tape them together.

Take a photograph of the quilt, and give each girl a copy at your celebration (in Think Like a Citizen Scientist Pt. 6) so they have their own memories to bring home!

Communication

# Quilt Template

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