

Take a Kid to FIRST®





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ABOUT YOUTH ROBOTICS TOURS

The Space Cookies Take a Kid to *FIRST* Kit is downloadable PDF with all the materials needed to help *FIRST* Teams host competition tours for kids of all ages. This will not only increase the team's *FIRST* outreach efforts to reach the youth, but it will also help them gain exposure to STEM.



GIRL SCOUT STEM PLEDGE NATIONAL LAUNCH

In 2018, we were honored to be invited to the launch of the Girl Scout STEM Pledge, a groundbreaking initiative to reduce the gender gap in STEM fields by bringing millions of girls into the pipeline. This kit is based on the STEM Pledge Kit developed to offer opportunities to girls to gain exposure to STEM by touring at FRC competitions.



HOW TO USE THE TAKE A KID TO FIRST KIT

The kit contains the following documents: **How to Contact local Youth Organizations Sample Google Form for Scheduling, Scavenger Hunt Template, Tour Sign Printout with Instructions, Sample Flyer, Safety First,** and **Sample Emails**. These supplementary documents will be referenced throughout the instructions.

- Read the **Safety First document.** These documents will help you design and implement your tours.
- Decide what event(s) your team would like to host tours at. FRC, FTC, and FLL competitions are ideal. Contact the competition's organizer to let them know your team plans on running tours. Consider keeping a venue map handy during the tours.
- Determine the time slots your team members are available to lead tours. Select people who are social and knowledgeable to lead tours as kids (and their parents) often have a lot of questions.

FRC TOURS

TRAINING TOUR GUIDES

The ideal time to run tours is during the qualification matches because all of the pits are set up and the matches are continuous.

Train members to explain robotics in simpler terms. For example, instead of "our robot can shoot cargo into the center rockets," say "our robot can shoot orange discs into the goal." It's important that both girls and their parents can understand the competition.

- Make a Google Form using the **Sample Google Form for Scheduling** document. We recommend having tours last up to an hour. This Google Form will be sent out to the troop leaders to register for tour slots. Make sure to select the times for these slots carefully based on your team's availability.
- Contact local youth groups/organizations following the instructions detailed in the **How to Contact Local Youth Groups** document. Send them a flyer with information about the event and the link to sign up for tours (see **Sample Flyer** and **Sample Emails**). Google Drawings and Canva are easy (and free) online design software tools you can use to design your flyer.

Once tour requests start rolling in, send confirmation emails to the adult chaperones or youth group leaders with more details and instructions (see example in **Sample Emails** document). Groups will want to stay together, so you might have a group of 5 to 15 people at a time. You will most likely need two team members to lead each tour (consider three for larger groups), a designated photographer, and two "receivers" who will be stationed at the meeting place to check in groups and hand them off to the tour guides. In the email, include where the group- should meet you and how they will recognize you. Also include a phone number so they can reach you. Never leave a group alone and always have someone there to engage with them.

STAFFING

You will need a minimum of 5 people (2 guides, 2 "receivers", 1 photographer) to run one tour. Make sure your team is properly staffed before sending a confirmation email. Some groups travel over an hour for tours, so please be organized and don't cancel at the last minute.

TOUR CANCELLATIONS

Sometimes tour groups will cancel last minute or not show up. Try contacting the point of contact adult/leader (call or email them) for an update. We recommend that you give them a 15 minute buffer before canceling the tour.

- Prepare a scavenger hunt to help guide the tours. A **Sample Scavenger Hunt** is included in this kit, but feel free to edit the questions based on age group. Check which teams are attending the competition and find interesting facts about them to include in the hunt. Bring pencils for kids to write with.
- Make tour signs. See **Tour Sign Printout and Instructions**. In the past, we've named tour groups according to the robot game theme. Be creative and have fun with this!

A SUMMARY OF TOUR ACTIVITIES

Start by giving a brief introduction of yourself and your team. Set up some tour guidelines: stay together, move to the side when teams yell "robot," and make sure to comply with other competition rules. Hand out safety glasses for the pit. For groups of younger kids, consider bringing extra safety glasses for parents who will accompany their children in pit.

For larger groups, consider taking half of the group to pits and half to the stands to watch qualification matches. In the pits, go through the scavenger hunt with them. You can stop by different team's pits and show them different robot designs. We often ask teams to demo a part of their robot so the kids can see it move close up.

Once you finish the scavenger hunt, take them to the stands. You'll have to plan on how you will keep seats available for them. Explain the game in simple terms and break down a few matches while kids watch. In between the matches, take time to answer any questions or share interesting facts about your team or *FIRST* robotics.

Send a thank-you email to the tour groups for joining you. Include more information about *FIRST* and *FIRST*'s guides on how to start junior FLL, FLL, or FTC teams depending on their age range. After you're done, post pictures on your social media. Be sure to tag @spacecookies1868!



SAFETY FIRST

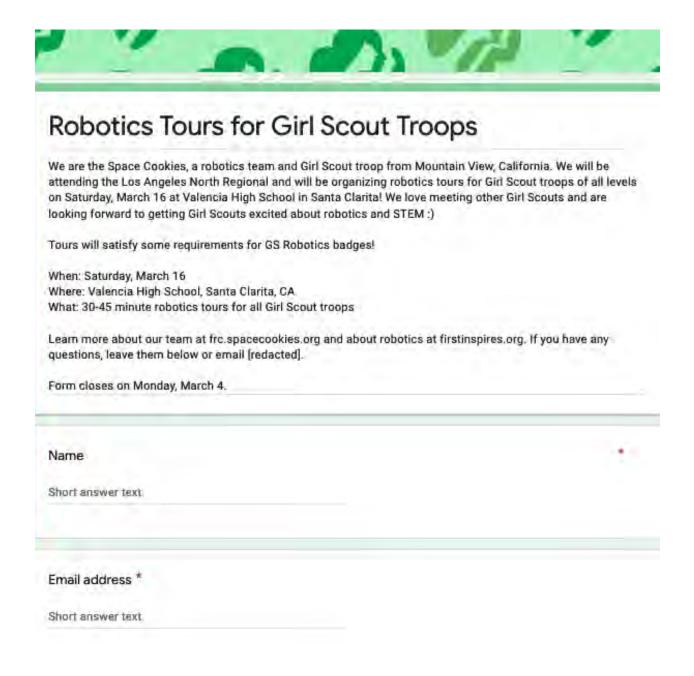
Before you host any tours, make sure to review these important **safety guidelines**. Ensure that any groups coming to tour with your team have appropriate chaperones.

Basic rules for safety:

- Never take kids away from their group; while it's fine to split a tour into groups, ask the adults first so that they can maintain the appropriate ratio of kids to adults.
- Don't let kids wander off. There is a lot going on at FIRST competitions and they will want to check things out.
- Make sure your team's tour guides know where the First Aid station is.
- Always have tour participants wear safety glasses in the pit area. Bring extras with you, along with cleaning supplies to use between tours.
- Make sure the kids know your team name and/or number; let them know that if they somehow get separated from their group, they should ask an adult how to get to your team's pit.
- Ask permission to use any photos in your team's collateral or on social media. While
 entrance to all FIRST events includes an automatic photo release, check with the
 parents to make sure they are okay with you using photos of their kids.
- Never use youth organization branding without council permission
- Make sure all the kids in the group are okay with loud environments since competitions can be quite noisy

SAMPLE GOOGLE FORM FOR SCHEDULING

Here is an example of the scheduling form to send to troops. A digital copy is available at **tinyurl.com/robotours**. If you choose to use the sample, please make sure to make a copy and replace the example text with the appropriate information. Otherwise, feel free to design your own form, but make sure all of the proper information is included. Never use youth organization branding without written permission from the organization.



Number of girls *		
Short answer text		
Number of adults *		
Short answer text		
Troop Number *		
Short answer text		
Troop level *	***	
Daisy		
Brownie		
Junior		
Cadette		
Senior		
Ambassador		
Juliette		
Tour time - tours will be approxi	nately 30-45 minutes long *	
10:30 am		
11:00 am		
3:00 pm		

HOW TO CONTACT YOUTH ORGANIZATIONS

Every youth organization has different rules for engagement with their members, so it is critical to understand their guidelines and requirements. Girl Scouts and Scouts BSA, for example, have similar requirements for ratios of adults to kids based on age groups, but it is important to know the differences.

Organizations you may wish to invite to your competitions include:

- Girl Scouts
- Scouts BSA
- Church/Synagogue/Mosque youth groups
- Community centers
- Schools
- After school programs
- Students at STEM camps
- ▶ Other organizations that your team members are involved with

Once you have decided which organization(s) to invite, contact their administrative leadership to ask about how to get started and to get an overview of their safety requirements, especially the number of screened adults that must accompany their youth members. Provide an overview of the tour content and the safety guardrails that *FIRST* has in place.

Attendees at FIRST competitions agree to a de facto photo release as they enter, but it is a good idea to ask the youth organization if you will need supplemental releases.

Here is an example of what the flyer sent to the Girl Scout Council should look like. A digital sample is available at **tinyurl.com/stempledgeflyer**. To edit our template, make sure a copy of the Google Drawing and input your information. You can also design your own form, but make sure all necessary information is included and make sure you have permission to use any Girl Scout brand elements.



Where: Valencia High School, Santa Clarita

When: Saturday, March 16 9:00 - 3:00 on the hour

Satisfies requirements for all Girl Scout Robotics Badges!

Discover robotics by touring the pits and watching matches with the Space Cookies, a Girl Scout Robotics team from Mountain View, CA

Register at goo.gl/gRk8y3

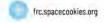








#bakeadifference #firstlikeagirlscout #stempledge





1868@spacecookies.org



@spacecookie1868



Space Cookies Robotics Team 1868

SAMPLE EMAILS

Emailing Girl Scout Councils

Hello,

We are the Space Cookies, an all-girls *FIRST* robotics team and Girl Scout troop based in Mountain View, CA. We will be attending the Silicon Valley Regional and hosting tours for Girl Scouts on Saturday, March 30. Our tours will help satisfy robotics badge requirements. We've designed a flyer (attached below), and we would appreciate it if you would distribute it to troop leaders in the area. Here is the link to sign up: [insert link]. Let us know if you have any questions. We look forward to hosting tours for Girl Scouts!

Thank you so much!

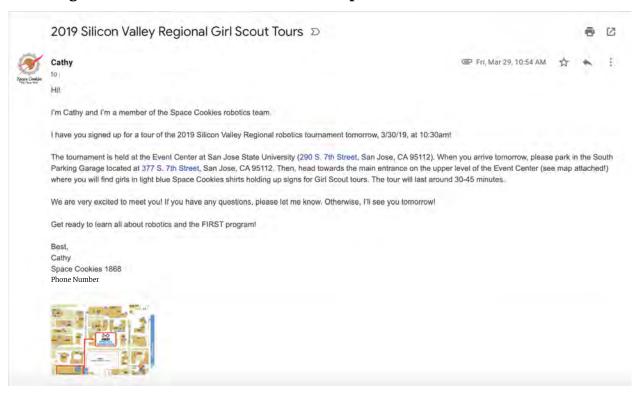
Best,

[First Last]

[Team Name]

[Contact Info]

Emailing Tour Instructions to Girl Scout Troops



SCAVENGER HUNT TEMPLATE

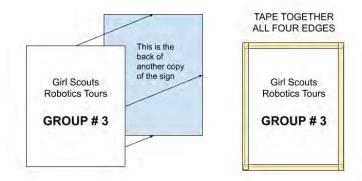
Here is an example of what the scavenger hunt can look like. A digital copy is available at **tinyurl.com/stempledgehunt**. If you choose to use our sample, please make sure to make a copy of the document and replace the example questions with ones that pertain to your regional. Feel free to design your own scavenger hunt--you can be really creative with this, but do make sure that the questions can be answered (e.g., if none of the teams at your competition are sponsored by NASA, don't ask the kids to find one!)

Na	met
	Hime of Regional Scavenger Hunt
We	lcome to the FIRST Name of Regional It's time for a scavenger hunt to become more familiar with FIRST competitions.
	What is the name of this year's game challenge?
•	Find a team that is from Place and get a signature from one of their members. Team Number/Name/Signature:
	Find a team with a blue banner. Team Number/Name and banner title:
	Find a team that is sponsored by X Company and ask a team member what their favorite part of their robot is and why. Team Number/Name:
	Part of robot and why:
	Find a Rookie team (this is their first year competing) and find out where the team is from Team Name/Home Location:
	Watch a match and tell us which teams won the match and the score of the match. Winning Teams/Score:

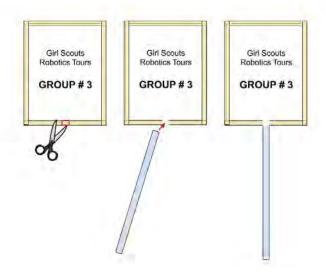
Get a signature from one of the Space Cookies Drive Team members and ask them what their role is. Signature: Role:
Ask a Space Goolee about one of their robot mechanisms and what it does. Mechanism:
Ask a member from a team that has an animal-themed name and ask what their robot can do during the autonomous period. Team Number/Autonomous task(s):
Ask a team with your favorite logo what the height and weight of their robot is. What do you like about the robot? Team Name/Height+Weight:
What you like:
If you were to build a robot that could compete in this year's game challenge, what would it look like? What game tasks would your robot be able to do? Draw it here:

TOUR SIGN PRINTOUT + INSTRUCTIONS

- Design the template for your tour sign. An example can be found on the following page, and a digital template is available at **tinyurl.com/stempledgesign**. If you decide to use our template, make a copy of the Google Drawing and include the appropriate edits.
- 2 For each sign, print out two copies and tape them together along all four sides so that their backs are facing inward towards each other and hidden. If you have access to a laminator, you can also laminate the two sheets together. You should end up with a double-sided sign.



On the bottom of each sign, cut a small slit. This is where can attach a stick of some sort. (*Tip: PVC pipes were secretly made for this:P*) Voila, now you have a beautiful tour sign! Repeat until you have the right amount of signs (# of signs = # of tours).





GIRL SCOUTS ROBOTICS TOUR

GROUP # 6

BEARINGS